# 5. Environmental Setting and Environmental Impacts

## 5.1 Aesthetics

| AESTHETICS<br>Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? | ☐ | ☐ | ☐ | ☒ |
| c. Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ |
| d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

Significance criteria established by CEQA Guidelines, Appendix G.

### 5.1.1 Introduction

This section of the Initial Study describes the existing conditions and project-related impacts to aesthetic resources in the vicinity of the Proposed Project. The Proposed Project's effects on this resource were evaluated using the significance criteria set forth in Appendix G of the CEQA Guidelines.

As addressed in the California Environmental Quality Act (CEQA), Aesthetics addresses the visual aspects of a proposed project with regard to its effect on vistas, visual character, scenic resources, and light or glare. Aesthetics analysis, or visual resource analysis, uses a systematic process to logically assess visible changes in the physical environment and the anticipated viewer response to those changes. The Aesthetics section of this IS/MND describes the existing landscape character of the project area, existing views of the project location from various on-the-ground vantage points, the visual characteristics of the Ocean Ranch Substation Project (the Proposed Project), and the visible changes that would be associated with the construction and operation of the Proposed Project, as seen from various vantage points.

It is noteworthy that different people viewing the same landscape may have different responses to that landscape and to any visual changes in the landscape. These different responses are based upon their individual values; familiarity, concern, or expectations for that landscape; and its scenic quality. Because each person's attachment to and valuing of a particular landscape is unique, visual changes inherently affect viewers differently. Nevertheless, generalizations can be made about a viewer's sensitivity to scenic quality and visual changes. For example, recreationists, hikers, equestrians, tourists, and people driving for pleasure are expected to have high concern for scenery, visual quality, and landscape character. People who are commuting daily through the same landscape generally have a moderate concern for scenery, while people working at agricultural or industrial sites generally have a lower concern for scenic quality or changes to existing landscape character. The visual sensitivity of a landscape is affected by the viewing distances at which it is seen, such as close-up or far away. The visual sensitivity of a landscape also is affected by the speed at which a person is moving through and viewing the landscape (e.g., high speed on a highway, low speed on a hiking trail, or stationary at a residence).

Proximity is an important consideration. Distances between the viewer and the viewed elements comprising the observed scene generally are described as distance zones, which are delineated based on increasing distance away. A typical set of distance zones would include immediate foreground, fore-

ground, middleground, and background. When a viewer is in close proximity to a viewed feature in the landscape, more detail can be seen and there is greater potential for that feature to influence visual quality because of its form or scale (i.e., relative size of the object in relation to the viewer). In contrast, when the same landscape feature is viewed at background distances, details may be imperceptible even if overall forms are evident, and the horizon and skyline are dominant in the view. In the middleground, some detail is evident (as in a foreground view) and landscape elements are seen in context with other landforms and vegetation patterns (as in a background view). For analysis in largely undeveloped or open landscapes, four viewing distances are typically considered:

- Immediate Foreground (from the viewer to approximately 300 feet away)
- Foreground (approximately 300 feet to 0.5 miles away)
- Middleground (approximately between 0.5 and 4 miles away)
- Background (approximately 4 miles to the horizon)

In contrast to open landscapes, in a developed or topographically complex setting, where buildings, utilities, trees, and terrain are prominent features that contribute to the complexity of the visual environment and tend to limit viewing distances, an analysis of visual impacts tends to focus more on immediate foreground and foreground distances. Over greater distances, views of the changes introduced by a project in an urbanized setting are likely to be blocked by existing structures or vegetation and to not be visually dominant when compared to surrounding conditions. For these reasons, the analysis of visual impacts from the Proposed Project is focused on views from locations in close proximity to the project site, with less emphasis on long-distance views.

## Visual Inventory Methodology

Visual resources of the project area were investigated based on the following criteria: (1) existing visual quality and scenic attributes of the landscape; (2) location of sensitive receptors in the landscape; (3) assumptions about receptors' concern for scenery and sensitivity to changes in the landscape; (4) the magnitude of visual changes in the landscape that would be brought about by construction and operation of the Proposed Project; and (5) compliance with State, County, and local policies for visual resources.

The viewshed of a project is defined as the geographic area within which the project is visible, omitting areas where views are blocked by buildings, vegetation, and terrain. Figure 5.1-1 identifies the computer-generated areas within 1.5 miles of the substation site from which project elements are potentially visible, based exclusively on topography. Existing vegetation and structures are not considered, and would block most views of the substation from a distance. (Note: All figures referenced in the text are located at the end of this section.) The figure also identifies public parks within this 1.5-mile radius. The result shows areas from which elements of the Proposed Project *may* be visible. The result is theoretical since it takes into account only the position of the viewer, the location of the element being viewed, and the intervening topography. It does not analyze the effects of trees, buildings, or other structures, all of which could block or screen project elements. It also does not take into account the effects of distance on the visibility of elements. It does, however, represent the worst-case visibility of prominent project elements. Overall, it is expected that areas with actual views of substation elements would be considerably fewer than indicated by Figure 5.1-1, given the built-up and vegetated nature of the project region.

The visual setting is described in terms of the existing *landscape character* and *visual quality* of the viewshed. Existing landscape character is an overall visual and cultural impression of landscape attributes —

the physical appearance and cultural context of a landscape that gives it an identity and sense of place. Existing landscape character is determined by landforms, vegetation patterns, waterbodies, and cultural features such as buildings and roads. Visual quality is a judgment of a landscape's attractiveness, as determined by attributes broadly recognized as being valued and preferred by most viewers. Visual quality is expressed as a range of valued landscape attributes and are often described in terms such as form, line, color, and texture. Combinations of these factors lead to evaluations of landscape character and visual quality, such as:

- High – a landscape of exceptional quality and beauty, valued for its scenic attributes.
- Moderate – a landscape that is common or average within the landscape character type.
- Low – a landscape that is lacking in scenic features.

The existing landscape setting and its viewers are characterized in terms of their overall *visual sensitivity*. Visual sensitivity consists of three components: *viewer exposure, viewer concern,* and *visual quality*. Viewer exposure affects a landscape's overall visual sensitivity. Landscapes that have very low viewer exposure (based on landscape visibility, the viewing distance, the number of people who view the landscape, or the duration of time that the landscape can be viewed) would tend to be less sensitive to overall visual change in the context of human experience of visual impacts.

Evaluations of existing landscape character and visual quality, combined with ratings of overall visual sensitivity, establish the visual inventory methodology.

Figures 5.1-2 provides photographs of existing conditions at the project site and surrounding area, including potential staging yards in the vicinity that may be used during project construction.

Around the substation site, seven viewpoints from public vantage points were analyzed for their potential to display worst-case visual effects of the Proposed Project in the scenic and aesthetic landscape. Of these seven viewpoints, three were identified as key observation points (KOPs) for which simulations were prepared. Figure 5.1-3 shows the location and orientation of the viewpoint photographs as well as KOP locations. The viewpoint photographs are shown in Figure 5.1-4. The three KOPs were identified that represent the most critical viewing locations and the viewer groups likely to be affected by a project; these KOPs are outlined in red on the figures. Assessments of visual impacts were determined from each KOP based on a comparison of existing conditions and simulations of the view with the Proposed Project in place. In the impact analysis, overall visual sensitivity is considered in combination with the level of visual change introduced by a project, as seen from a KOP, to arrive at preliminary findings of potential project impact significance. In this analysis impacts to foreseeable future viewers, such as occupants and visitors at currently un-built structures in the business park, were also analyzed to support the evaluation of cumulative impacts.

## 5.1.2 Setting

### Existing Landscape Setting and Viewer Characteristics

This section discusses the existing visual character of the region, existing visual quality in the project area; viewer concern, and viewer exposure to the Proposed Project, leading to a rating of overall visual sensitivity. Also discussed are the existing sources of light and glare within the project area.

**Regional Context.** The Proposed Project is within an approved master plan area designed for commercial and light industrial uses. The substation site is in an urban setting, in an area of existing light indus-

trial and commercial buildings as well as vacant pads or lots planned for future light industrial or commercial development.

The proposed Ocean Ranch Substation site's surroundings are characterized by some vacant building pads or parcels, and office and light-industrial buildings that are generally two stories tall, but are permitted to be up to 80 feet tall. Street trees and landscaping are along both sides of the streets in the area, with earlier-developed areas having larger trees. Paved parking lots around existing buildings are either devoid of substantial vegetation or landscaped with shrubs, flowers, and trees. The area is highly uniform in appearance in that it is dominated by 2-story buildings, roads, parking areas, and landscape vegetation. The buildings, streetscapes, signage, and lot designs conform to the business park's design guidelines that create a highly intact visual environment. However, portions of the business park still contains empty lots, and these unpaved, un-landscaped areas interrupt the visual continuity of the business park where the lots are visible.

The proposed substation will be located on two vacant lots that are not highly visible from most public streets. The triangle-shaped site is located at a higher elevation than adjacent Avenida del Oro, which parallels the western site boundary. Existing business park buildings and parking lots abut the northeast and southeast boundaries of the site. The main entrance to the proposed substation would be by way of a cul-de-sac at the end of the Rocky Point Drive on the north side of the site. The proposed substation would tie into TL 6966, which is an existing underground 69 kV circuit with termination points at San Luis Rey Substation (to the west) and Melrose Substation (to the east). This circuit, as well as local distributions lines, would be underground. The new substation would contain the only aboveground features of the project; the underground lines are not discussed further with regard to aesthetic impacts since they would not be visible once installed and would not contribute to aesthetic and visual resources impacts. Within the substation, TL 6966 would connect to aboveground equipment and is accounted for in the analysis.

### Project Viewshed and Key Observation Points.

As noted above, the area from which the substation would be potentially visible, absent intervening buildings and vegetation, is shown in Figure 5.1-1. Figures 5.1-2 and 5.1-4 provide photographs illustrating existing conditions in the vicinity, as well as at project yards areas and the substation site.

For the three key observation points (KOPs), photographs of the site and simulations visual conditions with substation built are provided to illustrate the viewing conditions.

Figure 5.1-5a shows the existing view looking northeast across Avenida del Oro toward the southern part of the substation site. Figure 5.1-5b shows the same view as it would appear with the substation built. The proposed communications tower and secondary access driveway are visible in the simulation, along with landscaping.

Figure 5.1-6a shows the existing view from the east side of the cul-de-sac on Rocky Point Road looking south. Figure 5.1-6b shows the same view as it would appear with the substation in place. The proposed wall surrounding the substation electrical equipment is show, with the upper parts of the low-profile substation visible beyond. One of the two main access driveways and gates is show, along with landscaping.

Figure 5.1-7a shows the existing view looking toward the northwest corner of the site from across and Avenida del Oro. Figure 5.1-7b shows the same view as it would appear with the substation built. From this location, only new landscaping would be visible. The height of the existing slope and the set back of the substation from the edge of the slope would result in it not being visible.

## Regulatory Background

This section includes a description of the aesthetic resources regulatory framework. There are no federal regulations associated with aesthetics that are relevant to the Proposed Project.

## State

### *California Department of Transportation: Scenic Highway Program.*

The Scenic Highway Program in the State of California is aimed at the protection and long-term preservation of highway corridors of scenic value to ensure the aesthetic value of lands adjacent to highways. The State Scenic Highway System includes highways that are either eligible for designation as scenic highways or have been designated as such. The status of a state scenic highway changes from eligible to officially designated when the local jurisdiction adopts a scenic corridor protection program, applies to the California Department of Transportation for scenic highway designation approval, and receives the designation. A city or county may propose adding routes with outstanding scenic elements to the list of eligible highways; however, state legislation is required for them to become designated.

There are no designated state scenic highways in the Proposed Project area. There are two eligible state scenic highways in the general region of the Proposed Project site — Interstate 5 (approximately 6 miles away) and State Route 76 (approximately 2 miles away); however, neither of these are officially designated.

## Local

As provided in CPUC General Order 131-D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary land use regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local land use plans and policies that pertain to aesthetics and visual resources.

### *City of Oceanside General Plan – Land Use Element*

There are several goals pertaining to visual character and aesthetics in the Land Use Element. A Community Enhancement goal is: "the consistent, significant, long term preservation and improvement of the environment, values, aesthetics, character, and image of Oceanside as a safe, attractive, desirable, and well-balanced community." Another objective for utilities is: "To assure the long-term efficient economic and aesthetic provision of public utilities to the City and its residents and businesses."

- Policy 2.721 A states that "The City shall require sufficient screening, fencing, noise attenuation, landscaping, open space setbacks, or other permanent mitigation or buffering measures between utility corridors and adjacent and surrounding land uses. The employed measures shall be of sufficient scope to minimize to the maximum extent possible negative impacts to adjacent surrounding land uses from the particular utility corridor."
- Policy 2.725 D states that "The City shall require the undergrounding of energy transmission lines and distribution systems to new land developments or uses" (City of Oceanside, 2002).

### *Pacific Coast Business Park, Industrial Master Development Plan*

The proposed Ocean Ranch Substation site is within the Pacific Coast Business Park Industrial Master Development Plan, which is a component of the Rancho Del Oro Specific Plan and is part of the industrially

designated area in the central portion of Oceanside encompassing 124.31 acres (City of Oceanside, 2005). Design and development within the Industrial Master Development Plan include:

**Utilities and Communication Devices**

- *All electric, telephone, gas, and cable service lines to individual lots or sites shall be installed and maintained underground,* and
- *Exterior onsite utilities, including but not limited to drainage systems, sewers, gas lines, water lines and electrical, telephone, and communications wires and equipment, shall be installed and maintained underground.*

**Landscape Criteria**

The landscape elements of the Pacific Coast Business Park Industrial Master Development Plan are intended to create an aesthetically pleasing setting for business park development and to be compatible with the design concepts of the adjacent industrial park areas while establishing a distinct identity for the Pacific Coast Business Park. The landscape design framework for the Proposed Project is established within the public street rights-of-way, including the project identification signage and landscaped parkways. The project guidelines include cross sections of each street within the development to show the overall planting scheme to be used within the Pacific Coast Business Park and the location of sidewalks within the parkway, which have been placed to accommodate landscaped parkways adjacent to the curb.

The planting palette for streetscapes within the Pacific Coast Business Park Industrial Master Development Plan complies with the horticultural requirements of the site and was created to provide a landscape in which the plants visually complement each other and have similar water requirements and seasonal temperature limitations in order to ensure the long-term success of the plant material. The Pacific Coast Business Park Industrial Master Development Plan palette incorporates many of the plants used throughout the Rancho Del Oro Specific Plan Area in order to provide continuity within the Specific Plan. The plan includes plant palettes with initial container sizes for developments, including for required landscape setback areas.

The design details are intended to be compatible with the design concepts of the adjacent industrial park areas while establishing a distinct identity for the Pacific Coast Business Park. The landscape design framework is established within the public street rights-of-way, including the project identification signage, the landscaped parkways, and, on Old Grove Road, median plantings. The intent of the Pacific Coast Business Park Industrial Master Development Plan landscape guidelines is to have the plants guide users to their final destination and provide visual cues to make access routes through the area easier to use. The plan includes use of taller plants at intersections to allow drivers to anticipate upcoming intersections, and delineates distinct tree species for each street. The planting guidelines also are intended to provide scale and green screens to shield views of parked vehicles, screen trash bin areas, and block walls.

**Lighting**

- *The streets and signs within the Pacific Coast Business Park shall be lit with adequate fixtures to provide safe and aesthetic illumination,* and
- *Building illumination and architectural lighting shall be soft and non-glaring in character. "Wall-washing," overhead down lighting and interior illumination that spills outside is encouraged. All lighting visible from adjacent streets shall be indirect and shall incorporate full cut-off shield fixtures.*

**Business Park Sign Regulations**

- *Project identification signage will utilize consistent color, logo and type-style elements, which will assist in unifying the signage throughout the development,* and
- *All project identification signage must be placed in such a location as to not obstruct sight distance. Signs may not be located within a public right-of-way. Signs located in the corner clear zone shall not exceed 30 inches in height, nor create a traffic sight obstruction or other pedestrian or traffic hazard.*

## Applicant Proposed Measures

No Applicant Proposed Measures were presented for Aesthetics. However, SDG&E has proposed Standard Operating Procedures to be implemented as part of the Proposed Project. These are incorporated into the project and are summarized below.

- **Conceptual Landscape Plan.** The landscaping at the proposed Ocean Ranch Substation would be implemented as part of the Proposed Project following construction of the substation. (The Conceptual Site Plan is provided as Appendix C and shows the landscaping and other features). The substation equipment would be within a walled area toward the center of the property, set back from Avenida del Oro and Rocky Point Drive. Stormwater management basins, access driveways, and the microwave tower and antenna would be outside of the wall. Exterior to the wall, the site would be landscaped. The landscaping plan, planting scheme, lighting guidelines, and sign regulations, include street trees and shrubs along Rocky Point Drive and Avenida del Oro and landscape plants that are low-water use, regionally appropriate, and visually compatible with the surrounding area and that do not conflict with the Pacific Coast Business Park Industrial Master Development Plan. The existing slope between Avenida del Oro and the substation pad currently is landscaped and irrigated and would not be disturbed.

  Implementation of the landscape plan would ensure that the project perimeter wall, street-front areas, and slopes would be visually similar to the existing business park surrounding the project and would provide partial screening of the perimeter wall.

  The plan incorporates low-water-use, mostly native plants that are visually similar to existing plants on neighboring properties. The landscaping includes strawberry tree (*Arbutus unedo*) at the entrance to the site from Rocky Point Drive, and on the top of the slope along Avenida del Oro. The landscape plan leaves in place the existing street trees and slope planting along the west side of the parcels facing Avenida del Oro and adds more shrubs and trees to the slope as well. The Proposed Project's landscape elements have been selected to comply with existing streetscape guidelines and to visually blend with existing neighboring landscapes. Low-water-use, mostly native plants are proposed throughout the interior landscape areas of the site, including trees and shrubs that are visually similar to existing plants on neighboring lots, such as Australian willow (*Geijera parviflora*) and holly leaf cherry (*Prunus ilicifolia*). These trees would provide a visual connection to the surrounding streetscapes and would provide some screening of the Proposed Project's perimeter walls. Medium-sized shrubs and low-growing shrubs and ground covers are proposed as well. The site includes two retention basins, which will be planted with locally appropriate grasses and rushes.

- **Dulled Galvanized Steel Structures.** New structures are designed utilizing dulled galvanized steel to avoid potential adverse effects relating to fire and fire damage, as well as adverse effects due to high moisture content in coastal areas. The dulled aspect of the steel poles also minimizes the potential for visual impacts relating to glare.

- **Perimeter Wall.** The perimeter wall would be designed to blend with the neighboring buildings and provide continuity with the existing landscape and would not conflict with standard design criteria and requirements for electrical substations or the Pacific Coast Business Park Industrial Master Development Plan.
- **Restoring Appearance of Temporarily Disturbed Areas.** When the Proposed Project construction has been completed, all temporarily disturbed terrain will be restored as near to preconstruction conditions as possible. Revegetation would be used where appropriate (revegetation in certain areas is not possible due to vegetation management requirements related to fire safety) to reestablish a natural appearing landscape and reduce potential visual contrast between disturbed areas and the surrounding landscape.
- **Temporary Lighting.** Temporary lighting at staging and storage areas will be directed on site and away from any sensitive receptors.
- **Visual Screening of Staging Yards.** Where staging yards are visible to the public, opaque mesh or slats (or equivalent material) will be installed along the fence that will soften the view of the staging yard from public vantage points such as roads, residences, and public vantage points.

## 5.1.3 Environmental Impacts and Mitigation Measures

### Visual Impact Assessment Methodology

This visual analysis used a Visual Sensitivity/Visual Change (VS/VC) methodology to assess the visual effects of the Proposed Project on the existing landscape. The VS/VC methodology includes a characterization of the visual sensitivity of the existing landscape, the characteristics of existing visual changes occurring and apparent in the landscape, and the characteristics of the Proposed Project.

Following professionally accepted practice in visual analysis, visual sensitivity consists of three components: *visual quality*, *viewer concern*, and *viewer exposure*. The description of visual quality notes the existing built structures and natural or introduced landscape features that contribute to overall visual quality. Viewer concern can be described as the personal expectations for the landscape that are held by the viewing public. Viewer concern often is reflected in public policy documents that identify landscapes of special concern or roadways with special scenic status, e.g., scenic highways. Viewer exposure also affects a landscape's overall visual sensitivity. Landscapes that have very low viewer exposure, based on landscape visibility, viewing distance, number of people who view the landscape, or duration of time that the landscape can be viewed, will tend to be less sensitive to overall visual change in the context of human experience of visual impacts. Landscapes with higher viewer exposure are more sensitive to overall visual changes. Overall visual sensitivity is rated on a scale, Low to Moderate to High.

Project-induced visual change can result from aboveground facilities; vegetation removal and planting; landform modification; component size or scale relative to existing landscape characteristics; and the placement of project components relative to other developed features in the landscape. The experience of visual change can also be affected by the degree of screening afforded by vegetation, landforms, and/or structures; distance from the observers; atmospheric conditions; and angle of view. Visual change describes the degree of actual visible change expected as a result of the project. The fundamental elements of visual change include *visual contrast*, *visual dominance*, and *scenic view obstruction*. Visual contrast refers to visual discrepancies of form, line, color or texture of the project against the existing landscape. Visual dominance refers to the degree to which this contrast would demand the attention of casual viewers. Scenic view obstruction refers to the degree to which the

project would block or intrude upon scenic view corridors, particularly those identified in public policies. Overall visual change is rated on a scale, Low to Moderate to High.

In addition, the project is evaluated for conformance with applicable local plans and policies. Adopted expressions of local public policy pertaining to visual resources are given great weight in determining both visual quality and viewer concern.

The determination of which aesthetic changes cross a threshold of "substantial adverse effect" or degradation is based upon the criteria described in the methodology above and in Table 5.1-1, Visual Impact Significance Criteria. This table was used primarily as a consistency check, as determinations of visual sensitivity and visual change were based primarily on analyst experience and site-specific circumstances.

Implicit in this rating methodology is the acknowledgment that for a visual impact to be considered significant two conditions generally exist: (1) the existing landscape is of reasonably high quality and is relatively valued by viewers; and (2) the perceived incompatibility of one or more elements or characteristics of the project tends toward the high extreme, leading to a substantial reduction in visual quality.

**Table 5.1-1. Visual Impact Significance Criteria**

| Visual Sensitivity | Visual Change | | | | |
|---|---|---|---|---|---|
| | Low | Low to Moderate | Moderate | Moderate to High | High |
| Low | No impact[1] | No impact | Less Than Significant[2] | Less Than Significant | Less Than Significant |
| Low to Moderate | No impact | Less Than Significant | Less Than Significant | Less Than Significant | Less Than Significant with Mitigation Incorporated[3] |
| Moderate | Less Than Significant | Less Than Significant | Less Than Significant | Less Than Significant with Mitigation Incorporated | Less Than Significant with Mitigation Incorporated |
| Moderate to High | Less Than Significant | Less Than Significant | Less Than Significant with Mitigation Incorporated | Less Than Significant with Mitigation Incorporated | Potentially Significant Impact[4] |
| High | Less Than Significant | Less Than Significant with Mitigation Incorporated | Less Than Significant with Mitigation Incorporated | Potentially Significant Impact[4] | Potentially Significant Impact |

1 - No Impact – Impacts may or may not be perceptible but are considered minor in the context of existing landscape characteristics and view opportunity.
2 - Less than Significant – Impacts are perceived as negative but do not exceed environmental thresholds.
3 - Less than Significant with Mitigation Incorporated – Impacts are perceived as negative and may exceed environmental thresholds depending on project and site-specific circumstances, but are Less Than Significant with mitigation incorporated.
4 - Potentially Significant Impact – Impacts with feasible mitigation may be reduced to levels that are not significant or avoided all together. Without mitigation, significant impacts would exceed environmental thresholds.

## Project Visual Description

The triangular-shaped substation property is bounded on the north by existing two-story commercial/light industrial buildings on either side of Rocky Point Drive, the street leading to and ending in the cul-de-sac adjacent to the substation site. On its north side, the substation property is at nearly the same elevation as the adjacent commercial properties on Rocky Point Drive. Views from the north toward the substation site are largely blocked by the existing buildings and street trees, except for views directly along the Rocky Point Drive to its terminus at the substation site. An existing overhead power line runs east-west along the north side of the substation property, between the substation site and the adjacent existing commercial/industrial buildings.

Abutting the east/southeast edge of the property is a row of commercial and light industrial buildings facing Avenida de la Plata. The relative elevation of the properties facing Avenida de la Plata to the project site elevation varies. The substation site is at a somewhat lower elevation (approx. 5 feet) than the adjacent properties at the east end of the site and a somewhat higher elevation (approx. 5 feet) than the adjacent properties near Avenida del Oro. Views from Avenida de la Plata toward the substation site are screened by these existing commercial buildings and landscaping, except when looking across the parking areas and driveways separating the buildings. These building have mature landscaping, including extensive tree and shrub cover. The distance from Avenida de la Plata to the substation property behind these buildings is approximately 225 feet.

At the west side of the substation site is Avenida del Oro. A U.S. Post Office with a parking lot is west of the site across from the substation site. A number of moderate to large sized street trees border the street between the Post Office and the substation site. South of the Post Office are two vacant properties. North of the Post Office, a stormwater detention basin separates the Post Office from a large two-story Federal Express Ground sorting facility surrounded by extensive car and truck parking. Along the Avenida del Oro side of the site, the substation property is elevated above the road. It is approximately 20 feet above the street at the north end of the property and ranges to approximately 8 feet above the street at the south end.

The Proposed Project would consist of a low-profile substation surrounded by a 10-foot high tan-colored wall made of stone, block, or similar material. The wall would be constructed after initial site preparation, with subsequent construction activity and equipment installation occurring within the walled property. Portions of the property outside of the wall may be used for temporary material staging during construction. With completion of construction, the area external to the wall would be landscaped. Access to the substation would be provided at two locations. Primary access would be by way of two driveways and gates in the Rocky Point Road cul-de-sac on the north side of the property. Secondary access would be way of one driveway and gate at the south end of the property that would be entered from Avenida del Oro. The Rocky Point Road gates would be 30 feet wide and made of chain-link fencing with slats inserted into the fencing. The secondary access from Avenida del Oro would be through a similar gate 20 feet wide. Lighting would be provided at the exterior of the primary entrance, with additional lighting on the interior side of the substation walls at the control building. Except for the exterior gate light, these lights would be off except when required for nighttime work. Although the substation is a low-profile design, some project elements would extend above the height of the surrounding wall and gates; the upper parts of this equipment would be visible from Rocky Point Drive. The most visually prominent feature of the Proposed Project from offsite would be a monopole and microwave dish installed at the south end of the property, outside of the substation wall (see Figure 5.1-5b). Transmission and distribution lines associated with the project would be installed underground. Exterior to the substation wall, landscaping would be installed along with stormwater management basins, as shown in

Appendix C. The landscaping and wall would comply with the Pacific Coast Business Park plan and standards, so as to be consistent with existing and future site development in the business park.

There are no residences in the vicinity of the substation site.

Immediate Foreground views are those occurring within 300 feet of the site. At this close distance, views from the north toward the substation site would be largely screened by existing 2-story commercial and light industrial buildings and their associated landscaping. A portion of the substation wall and gates, as well as the taller parts of substation equipment, would be visible to traffic and pedestrians on Rocky Point Road. Because the road ends in a cul-de-sac, there is no through traffic. Viewers would be limited to motorists and pedestrians traveling to and from the nearby business properties. The visual environment on Rocky Point Road is dominated by existing commercial and light industrial buildings, light standards, and vehicle parking. As a light industrial type of use, the substation would be in keeping with the character of its surroundings.

Along the southeast side of the substation site are existing commercial and light industrial buildings with associated landscaping and parking. The buildings face Avenida de la Plata, separating the substation site from the street by approximately 225 feet. These buildings and their landscaping and parking screen most of the site from offsite views from the southeast. Motorists and pedestrians looking perpendicular to the direction of travel on the road would have brief views of the substation wall and any equipment visible above the wall between the existing buildings. However, the existing buildings, parking, and vegetation would dominate the view and the visual character of the substation would be consistent with the visual character of the buildings in the foreground.

On the west side of the site, the Proposed Project would be visible from Avenida del Oro, a 2-lane road with a center turn lane and bike lanes, but no curbside parking. The view toward the substation for motorists, bicyclists, and pedestrians along this road would consist primarily of an engineered slope up from the street to the substation pad and the substation wall at the top of the slope. The slope would be landscaped. Motorists and pedestrians would see an 8- to 20-foot-high slope topped by a 10-foot wall. Based on the elevation of the top of the wall above the street, the wall's setback from the street, and the position of substation equipment and facilities toward the middle of the property, little if any of the equipment is anticipated to be visible at Immediate Foreground viewing distances. The one exception would be the monopole with microwave antenna proposed at the south apex of the triangular site, near Avenida del Oro's intersection with Avenida de la Plata. The 40-foot monopole and microwave dish would be visible, but not out of scale or character with existing development and vertical elements in the local visual environment. They would be a non-reflective grey color and would be a visual element consistent with other vertical elements in the vicinity, including landscape trees, street light standards, and transmission line poles.

Foreground view opportunities (ranging in distance from 300 feet to 0.5 miles of the substation project and site) are limited by topography, existing buildings, and trees. Figure 5.1-1 indicates those areas within 1.5 miles of the substation site from which the wall and/or equipment might be visible, based on topography alone. However, this figure does not account for the numerous existing buildings and trees that would block or filter most views of the substation. From the north, nearly all views except ones looking directly south down Rocky Point Drive would be blocked. If visible, the monopole would not penetrate above the height of many trees in the area and would be lower than nearby transmission lines. From the southeast, potential foreground views would be limited to the properties along Avenida de la Plata. Here, as well, the existing buildings and vegetation would largely block or filter views. From the west, views toward the substation are blocked by existing buildings. Motorists on eastbound Avenida del la Plata approaching Avenida del Oro would have the clearest view of the substation. This is

because the properties at this location (south of the Post Office) are vacant. Existing street trees would provide some view filtering. Moreover, most of the equipment and structures in the substation would be screened by the surrounding wall. Those that extend higher than the wall would be visible against a backdrop of buildings on Rocky Point Drive. The monopole and microwave antenna would be silhouetted against the sky, but would be a substantial visual element as it would be consistent with other vertical elements in the site vicinity, including trees, light standards, utility poles, and transmission lines.

Middleground views (from 0.5 miles to 4 miles distant) and Background views (beyond 4 miles distant) toward the Proposed Project would be mostly blocked. Buildings, landscaping, and topography would obstruct most sight lines between viewers and the site. In situations where the site may be visible from these distances the proposed substation would blend in with the existing commercial and light industrial buildings, roads, light standards, and trees that dominate the landscape and create its visual character. The substation would not be more prominent than the existing structures and features surrounding it. The 40-foot monopole and microwave dish would be visible, but not out of scale or character, with existing development in the area. Light standards along roads and in parking areas of commercial properties, as well as existing overhead transmission lines, are existing vertical elements in the existing visual landscape.

## Aesthetics Impacts

***a. Would the project have a substantial adverse effect on a scenic vista?***

*NO IMPACT*. The proposed substation would be in an urbanized area and set amidst numerous commercial and light industrial buildings, landscape trees, light standards, utility poles, and roads. The flat to rolling coastal plain topography in this part of the City of Oceanside does not provide scenic vistas, which typically are views of open spaces or views from elevated topographic positions. The nearest mountains or areas of high elevation that would provide panoramic views that could include the substation site are 4 to 5 miles away. Views from these locations would overlook the highly developed urban landscape, within which the substation would be barely discernable, if visible at all. At these distances, haze and moisture in the air diminish colors and softens the distinctness of objects. The substation would be a minor new element in the overall view as seen from these distant potential vista points. No mitigation is required.

***b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?***

*NO IMPACT*. The substation site consists of two filled and graded, minimally vegetated building lots. Offsite vegetation in the project vicinity is planted landscaping consisting primarily of trees and shrubs along roads and around buildings. There are no important rock outcroppings or historic buildings in the area. State Route 76, approximately 1.7 miles north of the substation site, is the nearest State scenic highway. Based on these circumstances, there would be no substantial damage to scenic resources. No mitigation is required.

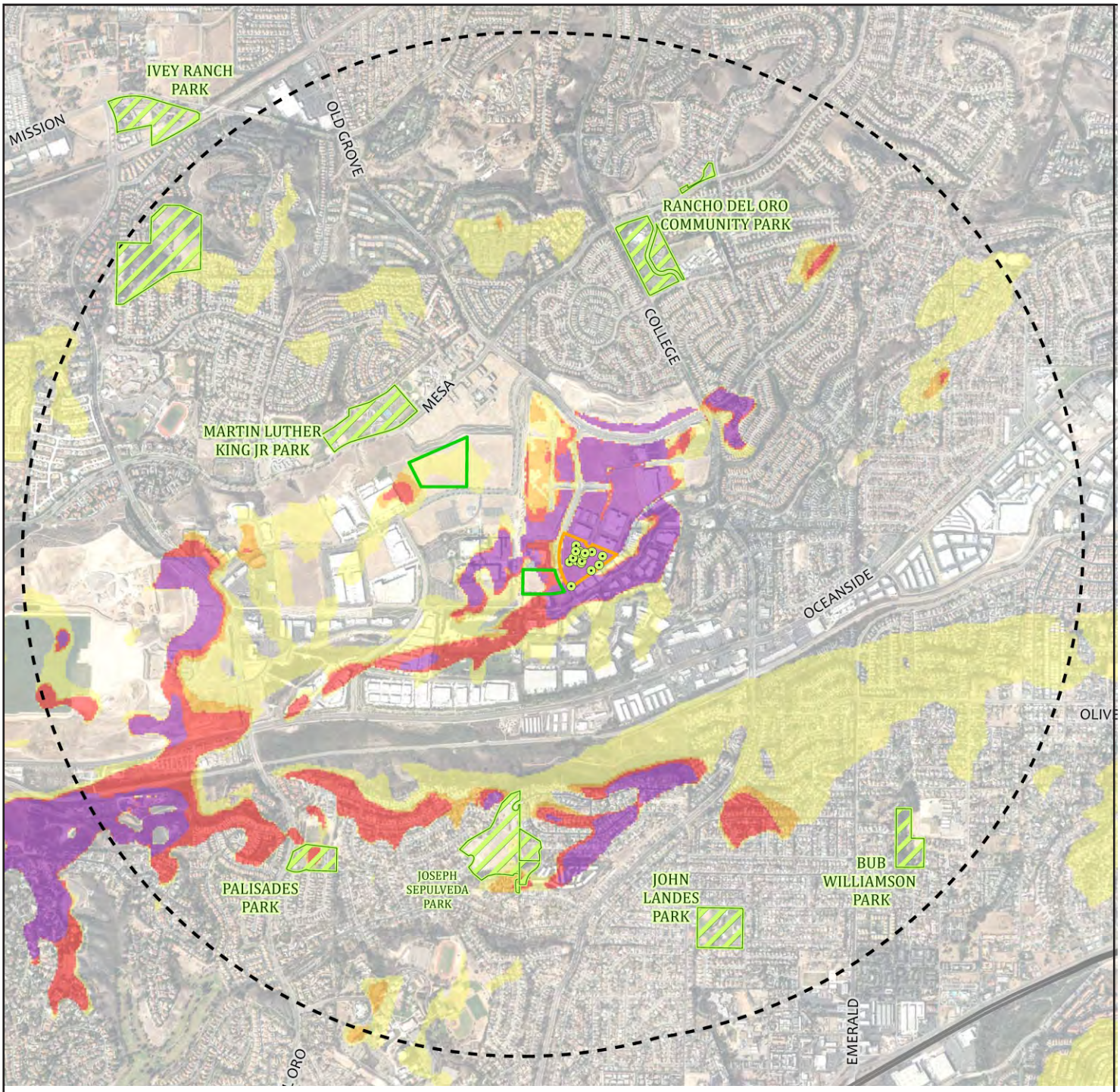
***c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?***

*LESS THAN SIGNIFICANT*. The substation would introduce a neutral-colored wall and grey, dull-finished electrical equipment to a currently vacant property. This would change the visual character of the site, from an open, flat site to a built site. The site's surroundings are largely built out in commercial or light industrial land uses. The substation's wall and landscaping would be consistent with the design standards for

the larger business park within which it would be located. The substation equipment within the project's exterior wall would alter the existing visual character of the site and its surroundings. However, it would be consistent with the dominant visual character of the area, which has been established by the existing buildings, streets, light standards, trees, overhead transmission lines, and other elements associated with the business park. Most of the equipment associated with the substation would be screened from view by the surrounding wall and the area outside of the substation wall would be landscaped. The impact on the existing visual character of the site and surroundings would be less than significant. No mitigation is required.

***d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

*LESS THAN SIGNIFICANT*. Lighting would be provided at the substation for safety, security, and nighttime emergency maintenance. Lights would be installed at the entry gate and at various locations within the walled substation. The lights would be less than 10 feet high, which is the height of the wall. Most substation lighting would be off, except on occasions when nighttime access is required. Safety/security lighting would consist of a light at the Rocky Point Road entrance and would be on during the night. There are existing street lights, parking area lights, and building-mounted lights on the streets, buildings, and properties abutting and near the substation site. The introduction of substation lighting would not represent a new source of substantial light or glare. The new light fixtures would add an imperceptible level of additional lighting in the vicinity, but would not adversely affect nighttime views. Materials used in the construction of the substation wall as well as equipment and appurtenances within the wall, such as the electrical equipment and monopole and antenna, would have dull, non-specular finishes and would not create glare. No mitigation is required.




Source: SDG&E, 2016a.

0 264 528 Feet

**Figure 5.1-1**

**Substation Viewshed**

*Avenita de la Plata, looking Northeast*

*Ocean Ranch Boulevard, looking Southeast*

*Avenida del Oro, looking Northeast*

*Rocky Point Drive cul-de-sac, looking Southwest*

*Parking lot of US Post Office on Avenida Del Oro, looking East*

*Avenida del Oro, looking West*

Source: SDG&E, 2016a.

**Figure 5.1-2**

**Existing Conditions Photographs**

*Southwest corner of Project Site, looking West*

*Northwest corner of Project Site, looking Northwest*

*Avenida del Oro and Windansea Street, looking South*

*Avenida del Oro at northwest corner of Project Site, looking Southeast*

*Construction site at Avenida del Oro, looking West*

*Senior Center Drive, looking East*

Source: SDG&E, 2016a.

**Figure 5.1-2**

**Existing Conditions Photographs, Continued**

*Corporate staging yard at northeast corder, looking West*

*USPS staging yard from Avenida de la Plata looking North*

*Melrose staging yard from Melrose Drive, looking Southwest*


*San Luis Rey staging yard at northwest corner, looking West*

Source: SDG&E, 2016a.

**Figure 5.1-2**

**Existing Conditions Photographs, Continued**


Simulated Key View Location
Key View Location

*Proposed Project*

Proposed Ocean Ranch Substation
Pulling Site
Staging Yard
Monopole

Underground 69 kV Power Line
Proposed

Underground 69 kV Power Line Vault
Proposed

Underground 12 kV Distribution Line
Proposed

Underground 12 kV Distribution Line Manhole/Handhole
Proposed Handhole
Proposed Manhole

Source: SDG&E, 2016a.

0 200 400 Feet

**Figure 5.1-3**
**Viewpoint Locations and Orientation**

**Key View 1**
*North of intersection of Avenida Del Oro and Avenida De La Plata looking Northeast*

**Key View 2**
*Cul-de-sac at southern end of Rocky Point Drive looking Southwest*

**Key View 3**
*Parking lot of US Post Office on Avenida Del Oro, looking East*

**Key View 4**
*West of intersection of Avenida Del Oro and Avenida De La Plata looking West*

*Note:* Views outlined in Red have been selected for simulation.

Source: SDG&E, 2016a.

**Figure 5.1-4**

**Viewpoints Near Substation Site**

**Key View 5**
*Southeast corner of Project Site looking Southwest*

**Key View 6**
*Avenida del Oro and Windansea Street, looking South*

**Key View 7**
*Avenida del Oro at northwest corner of Project Site, looking Southeast*

*Note:* Views outlined in Red have been selected for simulation.

Source: SDG&E, 2016a.

**Figure 5.1-4**

**Viewpoints Near Substation Site, Continued**

Source: SDG&E, 2016b.

**Figure 5.1-5a**
**KOP 1: Existing View**
**Looking Northeast Across Avenida del Oro to Site**

Source: SDG&E, 2016b.

**Figure 5.1-5b**
**KOP 1: Simulation**
**Looking Northeast Across Avenida del Oro to Site**

Source: SDG&E, 2016b.

**Figure 5.1-6a**
**KOP 2: Existing View**
**Looking South from Rocky Point Road**

Source: SDG&E, 2016b.

**Figure 5.1-6b**
**KOP 2: Simulation**
**Looking South from Rocky Point Road**

Source: SDG&E, 2016b.

**Figure 5.1-7a**
**KOP 3: Existing Conditions**
**Looking Southeast Across Avenida del Oro to Site**

Source: SDG&E, 2016b.

**Figure 5.1-7b**
**KOP 3: Simulation**
**Looking Southeast Across Avenida del Oro to Site**

# 5.2 Agriculture and Forestry Resources

| AGRICULTURE AND FORESTRY RESOURCES<br>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project:** | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b. Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.2.1 Setting

The Proposed Project is located in a developed industrial area. The substation site would occupy two previously disturbed and graded building pads surrounded by existing commercial and light-industrial buildings and public roads. There is no agricultural activity at the site and it is not zoned for agricultural uses by the City of Oceanside, nor is there agricultural activity in the vicinity of the site (City of Oceanside, 2002a). The Proposed Project site is not in an area designated as "good" or "fair" for farming (City of Oceanside, 2002a). The substation site is zoned for Limited Industrial uses and Planned Development. The surrounding lands are designated as Urban and Built-Up Land under the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP), which identifies various categories of farmland throughout the State. The substation property and other properties in the area are not under California Land Conservation Act of 1965 (referred to as the Williamson Act) contracts. The Williamson Act allows counties to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use in return for a reduction in assessed property taxes.

## Regulatory Background

This section includes a description of the aesthetic resources regulatory framework. There are no federal regulations associated with agriculture and forestry resources that are relevant to the Proposed Project.

## State

### *Farmland Mapping and Monitoring Program (FMMP)*

The FMMP was established in 1982 to identify various categories of farmland throughout California and to assess the location, quantity, and quality of agricultural lands and conversion of these lands to other uses. Every even-numbered year, FMMP issues a Farmland Conversion Report. FMMP data are used in elements of some county and city general plans, in regional studies on agricultural land conversion, and in environmental documents as a way of assessing project-specific impacts on Prime Farmland.

The DOC classifies lands as follows (DOC, 2016):

- **Prime Farmland:** Land that has the best combination of physical and chemical properties for the production of crops
- **Farmland of Statewide Importance:** Similar to Prime Farmland, but with minor shortcomings (e.g., steeper slopes, inability to hold water)
- **Unique Farmland:** Land of lesser quality soils, but recently used for the production of specific high economic value crops. Land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California
- **Farmland of Local Importance:** Land essential to the local agricultural economy
- **Grazing Land:** Land on which existing vegetation is suitable for livestock grazing.
- **Urban and Built-Up Land:** Land that is occupied by buildings or other structures at a minimum density of one unit to 1.5 acres (or approximately six structures to 10 acres). These lands are used for development purposes, including residential, commercial, industrial, construction, public administration, institutional, transportation yards, airports, cemeteries, golf courses, sewage treatment, sanitary landfills, and water control structures.
- **Other Land:** Land that is not in any other map category, such as waterbodies smaller than 40 acres; low-density rural developments; confined livestock, poultry, or aquaculture facilities; and brush, timber, wetland, and riparian areas not suitable for livestock grazing.
- **Water:** Perennial waterbodies that are a minimum of 40 acres.

### *Williamson Act*

The Williamson Act is intended to help preserve farmland by allowing counties to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use in return for a reduction in assessed property taxes. The contracted land is then restricted to agricultural and compatible uses through a rolling-term, 10-year contract between the private land owner and the local government, which has the discretion to determine uses compatible with Williamson Act enrollment. As stated in Section 51222 of the California Government Code, the minimum acreage requirement for individual parcels to enter into Williamson Act contracts is 100 acres.

## Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary land use regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local land use plans and policies that pertain to agriculture and forestry resources.

### *County of San Diego*

Farmland of Local Importance is land of value to the local economy, as defined by each county's local advisory committee and adopted by its board of supervisors. Farmland of Local Importance is either currently producing, or has the capability to produce agricultural products, but does not meet the criteria of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. Authority to adopt or to recommend changes to the category of Farmland of Local Importance rests with the San Diego County Board of Supervisors (DOC, 2015, as cited in SDG&E, 2016).

### *City of Oceanside General Plan – Land Use Element*

The objective of the city's agricultural policies in the *Land Use Element* is to identify, conserve, and enhance agricultural areas (City of Oceanside, 2002b; SDG&E, 2016). The following policies generally relate to the Proposed Project:

- Policy 2.03A states that the City shall assure in all sections that the legal parcels or interests in agricultural lands are sufficient size to viably conduct agricultural practices.
- Policy 2.5C states that the City shall, in all proposed actions converting agricultural land to other land uses, consider the loss of those lands to the potential agricultural productivity to the community; and shall assure that land use compatibility to agricultural land is fully defined and assured.
- Policy 2.5D states that Land Use compatibility is of primary importance to agricultural areas, since land use conflicts between agricultural and non-agricultural uses can force the economic non-viability of agricultural areas.
- Policy 3.19A states that the City shall apply agricultural land use designations and zoning classifications to areas of significant productive agricultural use.
- Policy 3.19C states that the City shall encourage participation of agricultural property owners in Williamson Act contracts.

### *City of Oceanside General Plan – Environmental Resource Management Element*

The purpose of the *Environmental Resource Management Element* is to conserve natural resources and preserve open space in the City of Oceanside. It provides information on agricultural resources and lands that are capable of supporting agricultural operations.

## Applicant Proposed Measures

There are no APMs proposed with regard to Agriculture.

## 5.2.2 Environmental Impacts and Mitigation Measures

***a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as Shown on the Maps Prepared Pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

*NO IMPACT*. The Proposed Project site is designated as Urban and Built-Up Land on the Farmland Mapping and Monitoring Program maps. The site and all of the land in the site vicinity are designated as Urban and Built-Up Land on the FMMP maps. Agriculture is not practiced on the site. The Proposed Project would not result in conversion of Farmland to non-agricultural use.

***b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

*NO IMPACT*. The substation site is zoned for Limited Industrial uses and Planned Development. The Proposed Project would not conflict with zoning for agricultural use and the property is not under a Williamson Act contract.

***c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?***

*NO IMPACT*. The proposed Ocean Ranch Substation site is in an urban area and is not forested. The Proposed Project would not conflict with zoning for forest land, timberland, or timber production.

***d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?***

*NO IMPACT*. The Proposed Project will not affect any forest land. There would be no impact related to the conversion of forest land to non-forest use.

**e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

*NO IMPACT*. There is no Farmland, agriculture, or forestland at or near the project site. The development of the substation would not result in changes in the environment that would result in the conversion to non-agricultural or non-forest uses.

# 5.3 Air Quality

| AIR QUALITY<br>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the project:** | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☐ | ☒ | ☐ |
| c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | ☐ | ☐ | ☒ | ☐ |
| d. Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| e. Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.3.1 Setting

**Climate and Meteorology.** The proposed project site is located 6 miles east of the Pacific Ocean, within the City of Oceanside, San Diego County and in the San Diego Air Basin. Local meteorological conditions in the project area produce a mild climate with limited rainfall that primarily occurs in the winter months. Table 5.3-1 presents a monthly climate summary for the City of Oceanside with average annual maximum and minimum temperatures of 68°F and 53°F, respectively, and average total precipitation of 10.3 inches.

Thermal surface gradients between ocean and land temperatures produce daytime onshore winds (particularly in the summer) and nighttime offshore winds (particularly in the winter). When cooler, moist air travels inland to higher elevations a temperature inversion can occur, limiting the rise of polluted air and preventing dispersion. Figure 5.3-1 presents typical wind speeds and directions for the project area with a weak predominant onshore flow from the west-southwest and southwest, and a weak offshore flow from the north-northwest and northwest.

**Table 5.3-1. Monthly Climate Data, Oceanside, California, 1953-2005**

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Max. Temperature (°F) | 63.9 | 63.8 | 63.8 | 65.1 | 66.6 | 68.5 | 72.1 | 74.3 | 73.7 | 71.5 | 68.2 | 64.9 | 68.0 |
| Average Min. Temperature (°F) | 44.6 | 45.7 | 47.6 | 50.4 | 54.8 | 58.4 | 62.2 | 63.4 | 60.9 | 55.9 | 48.9 | 44.5 | 53.1 |
| Average Total Precipitation (in.) | 2.11 | 2.14 | 1.73 | 0.97 | 0.20 | 0.08 | 0.03 | 0.07 | 0.27 | 0.40 | 1.06 | 1.26 | 10.31 |

Source: Western Regional Climate Center, 2016 (http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?caocea+sca)

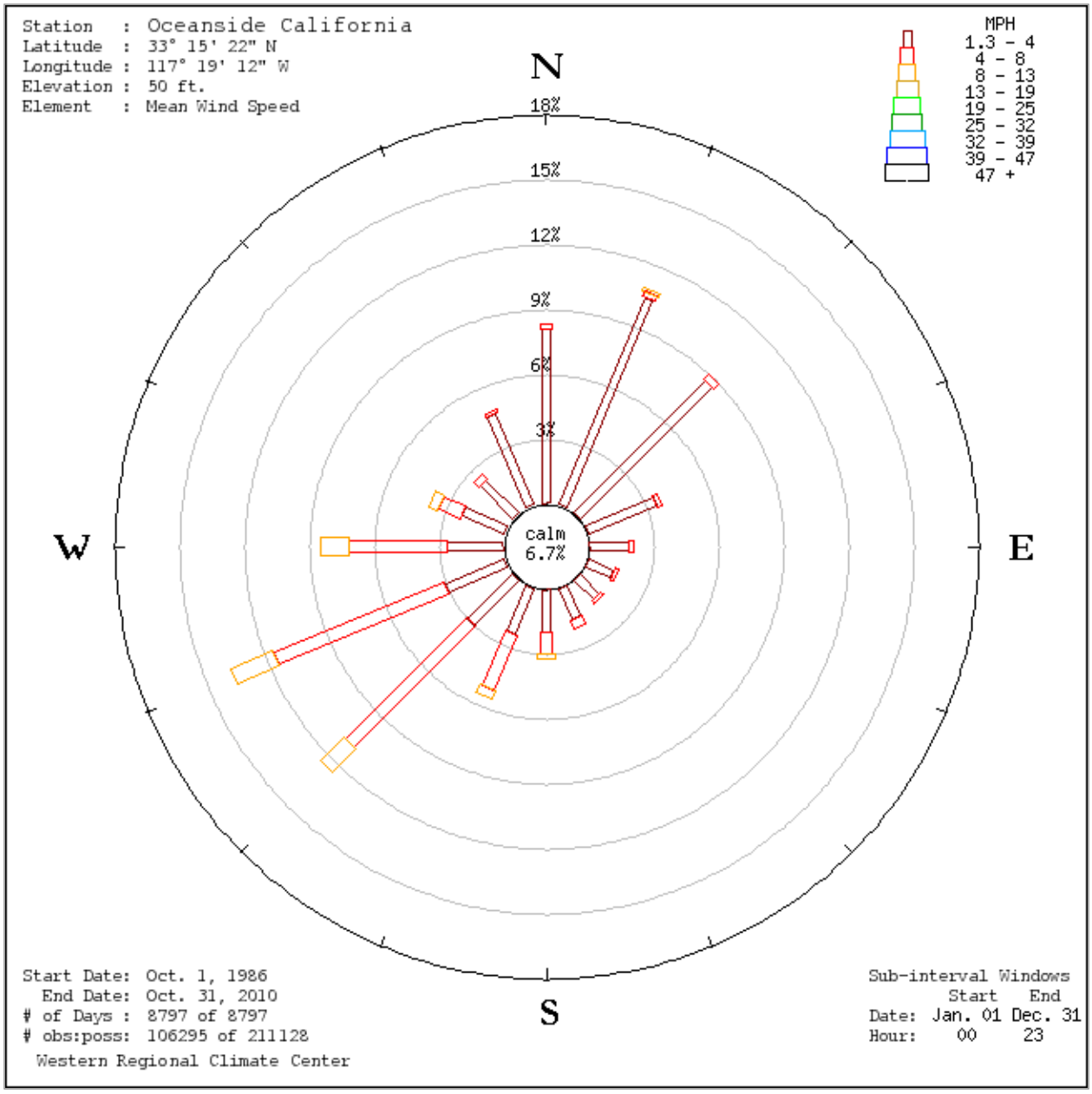



**Figure 5.3-1. Windrose, Oceanside, CA, 1988-2010**
Source: Western Regional Climate Center, 2016 (http://www.wrcc.dri.edu/cgi-bin/wea_windrose.pl?caZOCE)

**Ambient Air Quality Standards.** Ambient air quality is assessed by measuring concentrations of air pollutants in the ambient air. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are planning standards that define the upper limits for airborne concentrations of pollutants. The standards are designed to protect public health and welfare with a reasonable margin of safety. At the national level, the federal Clean Air Act requires the U.S. Environmental Protection Agency (USEPA) to establish NAAQS and designate geographic areas that are either attaining or violating the standards. In California, air quality management and regulation is the responsibility of the California Air Resources Board (CARB) and local air quality management districts, in this case the San Diego Air Pollution Control District (SDAPCD). The current national and California ambient air quality standards are shown in Table 5.3-2.

**Table 5.3-2. National and California Ambient Air Quality Standards**

| Pollutant | Averaging Time | California Standards | National Standards |
|---|---|---|---|
| Ozone | 1-hour<br>8-hour | 0.09 ppm<br>0.070 ppm | —<br>0.070 ppm |
| Respirable Particulate Matter (PM10) | 24-hour<br>Annual Mean | 50 µg/m$^3$<br>20 µg/m$^3$ | 150 µg/m$^3$<br>— |
| Fine Particulate Matter (PM2.5) | 24-hour<br>Annual Mean | —<br>12 µg/m$^3$ | 35 µg/m$^3$<br>12 µg/m$^3$ |
| Carbon Monoxide (CO) | 1-hour<br>8-hour | 20 ppm<br>9.0 ppm | 35 ppm<br>9.0 ppm |
| Nitrogen Dioxide ($NO_2$) | 1-hour<br>Annual Mean | 0.18 ppm<br>0.030 ppm | 100 ppb<br>0.053 ppm |
| Sulfur Dioxide ($SO_2$) | 1-hour<br>24-hour<br>Annual Mean | 0.25 ppm<br>0.04 ppm<br>— | 75 ppb<br>0.14 ppm<br>0.03 ppm |

Notes: ppm=parts per million; ppb=parts per billion; µg/m3= micrograms per cubic meter; "—" =no standard.
Source: CARB (http://www.arb.ca.gov/research/aaqs/aaqs2.pdf). Revised May 2016.

**Criteria Air Pollutants.** The NAAQS and CAAQS are established for "criteria pollutants." These are ozone, respirable particulate matter (PM10), fine particulate matter (PM2.5), carbon monoxide (CO), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), and lead. Ozone is an example of a secondary pollutant that is not emitted directly from a source (e.g., an automobile tailpipe), but it is formed in the atmosphere by chemical and photochemical reactions. Reactive organic gases (ROG), including volatile organic compounds (VOC), are regulated as precursors to ozone formation. The USEPA and CARB both have independent authority to develop and establish ambient air quality standards.

**Attainment Status and Air Quality Plans.** The USEPA, CARB, and the local air district classify an area as attainment, unclassified, or non-attainment. The classification depends on whether the monitored ambient air quality data show compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively. The proposed substation would be located within San Diego County, under the jurisdiction of the SDAPCD. Table 5.3-3 summarizes attainment status for the criteria pollutants in the SDAPCD with both the federal and state standards.

**Table 5.3-3. Attainment Status for San Diego Air Basin**

| Pollutant | Federal Designation | State Designation |
|---|---|---|
| Ozone (1-hour) | No Federal Standard | Nonattainment |
| Ozone (8-hour) | Nonattainment | Nonattainment |
| PM10 | Attainment | Nonattainment |
| PM2.5 | Attainment | Nonattainment |
| CO | Attainment | Attainment |
| $NO_2$ | Attainment | Attainment |
| $SO_2$ | Attainment | Attainment |

Source: San Diego Air Pollution Control District (http://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html).

Table 5.3-4 presents recent historical air quality data for the project area collected at the nearest representative monitoring station in San Diego County. The station used to provide ozone, PM2.5, and $NO_2$ concentrations is located at the Camp Pendleton monitoring station, approximately 6 miles west-northwest of the proposed project site. This is the most representative site of the project area given its coastal location. PM10 and $SO_2$ concentrations are from the El Cajon–Redwood Avenue and El Cajon–Floyd Smith Drive monitoring stations, approximately 35 miles and 33 miles southeast of the proposed project site, respectively. The Redwood Avenue monitoring station was moved to the current Floyd Smith Drive location in 2014 resulting in insufficient data for 2014, and only 75 percent of the 2015 PM10 data is

complete. Carbon monoxide concentrations are from the San Diego 1110 Beardsley Street station approximately 36 miles south of the proposed project site.

The ambient air quality data indicates that from 2013-2015, the proposed project area had experienced exceedances of the state and federal ozone and PM2.5 standards and state PM10 standards, but experienced no exceedance of the federal PM10 standards, or federal or state $SO_2$, $NO_2$, and CO standards.

**Table 5.3-4. San Diego Air Basin Ambient Air Quality**

| | | Maximum Concentration | | |
|---|---|---|---|---|
| **Pollutant** | **Averaging Time** | **2013** | **2014** | **2015** |
| Ozone | 1-hour (ppm) | 0.078 | 0.097 | 0.093 |
| | 8-hour (ppm) | 0.066 | 0.079 | 0.077 |
| PM10 | 24-hour (µg/m$^3$) | 41.1 | — | 50.3 |
| | Annual (µg/m$^3$) | 24.1 | — | 23.4 |
| PM2.5 | 24-hour 98$^{th}$ Percentile (µg/m$^3$) | 41.0 | 54.4 | 43.7 |
| | Annual (µg/m$^3$) | 17.8 | 19.1 | 18.8 |
| CO | 1-hour (ppm) | 3.0 | 2.7 | 2.6 |
| $NO_2$ | 1-hour (ppm) | 0.081 | 0.060 | 0.060 |
| | 1-hour 98$^{th}$ Percentile (ppm) | 0.049 | 0.051 | 0.044 |
| | Annual (ppm) | 0.019 | 0.018 | 0.017 |
| $SO_2$ | 1-hour (ppm) | 0.007 | — | 0.001 |

Source: CARB, 2016c.
Notes: ppm = parts per million; µg/m$^3$ = micrograms per cubic meter; "—" = no data or insufficient annual coverage currently available.

**Toxic Air Contaminants.** Toxic air contaminants (TACs) are air pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations. Potential human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another's. TACs are not subject to ambient air quality standards but are regulated by SDAPCD using a risk-based approach. If the projected emissions of a specific air toxic compound from a proposed new or stationary modified source suggest a potential public health risk, then each applicant is subject to a health risk assessment for the source in question. Such an assessment also evaluates the chronic and acute hazards and the potential increased cancer risk stemming from exposure to a change in airborne TACs. The three TACs that do have state ambient air quality standards (lead, vinyl chloride, and hydrogen sulfide) are pollutants that are in attainment of the state standards in San Diego County and that are not relevant to the air pollutant emissions sources for this project. Mobile sources powered by diesel fuel emit diesel particulate matter (DPM), which is classified as a TAC because many toxic compounds adhere to diesel exhaust particles. Statewide programs for mobile sources and diesel-fired equipment set mandatory exhaust standards for manufacturers of these engines and require equipment owners or operators to register portable equipment.

**Sensitive Receptors.** While the project site is located within a commercial/industrial park, air pollution emission impacts on sensitive receptors surrounding the project area are of concern. Sensitive receptors include but are not limited to children, pregnant women, the elderly, and acutely or chronically ill. These individuals may be present at educational or daycare facilities, convalescent homes, hospitals, residences, or open recreational areas. The nearest sensitive receptor to the proposed project site is the

Coastal Academy Elementary School approximately 850 feet south southeast. There are three other educational facilities, a daycare, an outdoor golf training facility, a public park, two convalescent homes, and several medical clinics within one mile of the project site. The nearest single family residences are approximately 1,200 feet east of the project site.

## Regulatory Background

Sources of air pollutants in San Diego County are subject to regulation and oversight by the USEPA, CARB, and SDAPCD. Although the proposed project is within the City of Oceanside, this analysis also notes the guidelines for determining significance in the California Environmental Quality Act (CEQA) process, as approved by the County of San Diego.

### *Federal Clean Air Act (CAA)*

The NAAQS (Table 5.3-2) for criteria air pollutants were established in 1970 with a mandate for periodic updating. The CAA places responsibility on state and local air agencies to maintain these ambient air quality standards. In San Diego County, the CARB and SDAPCD establish the regulations, enforce air pollution control requirements, and develop the attainment plans for the NAAQS. The USEPA implements most aspects of the CAA, and reviews local and state air quality management plans and regulations to ensure attainment with the NAAQS.

### *California Clean Air Act*

Implemented by the CARB, the California Clean Air Act establishes broad authority for California to regulate emissions from mobile sources and requires regions to develop and enforce strategies to attain CAAQS. In San Diego County, the SDAPCD is responsible for periodically preparing air quality management plans demonstrating how these standards will be met.

### *USEPA/CARB Off-Road Mobile Sources Emission Reduction Program*

The California Clean Air Act mandates that CARB achieve the maximum degree of emission reductions from all off-road mobile sources in order to attain the state ambient air quality standards. Off-road mobile sources include construction equipment. Tier 1, Tier 2, Tier 3, and Tier 4 standards for large compression-ignition engines used in off-road mobile sources began to go into effect in California for new equipment in 1996, 2001, 2006, and 2008, respectively. These standards and standards applicable to fleets that are already in-use address emissions of nitrogen oxides (NOx) and toxic particulate matter from diesel combustion.

### *CARB In-Use Off-Road Diesel-Fueled Fleet Regulation*

The regulations for in-use off-road diesel equipment are designed to reduce NOx and DPM from existing fleets of equipment. CARB expects to gradually enforce this rule with emissions performance requirements for large fleets starting on July 1, 2014 and for small fleets starting on January 1, 2019 (according to CARB Mail-Out #MSC 14-1, February 2014). Depending on the size of the fleet, the owner would need to ensure that the average emissions performance of the fleet meets certain state-wide standards. In lieu of improving the emissions performance of the fleet, electric systems can be installed to replace diesel equipment in the fleet average calculations. Presently, all equipment owners are subject to a five-minute idling restriction in the rule (13 California Code of Regulations, Chapter 10, Section 2449).

### *CARB Portable Equipment Registration Program (PERP)*

This program allows owners or operators of portable engines and associated equipment commonly used for construction or farming to register their units under a statewide portable program that allows them to operate their equipment throughout California without having to obtain individual permits from local air districts.

### *SDAPCD Rules and Regulations*

The SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards within San Diego County. It is also responsible for permitting and controlling stationary source criteria and air toxic pollutants as delegated by the USEPA. Applicable rules and regulations to the proposed substation project include:

- **Regulation II – Permits.** The rules under this regulation require the permitting of stationary sources, require new emission sources use best available control technology (BACT) to control criteria pollutant emissions, and require offsetting of emissions if permitted emissions would exceed designated thresholds. There is the potential that portable internal combustion engines being used during Project construction would require permits from SDAPCD if they are not permitted under the CARB PERP program.
- **Regulation IV – Prohibitions**
  - **Rule 50 – Visible Emissions.** This rule prohibits discharge of air contaminants or other material, which are as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or obscure an observer's view.
  - **Rule 51 – Nuisance.** This rule prohibits discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any such persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property.
  - **Rule 55 – Fugitive Dust Control.** The rule limits visible dust opacity and visible dust plumes beyond property lines, and requires control of track-out onto paved roads to control the amount of PM entrained in the atmosphere from man-made sources of fugitive dust.

### *City of Oceanside General Plan – Land Use Element*

The Natural Resource Management section in the City of Oceanside General Plan, Land Use Element contains an air quality policy stating the city shall cooperate with the San Diego County Air Pollution Control Board (SDCAPCB) and participate in the Regional Air Quality Control Strategy (RAQS). The RAQS is developed by the San Diego Quality Planning Team which is comprised of representatives from the SDCAPCB, Comprehensive Planning Organization, and the California Department of Transportation (Caltrans). Within the Environmental Resource Management Element are several air quality policies. The long-range policy direction restates that the city shall cooperate with county, state, and federal agencies in continuing programs of air quality improvement. The environmental resource management plan restates that industry and development projects are subject to regulations and controls of the SDAPCB and should exercise dust controls and noise abatement measures as necessary to protect the health and wellbeing of the surrounding community.

## Applicant Proposed Measures

There are no applicant proposed measures for air quality.

## 5.3.2 Environmental Impacts and Mitigation Measures

**Significance Criteria.** The SDAPCD rules and regulations include trigger levels for potential ambient air quality impacts, in SDAPCD Regulation II, Rule 20.2, Table 20.2-1, and these regulatory levels provide the basis for screening criteria for potential impact significance. Within the jurisdiction of SDAPCD, lead agencies commonly note these regulatory levels and the CEQA guidelines for determining significance in that are approved by the County of San Diego, Department of Planning and Land Use (March 19, 2007). A project that emits over these guideline levels would normally require a detailed air quality impact assessment, especially if sensitive receptors are likely to be impacted or if the potential exists for a significantly cumulative air quality impact. If emissions during construction of the proposed project exceed the thresholds, then construction activities would be deemed likely to have the potential to violate air quality standards or contribute substantially to existing violations.

**Table 5.3-5. Air Quality Significance Thresholds**

| Significance Threshold | NOx | VOC | PM10 | PM2.5 | CO | SOx |
|---|---|---|---|---|---|---|
| Pounds Per Day (lb/day) | 250 | 75 | 100 | 55 | 550 | 250 |
| Tons Per Year (tpy) | 40 | 13.7 | 15 | 10 | 100 | 40 |

Source: County of San Diego, Guidelines for Determining Significance, Air Quality. March 19, 2007.

### *a. Would the project conflict with or obstruct implementation of the applicable air quality plan?*

*LESS THAN SIGNIFICANT*. The SDAPCD manages local air quality, subject to oversight by CARB and USEPA, and administers California and federal air pollution control programs ensuring attainment and maintenance of the ambient air quality standards. A project could be inconsistent with the applicable air quality management plan or attainment plan if it could cause population and/or employment growth or growth in vehicle miles traveled in excess of the growth forecasts included in the attainment plan. The proposed project would not create any new permanent employment; the substation would be unstaffed. Construction of the proposed substation is expected to take approximately 20 months to complete with the expected required personnel peaking at 40 workers. Routine operations are expected to require one or two workers to visit the station on a daily or weekly basis. Routine maintenance is expected to require approximately six trips to the station per year by two to four workers.

Construction-related emissions for the proposed project were estimated using the California Air Pollution Officers Association (CAPCOA), California Emissions Estimator Model (CalEEMod), version 2016.3.1, and the results are shown in Table 5.3-6. The maximum daily emissions generated during construction of the proposed substation do not exceed the SDAPCD rules and regulations.

**Table 5.3-6. Estimated Maximum Daily Construction Emissions (lb/day)**

| Anticipated Construction | NOx | VOC | PM10 | PM2.5 | CO | SOx |
|---|---|---|---|---|---|---|
| 2017 | 106 | 9 | 22 | 12 | 54 | 0.11 |
| 2018 | 119 | 10 | 23 | 13 | 67 | 0.14 |
| 2019 | 40 | 4 | 3 | 2 | 33 | 0.06 |
| Significance Threshold | 250 | 75 | 100 | 55 | 550 | 250 |
| Significant? | No | No | No | No | No | No |

Source: SDG&E 2016; response dated November 18, 2016.

Regional air quality plans and emissions inventories anticipate growth, and this anticipated growth includes the construction of some new infrastructure, such as the proposed project. Conducting project construction and operational activities in compliance with applicable SDAPCD rules and regulations would ensure the project-related activities would not conflict with or obstruct attainment and maintenance of the ambient air quality standards. Project-related emissions occurring in compliance with these standards would not conflict with or obstruct implementation of the applicable air quality plan. This impact would be less than significant.

***b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?***

DURING CONSTRUCTION, *LESS THAN SIGNIFICANT*. Emissions during the construction phase would include criteria air pollutants that could contribute to existing or projected violations of the ambient air quality standards for ozone and PM10. Construction of the proposed substation, subtransmission line segments, and other project facilities would result in air pollutant emissions from construction equipment and material handling at the various work areas and from off-site motor vehicle trips carrying workers and materials. Motor vehicles, off-road equipment, and other construction equipment would directly emit criteria air pollutants and toxic air contaminants.

The proposed project includes a substation facility that is planned to occupy 9.66 acres. The substation would tie into adjacent SDG&E facilities via approximately 1,500 feet of underground power line duct bank and would have an approximate 4,650-foot long electrical distribution line, mostly on the proposed substation parcel. A 40-foot telecommunication monopole would also be constructed at the southern corner of the parcel. Construction of the substation is expected to require an average of 24 workers and a peak of 40 workers. The equipment anticipated are detailed in Table 4-4 (Project Description).

During construction, emissions would be generated at the proposed substation site, at staging yards, along the subtransmission line and fiber optic line work areas, and along the roadways used to access these locations. Construction emissions would be caused by exhaust from vehicles and equipment (e.g., ozone precursors [volatile organic compounds and NOx], CO, and particulate matter [PM10 and PM2.5]) and fugitive dust/particulate matter from ground-disturbing activities and travel on unpaved roads. Diesel and gasoline-powered construction equipment at work sites would include dozers, loaders, graders, backhoes, lifts, a crane, and haul trucks for lifting, delivery, concrete, water, and work crews. Outside of work sites, exhaust emissions would be caused by vehicles transporting equipment and supplies to the sites, trucks removing debris or importing fill, and workers commuting to and from work sites. Table 5.3-6 (Estimated Maximum Daily Construction Emissions) summarizes the estimated total construction emissions modeled in CalEEMod, version 2016.3.1 (SDG&E 2016; response dated November 18, 2016).

Emissions were calculated based on anticipated equipment and workforce needs during construction of the proposed substation (Table 4-4) over an estimated 20-month construction period. During construction, the emissions generated would not exceed the SDAPCD threshold levels for any air pollutants. Project construction activities would need to be compliant with federal, state, and SDAPCD rules and regulations and would adhere to SDG&E Construction Practices in the Standard Operating Procedures (see Section 4.12.3, in Project Description). Because the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation, the impacts resulting from construction-related emissions would be less than significant.

DURING OPERATION, *LESS THAN SIGNIFICANT*. The operation and maintenance of the proposed substation and related facilities would require occasional use of mobile sources and some portable equipment that cause

routine emissions of criteria air pollutants. The substation itself would not include any stationary sources of air pollutants, although the on-site unintentional release of insulating gas would cause greenhouse gas emissions (Section 5.7). During operations, emissions would result from vehicles used for periodic visits, inspections, and routine maintenance or as needed during an emergency. Operation and maintenance activities are described in Section 4.12, Operation and Maintenance (Project Description), and these activities would largely be included in SDG&E's regular operations and maintenance schedule with nearby facilities. The substation would not be staffed, and the routine operation and maintenance activities would result in a small, but unquantified amount of air pollutant emissions from mobile sources. SDG&E claims that operation and maintenance activities would not materially increase with the addition of the proposed facilities to SDG&E's system. Crews would conduct maintenance roughly six times per year, and one or two workers would visit the substation daily or weekly. As such, the operation and maintenance emissions would be less than the level of emissions during construction activities, which would also be less than the significance thresholds. These operation and maintenance emissions would not be likely to violate any air quality standard or contribute substantially to an existing or projected air quality violation, and the impacts of emissions during operation and maintenance would be less than significant.

***c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***

DURING CONSTRUCTION, *LESS THAN SIGNIFICANT*. The proposed project is within the San Diego Air Basin which is state and federally designated nonattainment for ozone, and state designated nonattainment for PM10 and PM2.5 (Table 5.3-3). Concurrent construction of other projects in close proximity to the proposed project would result in increased local air quality impacts for the duration of simultaneous construction activities. However, simultaneous construction projects would also need to comply with SDAPCD rules and regulations regarding criteria pollutants. Table 5.3-6 shows that construction-related emissions would not exceed the significance thresholds and therefore not be at a cumulatively considerable level. In addition to the implementation of SDG&E's Standard Operating Procedures (see Section 4.12.3, in Project Description), the proposed project would not result in a cumulatively considerable new increase of any criteria pollutants. The impact would be less than significant.

DURING OPERATION, *LESS THAN SIGNIFICANT*. During operation, emissions would result from limited vehicle use related to routine maintenance at the project site. The associated emissions levels would be below the significance thresholds and would not result in a cumulatively considerable increase of any criteria pollutants. The impact would be less than significant.

***d. Would the project expose sensitive receptors to substantial pollutant concentrations?***

*LESS THAN SIGNIFICANT*. The project site is located within an industrial park surrounded by commercial and industrial uses and undeveloped land. Sensitive receptors include but are not limited to children, pregnant women, the elderly, and acutely or ill. These individuals may be present at educational or daycare facilities, convalescent homes, hospitals, residences, or open recreational areas. The nearest sensitive receptor to the proposed project site is the Coastal Academy Elementary School approximately 850 feet south southeast and the nearest residences are 1,200 feet east of the project site.

Excavation, grading, and other construction-related activities could potentially expose sensitive receptors to construction-related emissions, including emissions of fugitive dust, DPM, and other toxic air contaminants, which would expose the receptors to increased health risk and hazards. The estimated construction-related emissions (Table 5.3-6) would not exceed the significance thresholds set by the

SDAPCD. Compliance with the SDAPCD rules and regulations and implementation of SDG&E's Standard Operating Procedures (see Section 4.12.3, in Project Description) would further reduce the construction-related emissions of TACs and fugitive dust. Therefore, the total project construction-related emissions would not be of a magnitude or duration that would expose the nearest sensitive receptors to substantial pollutant concentrations. During operation, the emissions produced by the proposed substation are limited to the use of vehicles for routine maintenance and would not expose sensitive receptors to substantial concentrations of air pollutants. The impact would be less than significant.

***e. Would the project create objectionable odors affecting a substantial number of people?***

*LESS THAN SIGNIFICANT*. The proposed project would not include any sources of objectionable odors during operation. The temporary generation of minor odors from combustion of diesel by construction equipment and emissions of dust would occur during construction activities. Any odors due to construction activities would be intermittent, dissipate quickly, and be localized to the work area. Odors from diesel combustion would be minimized through use of ultra-low sulfur diesel fuel, which is mandatory through federal and state diesel fuel standards. Odors would be limited by a prohibition on nuisances (SDAPCD Regulation IV, Rule 51), and fugitive dust emissions would be minimized through implementation of local rules and regulations (SDAPCD Regulation IV, Rule 55). Project-related activities occurring in compliance with these rules and regulations would not create objectionable odors affecting a substantial number of people. This impact would be less than significant.

# 5.4 Biological Resources

| BIOLOGICAL RESOURCES<br>Would the project: | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| c. Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☒ | ☐ | ☐ |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☒ |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.4.1 Setting

This section describes the biological resources that occur, or could potentially occur, in the Project area. It includes a description of the existing biotic environment, including common plants and wildlife, sensitive habitats, special-status species and their locations in relation to the Proposed Project. The following section (5.4.2) presents an analysis of potential impacts to biological resources and, where necessary, specifies mitigation measures to reduce potential impacts to less-than-significant levels. Information used in preparing this section was derived from:

- Proponent's Environmental Assessment for the Ocean Ranch Substation Project (SDG&E, 2016a);
- Final Biological Technical Report: Ocean Ranch Substation Project (Pangea, 2016);
- Data Request Response No. 1 to CPUC Data Request No. 1 (SDG&E, 2016b)
- Records of sensitive species locations from the California Natural Diversity Database (CNDDB; CDFW, 2016) for the following 7.5-minute USGS topographic quads: San Luis Rey, Las Pulgas Canyon, Morro Hill, Bonsall, Oceanside, San Marcos, Encinitas, and Rancho Santa Fe; and
- Records of sensitive species locations from the California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California for the topographic quads listed above (CNPS, 2016).

The Proposed Project would be located approximately 35 miles north of downtown San Diego. The Proposed Project site is found on the U.S. Geological Survey (USGS) San Luis Rey 7.5 minute quadrangle

map. Average annual precipitation in the area is approximately 10 inches, most of which falls between November and April (WRCC, 2016).

For the purposes of this section, the Project site is defined as all areas that would be directly affected by construction activities. For biological resources, the Project Study Area (PSA) includes the Project site plus a surrounding 50-foot buffer; see Figure 5.4-1. (Note: All figures referenced in the text are located at the end of this section.) The Project area includes the Project site and its general vicinity.

The proposed Ocean Ranch Substation site occupies 9.66 acres, which is primarily disturbed habitat dominated by non-native vegetation. The site has gentle to moderately sloping topography. There is evidence of past site disturbance including grading, mowing, and agricultural use. Past earthwork at the site (the most recent during 2006 to 2007) consisted primarily of infilling of existing drainage features with artificial fill. That grading resulted in the formation of an enclosed basin in the central portion of the site with a subdrain that allows the basin to drain toward the southwest (Kleinfelder, 2015). This drainage basin supports a small area of riparian vegetation. The site was mowed most recently in July 2016.

The proposed substation site is composed of two parcels. A 4- to 7-foot-high slope planted with small, immature ornamental trees and landscaping ground cover divides the two parcels. Landscaped slopes run along the western edge of the site adjacent to Avenida del Oro and along the northwestern edge adjacent to a paved driveway. These slopes are also planted with ground cover and small, immature ornamental trees. Mature ornamental trees are found along the southeastern edge of the site along the fence separating the site from adjacent commercial/industrial buildings. The entire substation site would be permanently impacted by construction of the facility.

Four potential construction staging yards, with a total area of approximately 17.5 acres, have been identified in the vicinity of the proposed substation. The staging areas may be used for various activities in support of construction, including parking, storage, lighting, construction trailers, portable restrooms, refueling of vehicles and equipment by a mobile fueling truck, and pole framing and assembly. In-ground fencing would be installed at the staging yards, unless already present. Gravel, class II road base, or other best management practice (BMP) may be used to line the ground at staging yards to avoid mud conditions and sediment transport off site. The staging yards are temporary work areas and are intended to be restored as near to pre-construction conditions as possible following the completion of construction. The 4 yards are the Corporate Center, USPS, San Luis Rey, and Melrose Staging Yards:

- The Corporate Center Staging Yard is approximately 11.5 acres of disturbed habitat that has been previously mass graded as part of an approved industrial development plan. The Corporate Center parcel is mowed annually for vegetation management. Surrounding areas are open space, also subject to previous grading and recent vegetation management, commercial/industrial buildings, public roadways, and landscaped areas.
- The USPS Staging Yard is approximately 5 acres of undeveloped land composed of disturbed habitat that has been previously graded. The site is periodically mowed for vegetation management, most recently in October 2016. Surrounding areas are commercial/industrial buildings, public roadways, and landscaped areas. There is a small area of undeveloped land, also subject to previous disturbance and vegetation management, to the southeast, and the proposed substation site is across the street (Avenida del Oro) from this staging yard.
- The San Luis Rey Staging Yard is approximately 0.5 acres of paved area next to the existing San Luis Rey Substation. The area to the south is the substation, but just to the north is open space with native coastal scrub habitat. This area to the north of the yard is U.S. Fish and Wildlife Service (USFWS) designated critical habitat for the federally threatened coastal California gnatcatcher (*Poliptila californica*

*californica*). At its closest point, the edge of the critical habitat is approximately 60 feet north of the staging yard (USFWS, 2016).

- The Melrose Staging Yard is approximately 0.5 acres of land next to the existing Melrose Substation. This area has several mature ornamental landscaping trees, including palm trees. The substrate at the staging yard consists of wood chips. Surrounding areas are the substation, residential and commercial/ industrial development, and additional landscaped areas.

Other existing SDG&E paved material storage yards may also be used to support construction. No improvements would occur at these existing sites as a result of the Proposed Project. Other Project components (Power Line TL 6966 Loop-In, 12 kV Distribution System, Telecommunications System, Pulling Sites) would be installed either within the footprint of the proposed substation or underground along paved public roadways. Most work areas are accessible by vehicle in paved/developed areas or other existing disturbed areas. Vehicles would remain within existing access roads, previously disturbed areas, and designated temporary work areas, where feasible. No new access roads are proposed for the Project. See Section 4.0, Project Description, for full details.

## Previous Site Disturbance

### *Ocean Ranch Substation Site and USPS Staging Yard*

The Ocean Ranch Substation site and the USPS Staging Yard are located within the Pacific Coast Business Park Master Development Plan, which is an industrial development plan within the Rancho del Oro Specific Plan area.

The Pacific Coast Business Park Master Development Plan was approved and its Environmental Impact Report was certified in August 2005. Per that plan, the entire plan area has been graded to create development pads, and all infrastructure was installed including roads, drainages, and utilities.

The proposed Ocean Ranch Substation site was used as agricultural land in the early 2000s (Google Earth aerial photos dated 2003 and 2004). By 2008, the Ocean Ranch Substation site and the USPS Staging Yard were mass graded for the development of industrial uses per the approved Pacific Coast Business Park Master Development Plan. Currently, the proposed Ocean Ranch Substation site is entirely bounded by roads and existing industrial and commercial development. Soils that underlie the Proposed Project area consist primarily of loose to medium dense fill, medium dense to hard to very hard colluvium, and at depth very dense formational soils, which are primarily of the Santiago Formation. The Project site consists of documented fill overlying alluvial and colluvial deposits. The substation site is mowed annually, most recently in July 2016. The USPS Staging Yard site has been mowed annually for the past 10 to 12 years, most recently in October 2016.

### *Corporate Center Staging Yard*

The Corporate Center Staging Yard is a vacant property within the Ocean Ranch Corporate Center, west of the Pacific Coast Business Park area. The site for the staging yard was approved for industrial development (Windstar Project) and has been previously graded. The Corporate Center Staging Yard is mowed annually.

## Vegetation Communities

General biological resource and reconnaissance-level field surveys of the PSA were conducted by Pangea Biological in March, May, and October 2015, and March 2016. The purpose of the surveys was to determine the vegetation communities present and the special-status species that occur or have the potential

to occur. Aspen Environmental Group (Aspen) conducted a site visit in September 2016 to verify existing conditions.

Vegetation community classifications generally follow Holland (1986), as modified by Oberbauer et al. (2008). The PSA supports three vegetation communities and cover types: Disturbed Southern Riparian Scrub, Disturbed Habitat, and Urban/Developed/Landscape/Ornamental/Bare Ground; see Figure 5.4-2. The acreages of each vegetation community and anticipated impacts are provided in Table 5.4-1.

The proposed Ocean Ranch Substation site includes disturbed habitat with dominant species that include within the graded pad the native species western ragweed (*Ambrosia psilostachya*) and telegraph weed (*Heterotheca grandiflora*), and non-native species Russian thistle (*Salsola tragus*), brome grass (*Bromus* spp.), Australian saltbush (*Atriplex semibaccata*), crown daisy (*Chrysanthemum coronarium*), and lavender (*Limonium* sp.); within the developed desiltation basin is Disturbed Southern Riparian Scrub habitat that is dominated by native mulefat (*Baccharis salicifolia*) and arroyo willow (*Salix lasiolepis*), and non-native iceplant (*Mesembryanthemum* sp.) and sweet fennel (*Foeniculum vulgare*); and the urban/developed areas consist of bare ground, pavement-asphalt, and landscape/ornamental vegetation. Regular maintenance activities at this site consist of mowing and removal of trash and debris.

The Corporate Center Staging Yard includes disturbed habitat with dominant species that include native telegraph weed and non-native Russian thistle and wild oat (*Avena fatua*); and urban/developed areas that consist of pavement-asphalt and landscape/ornamental vegetation. Regular maintenance activities at this site consist of mowing and removal of trash and debris.

The USPS Staging Yard includes disturbed habitat with dominant plant species non-native wild oat and ripgut brome (*Bromus diandrus*) and urban/developed areas that consist of pavement-asphalt and landscape/ornamental vegetation. Regular maintenance activities at this site consist of mowing and removal of trash and debris. The jurisdictional delineation report for the Proposed Project (Pangea and Borcher, 2016) indicates that there is one “small patch” of emergent wetland with cattail (*Typha latifolia*) in the southwest corner of the yard that is supported by an irrigation leak on the slope above. Photos included with the jurisdictional report show that the patch is, at most, a few square feet (See Appendix I).

The San Luis Rey Staging Yard is a paved area at an existing substation. While the yard is paved, the surrounding PSA includes disturbed habitat with dominant species that include non-native eucalyptus (*Eucalyptus* sp.), Russian thistle, oxalis (*Oxalis* sp.), and foxtail chess (*Bromus madritensis* ssp. *rubens*); and urban/develop areas that consist of pavement-asphalt and landscape/ornamental vegetation. The San Luis Rey Substation Staging Yard consists of pavement and therefore no vegetation maintenance activities occur at this site.

The Melrose Staging Yard includes urban/developed areas that consist of pavement-asphalt, bare ground, and landscape/ornamental vegetation. The landscape/ornamental plant species include Peruvian pepper tree (*Schinus molle*), olive tree (*Olea europea*), bottlebrush (*Callistemon viminalis*), fan palm (*Washingtonia* sp.), date palm (*Phoenix* sp.), oleander (*Nerium oleander*), and ornamental pine trees (*Pinus* sp.). Maintenance activities at this site consist of vegetation trimming twice per month and annual trimming of any trees that encroach into the area required for minimum clearance from power lines.

Vegetation communities found in the PSA are summarized in Table 5.4-1 and described below. Sensitive vegetation communities are defined as riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or designated by the USFWS and the California Department of Fish and Wildlife (CDFW). One sensitive vegetation community, Disturbed Southern Riparian Scrub, occurs on the Project site, as described below.

Approximately 43 plant species were observed within the PSA during surveys, most of which are non-native. A list of plant species observed during field surveys is included in the Biological Technical Report (Appendix G).

**Table 5.4-1. Vegetation Communities and Anticipated Impacts in the PSA**

| Vegetation Community | Area (acres) | Temporary Impacts (acres) | Permanent Impacts (acres) |
|---|---|---|---|
| **Riparian/Wetland** | | | |
| Southern Riparian Scrub (Disturbed) | 0.16 | 0 | 0.16 |
| Subtotal | 0.16 | 0 | 0.16 |
| **Developed/Disturbed** | | | |
| Disturbed Habitat | 24.37 | 16.39 | 7.98 |
| Urban/Developed/Landscape/Ornamental/Bare Ground | 3.34 | 1.82 | 1.52 |
| Subtotal | 27.71 | 18.21 | 9.50 |
| Total | 27.86 | 18.21 | 9.66 |

Source: Pangea (2016)

### *Southern Riparian Scrub (Disturbed)*

Southern riparian scrub is a vegetation community dominated by small trees or shrubs that are associated with drainages or river systems (Oberbauer et al., 2008). Disturbed Southern Riparian Scrub was observed at one location within the PSA, in the engineered drainage basin within the Ocean Ranch Substation site; see Figure 5.4-2. Google Earth images (Google Earth, 2016) indicate that this riparian vegetation developed only in the past few years after construction of the drainage basin.

The dominant species within the basin are a mix of native and non-native species including native arroyo willow and mulefat, and non-native crown daisy, wild oat, Russian thistle, and iceplant.

Southern riparian scrub has a CNDDB State rank (S rank) of 3.2, meaning that this vegetation type is considered by CDFW to be rare and threatened (CDFW, 2010).

### *Disturbed Habitat*

Disturbed habitat includes vegetation and soils characterized by physical disturbance, such as clearing for fuel management, repeated grading, maintenance of firebreaks, or repeated use as construction staging areas, trails, access roads, or dirt parking lots. Disturbed habitat in the PSA is generally dominated by invasive non-native species, such as black mustard (*Brassica nigra*), Russian thistle, tocalote (*Centaurea melitensis*), and ripgut brome (*Bromus diandrus*). Native species are also found in the disturbed habitat in the PSA and include fascicled tarweed (*Deinandra fasciculata*), coyote brush *(Baccharis pilularis)*, coastal goldenbush (*Isocoma menziesii*), telegraph weed, and western ragweed. Disturbed habitat occurs throughout most of the substation site and the Corporate Center Staging Yard, and is also found in a narrow strip along the north edge of the PSA buffer at the San Luis Rey Staging Yard; see Figure 5.4-2.

### *Developed/Disturbed*

Developed/disturbed areas, including landscaping, have been physically altered to an extent that native vegetation communities are no longer supported (Oberbauer et al., 2008). Developed/disturbed areas occur throughout the PSA, and include paved and dirt roads, bare ground associated with disturbance or development, buildings, paved parking lots, road medians and roadsides, and landscaped areas.

## Common Wildlife

Surveys identified 21 common wildlife species within the PSA. A full list of wildlife species observed is included in the Biological Technical Report (Appendix G). Some of the species observed are rock pigeon (*Columba livia*), American crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), and western meadowlark (*Sturnella neglecta*) (Pangea, 2016).

## Special-status Species

Special-status species include those listed, proposed for listing, or candidates for listing as threatened or endangered under the federal or State Endangered Species Acts, California Species of Special Concern, and other species that have been identified by the USFWS, CDFW, or other agency as unique or rare, and those listed as regionally sensitive in the SDG&E Natural Community Conservation Plan (NCCP) (SDG&E, 1995). See Regulatory Background section below for a description of the SDG&E NCCP.

### *Special-status Plants*

Five special-status plant species have been documented within 1 mile of the PSA; see Figure 5.4-3. These are listed in Table 5.4-2. The PSA does not include suitable habitat for these species. A CNDDB (CDFW, 2016) and CNPS (CNPS, 2016) search of the nine 7.5-minute USGS topographic quads that include and surround the PSA was also performed. This search found no additional special-status plant species that are likely to occur in the PSA; see Appendix H.

Reconnaissance-level field surveys did not identify any special-status plant species within the PSA. A list of plant species observed is included the Biological Technical Report (Appendix G) and consists of common native plants as well as non-native and ornamental species.

**San Diego ambrosia.** San Diego ambrosia (*Ambrosia pumila*) is federally listed as endangered and may be found in disturbed habitat. Only 16 extant occurrences of this species are known. Two occurrences have been documented within one mile of the Project. One occurrence is approximately 0.7 miles north of the San Luis Rey Staging Yard. This occurrence was threatened by construction of State Highway 76 and some San Diego ambrosia were transplanted to another site, located approximately 4.3 miles northeast of the proposed Ocean Ranch Substation site. Some potential habitat may still exist in the vicinity of this occurrence; however, no San Diego ambrosia were observed in 2009 and 2012. A second occurrence is located approximately 0.9 miles north of the Corporate Center Staging Yard. No suitable habitat appeared to remain in the area in 2012 and the occurrence is presumed extirpated.

San Diego ambrosia is a perennial species and can be detected year-round. It was not identified in the PSA during biological surveys. Based on the current soils and level of disturbance within the PSA, and the lack of detection of this species during biological surveys, San Diego ambrosia is not expected to occur.

**Table 5.4-2. Special-Status Plant Species Documented within One Mile of the PSA**

| Species | Status | Habitat | Potential for Occurrence in the PSA |
|---|---|---|---|
| **Plants** | | | |
| *Ambrosia pumila*<br>San Diego ambrosia | FE, CRPR 1B.1, NCCP | Perennial herb; clay soils, sometimes in or around vernal pools, grasslands or openings in shrublands, disturbed areas; sea level to about 1400 ft. elev. Blooms Apr–July, sometimes thru Oct. | **Not likely to occur.** Not observed during surveys. Only 16 extant occurrences known. |

**Table 5.4-2. Special-Status Plant Species Documented within One Mile of the PSA**

| Species | Status | Habitat | Potential for Occurrence in the PSA |
|---|---|---|---|
| *Brodiaea filifolia*<br>Thread-leaved brodiaea | FT, SE, CRPR 1B.1, NCCP | Perennial bulbiferous herb; mesic clay soils in chaparral openings, coastal scrub, vernally moist grassland, vernal pools, cismontane woodland; 80 to 3675 feet elev. Blooms Apr-May, occasionally Mar–Jun. | **Not likely to occur.** PSA does not include suitable habitat. |
| *Ceanothus verrucosus*<br>Wart-stemmed ceanothus | CRPR 2B.2, NCCP | Evergreen shrub; chaparral on mesas and hillsides, sea level to about 1250 ft. elev. Blooms Dec–May. | **Not likely to occur.** PSA does not include suitable habitat, not observed during surveys. |
| *Euphorbia misera*<br>Cliff spurge | CRPR 2B.2 | Subshrub; rock slopes, coastal bluffs below about 1700 ft. elev. Blooms Jan–Aug. | **Not likely to occur.** PSA does not include suitable habitat. |
| *Nama stenocarpa*<br>Mud nama | CRPR 2B.2 | Annual/perennial herb. Intermittently wet areas – freshwater marshes and swamps, lake margins, riverbanks. Elev. 0-2,700 ft. Blooms Jan-Jul. | **Not likely to occur.** PSA does not include suitable habitat. |

**Definitions Regarding Potential Occurrence:**

| | |
|---|---|
| Present: | Species or sign of its presence observed on the site |
| High: | Species or sign not observed on the site, but reasonably certain to occur on the site |
| Moderate: | Species or sign not observed on the site, conditions suitable for occurrence |
| Low: | Species or sign not observed on the site, conditions marginal for occurrence |
| Not likely to occur: | Species or sign not observed on the site, conditions unsuitable for occurrence |

**STATUS CODES:**

| | |
|---|---|
| FE | Federally Endangered |
| FT | Federally Threatened |
| FC | Federal Candidate |
| SE | State Endangered |
| ST | State Threatened |
| SC | State Candidate |
| SR | State Rare |
| NCCP | Regionally Sensitive Species covered under the SDG&E Subregional NCCP |
| CRPR | California Rare Plant Rank |
| 1B | Plants Rare, Threatened, or Endangered in California and elsewhere |
| 2 | Plants Rare, Threatened, or Endangered in California, but more common elsewhere |
| 3 | Plants about which we need more information – a review list |
| 4 | Plants of limited distribution – a watch list |
| .1 | Seriously threatened in California (high degree/immediacy of threat) |
| .2 | Fairly threatened in California (moderate degree/immediacy of threat) |
| .3 | Not very threatened in California (low degree/immediacy of threats or no current threats known) |

### *Special-status Wildlife*

Thirteen special-status wildlife species have been documented within 1 mile of the PSA; see Figure 5.4-3. A CNDDB (CDFW, 2016) search of the nine 7.5-minute USGS topographic quads that include and surround the PSA found seven additional special-status wildlife species that may occur in the PSA; see Table 5.4-3. Of these 20 species, 10 are absent or not likely to occur. Descriptions of additional species from the CNDDB search that are not likely to occur in the PSA are provided in Appendix H.

No special-status wildlife species were detected during reconnaissance-level field surveys of the PSA. A list of the common wildlife species observed is included in the Biological Technical Report (Appendix G).

**Stephens' kangaroo rat.** Stephens' kangaroo rat (*Dipodomys stephensi*) is generally found in plant communities transitional between grassland and coastal sage scrub, but can be found in disturbed habitat. The most recent documented sighting within 1 mile of the PSA was in 1973. According to the CNDDB (CDFW, 2016), the nearest Stephens' kangaroo rat population was documented approximately 0.5 miles

north of the Corporate Center Staging Yard, but this population was extirpated by subsequent development activities. Due to the specific soil requirements of this species, based on the current soils and level of disturbance within the Project area, and the lack of detection of sign or potential sign for this species during biological surveys, Stephen's kangaroo rat is not expected to occur in the PSA.

**Coastal California gnatcatcher.** The Project site does not include suitable habitat for coastal California gnatcatcher (*Polioptila californica californica*). However, as described below, the San Luis Rey Staging Yard is in close proximity to USFWS-designated critical habitat for coastal California gnatcatcher; see Figure 5.4-4. This area is also identified in the Oceanside Subarea Species Plan (SAP) (Oceanside, 2010) as part of the regional coastal California gnatcatcher corridor, and the Oceanside SAP depicts observations of coastal California gnatcatcher near the San Luis Rey Staging Yard; see Figure 5.4-5.

**Burrowing owl.** Surveys identified potentially suitable habitat for burrowing owl (*Athene cunicularia*) at the Ocean Ranch Substation site, USPS Staging Yard, and Corporate Center Staging Yard. The area outside the San Luis Rey Staging Yard PSA could provide nesting and foraging habitat for burrowing owl. Culverts that could be used by burrowing owl were observed in the northern portion of the Ocean Ranch Substation site. Burrows that could be used by burrowing owl were observed within the Corporate Center Staging Yard. No burrowing owls or burrowing owl sign (e.g., whitewash, pellets, feathers, etc.) were observed during surveys. Applicant Proposed Measure (APM) BIO-4 specifies that protocol surveys for burrowing owl would be conducted in suitable habitat prior to construction and, if found, measures would be implemented to reduce and avoid impacts.

**Western yellow bat.** Surveys also identified potential roosting habitat for western yellow bat (*Lasiurus xanthinus*) in the Melrose Staging Yard. This yard includes mature non-native ornamental trees, including palm trees. No trimming or removal of these trees is anticipated for the Proposed Project. APM BIO-4 requires preconstruction surveys for western yellow bat at the Melrose Staging Yard. Western yellow bat may occur year-round in California and probably does not hibernate. Individuals usually roost in trees, and are commonly found roosting in the skirt of dead fronds in both native and non-native palm trees. Pupping season is June to July. The western yellow bat is believed to be non-colonial, although aggregations of up to 15 have been found in a single roost site and it probably forms small maternity groups (Pierson and Rainey, 1998; CDFW, 2008). Roost sites may be day roosts, used during inactive daylight hours, or maternity roosts, where female bats congregate to give birth and raise young.

**Special-status raptors and songbirds.** Common raptors (i.e., American kestrel [*Falco sparverius*] and red-tailed hawk [*Buteo jamaicensis*]) were observed during field surveys (see Appendix G) and special-status raptors, such as Cooper's hawk (*Accipiter cooperii*), northern harrier (*Circus cyaneus*), and white-tailed kite (*Elanus leucurus*) may utilize the Project site for foraging, although the habitat is marginal. As listed in Table 5.4-3, the Project site includes potentially suitable, although marginal, foraging habitat for other special-status birds, including tricolored blackbird (*Agelaius tricolor*), California horned lark (*Eremophila alpestris actia*), and bank swallow (*Riparia riparia*). These species have a low potential to occur. Western bluebird (*Sialia mexicana*) is included as a special-status species because it is covered under the NCCP, but it has no other conservation status. This species was observed in the PSA during field surveys. Other special-status bird and bat species may fly over the area during migration.

**Nesting birds.** A variety of birds may nest on the Project site. Nests may be built in trees or other vegetation or on the ground in the staging yards or substation site, or on adjacent structures. Nesting birds are protected under the Migratory Bird Treaty Act (MBTA) as well as California Fish and Game Code.

**Table 5.4-3. Special-Status Wildlife Species Documented within One Mile of the PSA**

| Species | Status | Habitat | Potential for Occurrence in the PSA |
|---|---|---|---|
| **Fish** | | | |
| *Eucyclogobius newberryi* Tidewater goby | FE, SSC | Brackish water estuaries and lagoons, lower reaches of freshwater coastal streams; entire California coast. | **Absent.** Documented within 1 mile, but no aquatic habitat present in the PSA. |
| **Reptiles** | | | |
| *Phrynosoma blainvillii* Coast (San Diego) horned lizard | SSC, NCCP | Inhabits coastal sage scrub and chaparral in arid and semi-arid climate zones; prefers friable, rocky, or shallow sandy soils; requires native ant food source. | **Not likely to occur.** Documented within 1 mile, but PSA does not include suitable habitat. |
| *Thamnophis sirtalis ssp.* South Coast garter snake | SSC | In and around marshlands and riparian habitat; coastal plain, foothills, and mountains, sea level to about 2700 ft. elev.; Ventura Co. to San Diego Co., inland to SW Riverside Co. | **Not likely to occur.** Documented within 1 mile, but PSA does not include suitable habitat. |
| **Birds** | | | |
| *Accipiter cooperii* Cooper's hawk | WL, NCCP | Nests and hunts in forest & woodland, also forages in open areas. | **Low.** Project site does not include suitable nesting habitat, but potentially suitable foraging habitat is present. Known from the region. |
| *Agelaius tricolor* Tricolored blackbird | SSC, NCCP | Breeds colonially in freshwater marshes and grain fields; nomadic among marshes and fields in winter; almost completely endemic to Calif. Forages in grasslands, fields, pastures. | **Low.** Documented within 1 mile, but PSA does not include suitable nesting habitat, may provide marginal foraging habitat. |
| *Athene cunicularia* Burrowing owl | SSC, NCCP | Open, dry grasslands, deserts and ruderal areas with suitable small mammal burrows, especially those of California ground squirrels. May use surrogate burrows (e.g., culverts, debris piles). | **Low.** Documented within 1 mile. PSA includes potentially suitable habitat, no burrowing owl or owl sign observed during surveys. |
| *Buteo swainsoni* Swainson's hawk | ST, NCCP | Stands with few trees, juniper-sage flats, riparian habitat, and oak savannah. Forages in adjacent grasslands and agricultural fields and pastures. Winters in South America, migrates to western U.S. to breed, site is outside breeding range. | **Not likely to occur.** Documented within 1 mile, but PSA does not include suitable nesting habitat. Species does not nest in the region. Potential occurrence only as seasonal migrant. |
| *Circus cyaneus* Northern harrier | SSC, NCCP | Breed and forage in a variety of open habitats that provide adequate cover, prey abundance, and perching sites. | **Low.** Project site does not include suitable nesting habitat, but potentially suitable foraging habitat is present. Known from the region. |
| *Elanus leucurus* White-tailed kite | FP | Breeds in woodlands and riparian forests, forages over open terrain; Pacific Coast (Calif., N Baja, Oregon), scattered coastal regions N & S Amer. | **Low.** Project site does not include suitable nesting habitat, but potentially suitable foraging habitat is present. Known from the region. |
| *Empidonax traillii extimus* Southwestern willow flycatcher | FE, SE, NCCP | Breeds in dense riparian forests & shrublands, esp. in willows; scattered locations in Calif. and N. Baja; near sea level to about 8000 ft. elev.; winters in Cent. Amer. | **Not likely to occur.** Documented within 1 mile, but PSA does not include suitable habitat. Patch of riparian vegetation on the substation site is not large or dense enough to provide suitable habitat. |

**Table 5.4-3. Special-Status Wildlife Species Documented within One Mile of the PSA**

| Species | Status | Habitat | Potential for Occurrence in the PSA |
|---|---|---|---|
| *Eremophila alpestris actia*<br>California horned lark | WL | Open habitats, forages in bare dirt in short and/or sparse grassland and areas of scattered shrubs. | **Low.** Project site includes potentially suitable habitat. Known from the region, but no recent documented occurrences in the Project vicinity. |
| *Icteria virens*<br>Yellow-breasted chat | SSC | Riparian thickets of willow, brushy tangles near watercourses. Nests in riparian woodland throughout much of western North America. Winters in Central America. | **Not likely to occur.** Documented within 1 mile, but PSA does not include suitable habitat. Patch of riparian vegetation on the substation site is not large or dense enough to provide suitable habitat. |
| *Polioptila californica californica*<br>Coastal California gnatcatcher | FT, SSC, NCCP | Coastal sage scrub habitats of southern California coastal slope, generally below 950 feet. | **Low.** Documented within 1 mile. PSA does not include suitable nesting habitat. Critical habitat and gnatcatcher observations near San Luis Rey Staging Yard; yard is within identified regional gnatcatcher corridor, but does not include suitable habitat. |
| *Riparia riparia*<br>Bank swallow | ST | Nests in widely scattered colonies, N half of U.S. and much of Canada; excavates burrows in riverbanks, steep soil cliffs, and road cuts; winters in S Amer. | **Low.** Project site does not include suitable nesting habitat, but potentially suitable foraging habitat is present. Known from the region. |
| *Setophaga petechia*<br>Yellow warbler | SSC | Riparian plant associations; prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging. | **Not likely to occur.** Documented within 1 mile, but PSA does not include suitable habitat. Patch of riparian vegetation on the substation site is not large or dense enough to provide suitable habitat. |
| *Sialia mexicana*<br>Western bluebird | NCCP | Scattered trees, open coniferous forest, farms, brush, deserts. Common to very common resident and winter visitor in San Diego County. | **Present.** Observed during field surveys. |
| *Vireo bellii pusillus*<br>Least Bell's vireo | FE, SE, NCCP | Summer resident of southern California in low riparian habitats in vicinity of water or dry river bottoms; found below 2000 ft; nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mesquite, mulefat. | **Not likely to occur.** Documented within 1 mile, but PSA does not include suitable habitat. Riparian habitat on the substation site is not large or dense enough to support this species. |
| **Mammals** | | | |
| *Chaetodipus fallax fallax*<br>Northwestern San Diego pocket mouse | SSC, NCCP | Open shrublands and sandy areas, grassland; coastal and interior valleys of SW Calif. | **Not likely to occur.** PSA does not include suitable habitat. |

**Table 5.4-3. Special-Status Wildlife Species Documented within One Mile of the PSA**

| Species | Status | Habitat | Potential for Occurrence in the PSA |
|---|---|---|---|
| *Dipodomys stephensi* Stephens' kangaroo rat | FE, ST, NCCP | Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50%, can be found in disturbed habitat. Requires well-drained soils with compaction characteristics suitable for burrow construction. Occurs only in western Riverside County, northern and central San Diego County, and extreme southern San Bernardino County, below 3,000 feet elevation. | **Not likely to occur.** No kangaroo rat burrows observed during field surveys. Most recent documented sighting within 1 mile of the PSA was in 1973. |
| *Lasiurus xanthinus* Western yellow bat | SSC | Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages for insects over water and among trees. | **Low.** Documented within 1 mile of the PSA. Palm trees at Melrose Staging Yard may provide roosting habitat. |

**Definitions Regarding Potential Occurrence:**

| | |
|---|---|
| Present: | Species or sign of its presence observed on the site |
| High: | Species or sign not observed on the site, but reasonably certain to occur on the site |
| Moderate: | Species or sign not observed on the site, conditions suitable for occurrence |
| Low: | Species or sign not observed on the site, conditions marginal for occurrence |
| Not likely to occur: | Species or sign not observed on the site, conditions unsuitable for occurrence |
| Absent: | Required habitat not present (e.g., aquatic species are absent from terrestrial habitats) |

**STATUS CODES:**

| | |
|---|---|
| FE | Federally Endangered |
| FT | Federally Threatened |
| FC | Federal Candidate |
| BGEPA | Federal Bald and Golden Eagle Protection Act |
| SE | State Endangered |
| ST | State Threatened |
| SC | State Candidate |
| SR | State Rare |
| SSC | California Species of Special Concern |
| FP | California Fully Protected |
| WL | CDFW Watch List |
| SA | CDFW Special Animal |
| NCCP | Regionally Sensitive Species covered under the SDG&E Subregional NCCP |

## Critical Habitat and Preserves

Under the federal Endangered Species Act, to the extent prudent and determinable, the USFWS is required to designate critical habitat for endangered and threatened species (16 U.S.C. § 1533 (a)(3)). Critical habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of federally listed endangered and threatened species, including sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Designated critical habitats require special management and protection of existing resources, including water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types. A critical habitat designation delineates all suitable habitat, occupied or not, essential to the survival and recovery of the species.

The Project site is within 5 miles of critical habitat for San Diego ambrosia, San Diego thornmint, spreading navarretia, thread-leaved brodiaea, cushenbury oxytheca, San Diego fairy shrimp, tidewater goby, arroyo toad, coastal California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher; see Figure 5.4-4. No critical habitat is located within the Project site. However, critical habitat for coastal California

gnatcatcher is located immediately north of the San Luis Rey Staging Yard, about 0.14 miles west of the Corporate Center Staging Yard, approximately 0.6 miles northwest of the USPS Staging Yard and the Ocean Ranch Substation site, and approximately 1 mile southwest of the Melrose Substation Staging Yard.

The San Diego Multiple Habitat Conservation Program (MHCP) is a planning process that addresses plant and animal species in northwestern San Diego County, including the City of Oceanside. The Oceanside Subarea Plan (SAP) is the city's implementing conservation plan under the MHCP; see Regulatory Background, below. The Oceanside SAP identifies areas within the City of Oceanside to be preserved for the conservation of natural biotic communities and sensitive plant and wildlife species. The Proposed Project site is not located within any designated preserve areas as delineated in the City of Oceanside SAP (Oceanside, 2010). Identified preserves are in proximity to the San Luis Rey Staging Yard and the Corporate Center Staging Yard; see Figure 5.4-6. Preserve boundaries are immediately adjacent to the northwest corner of the Corporate Center Staging Yard and immediately north of the San Luis Rey Staging Yard.

### Wildlife Corridors and Biological Connectivity

Wildlife corridors are defined as areas that connect suitable habitat in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features, such as drainages, ridge-lines, or areas with vegetation cover, can provide corridors for wildlife travel. Roadways, fences, and other barriers to wildlife movement may incorporate specially designed structures (e.g., culverts, underpasses, overpasses, landscape bridges, and fish passages) to maintain biological connectivity. Wildlife corridors are important because they provide access to mates, food, and water; allow for dispersal of individuals; and facilitate gene flow between populations. Wildlife corridors are considered sensitive by resource and conservation agencies.

Movement and dispersal corridors that connect large blocks of habitat are essential to the long-term viability of plant, fish, and wildlife populations. At every scale, planning for biological connectivity must consider species or populations that may travel through a corridor or linkage regularly (perhaps seasonally or even daily), and other species that may "move" through a corridor or linkage over multiple generations, at a population scale rather than as individual animals.

Terrestrial wildlife species tend to travel along natural drainages such as Loma Alta Creek and the San Luis Rey River, in order to have cover from predators and a water and food source. Migrating avian species would use native habitat areas as stopovers on their journey through the area.

Much of the City of Oceanside is developed, and the remaining natural open space consists of small, fragmented patches of habitat, often disturbed, and isolated or only tenuously connected to adjacent habitat. There are no broad north to south habitat linkages remaining. However, undeveloped areas within the city appear to be critical to regional habitat connectivity and conservation for bird species, especially the coastal California gnatcatcher. Preserves within the City of Oceanside and the existing SDG&E electric transmission corridor provide linkages between stepping-stone patches of habitat. This stepping-stone corridor allows for continued genetic and demographic connectivity between gnatcatcher core areas on Marine Corps Base Camp Pendleton to the north and Carlsbad to the south (Oceanside, 2010).

The Project sites, including the substation site and staging yards, are within an urbanized area and adjacent to busy roadways. However, pockets of open space remain and may be used by wildlife for foraging and breeding habitat and dispersal routes. The Oceanside SAP (Oceanside, 2010) identifies the existing San Luis Rey Substation, and the power line from the San Luis Rey Substation east along El Camino Real to Rancho Del Oro Road as being within a designated Wildlife Corridor Planning Zone (WCPZ); see Figure 5.4-6. The Oceanside SAP provides development standards for projects that are located within the WCPZ;

however, the Proposed Project does not include any development at the San Luis Rey Staging Yard. Storage of materials and equipment within this existing facility would not constitute development and the Proposed Project's use of this facility would be consistent with the SAP and the WCPZ. The San Luis Rey Staging Yard is also within the regional gnatcatcher corridor, as identified in the Oceanside SAP (Oceanside, 2010); see Figure 5.4-5.

As described above, the San Luis Rey Staging Yard and Corporate Center Staging Yard are in proximity to preserve areas identified in the Oceanside SAP, which may function as stepping-stone patches of habitat for bird species. The Ocean Ranch Substation site and other staging yards are not located within areas that represent an important corridor for terrestrial wildlife movement.

## Jurisdictional Waters

A delineation of wetland and non-wetland jurisdictional waters within the PSA was conducted in May and October 2015 by Pangea and Borcher Environmental Management (Pangea and Borcher, 2016). The methodology followed U.S. Army Corps of Engineers (USACE) wetland delineation guidelines (USACE, 2008). The results of the delineation indicate that the PSA does not include water resources under the jurisdiction of the USACE, CDFW, or Regional Water Quality Control Board (RWQCB).

Non-jurisdictional features in the PSA include concrete v-ditches and channels designed to provide a controlled runoff system, erosional features created by on-time or rapid surface flows in areas that were disturbed and not properly compacted or areas with erosive soil, and sedimentation basins installed as temporary stormwater management features that connect to the underground storm system (Appendix I).

## Regulatory Background

This section includes a description of the biological resources regulatory framework.

## Federal

### *Federal Endangered Species Act of 1973*

The federal Endangered Species Act (FESA) designates and provides for protection of threatened and endangered plant and wildlife species and their critical habitat. "Take" of a federally listed species is prohibited without the appropriate permits, which may be obtained through Section 7 consultation (between federal agencies) or a Section 10 Habitat Conservation Plan.

### *Migratory Bird Treaty Act.*

The Migratory Bird Treaty Act (MBTA) makes it unlawful to take or possess any migratory non-game bird (or any part of such migratory non-game bird) as designated in the MBTA unless permitted by regulation (e.g., duck hunting).

### *Clean Water Act (33 USC §§ 1251-1376)*

The Clean Water Act (CWA) regulates the chemical, physical, and biological integrity of the nation's waters. Section 401 of the CWA requires that an applicant obtain State certification for discharge into waters of the United States. The Regional Water Quality Control Boards administer the certification program in California. Section 404 of the CWA established a permit program, administered by the U.S. Army Corps of Engineers, to regulate the discharge of dredged or fill material into waters of the United States, including wetlands.

### *Final Rule for Revised Designation of Critical Habitat for the Coastal California Gnatcatcher*

The USFWS designates critical habitat for endangered and threatened species under the federal ESA (16 U.S.C. § 1533 (a)(3)). Critical habitat is designated for the survival and recovery of federally listed endangered and/or threatened species. Critical habitat includes areas used for foraging, breeding, roosting, shelter, and movement or migration.

In the USFWS 2003 Proposed Rule to Revise Designation of Critical Habitat for the Coastal California Gnatcatcher, the USWFS considered but did not propose as critical habitat, pursuant to sections 3(5)(A) and 4(b)(2) of the Act, reserve lands covered by three completed and approved regional/subregional Habitat Conservation Plans (68 CFR 20228). These lands include SDG&E right-of-way (ROW) within SDG&E's Natural Community Conservation Plan (NCCP). Although these areas were not included in the proposed critical habitat, the USFWS sought public review and comment on these lands, provided maps to facilitate the public's ability to comment, and alerted the public that the lands could potentially be included in the final designation. Lands considered but not proposed for designation were also analyzed for potential economic impacts in the Draft Economic Analysis.

In 2007, USFWS issued the Revised Final Rule, reaffirming exclusion of lands within approved regional and subregional Habitat Conservation Plans under section 4(b)(2) of the federal ESA. USFWS determined that lands owned by SDG&E and covered under SDG&E's NCCP provided greater benefits to coastal California gnatcatcher than other areas designated as critical habitat. As such, the USFWS designation of critical habitat for the coastal California gnatcatcher specifically excludes SDG&E ROW within SDG&E's NCCP area.

## State

### *CEQA Guidelines § 15380*

Enacted in 1970, CEQA requires an applicant to fully disclose environmental impacts before issuance of a permit by state and local agencies. State CEQA Guidelines Section 15380(b) articulates the classifications of species to be analyzed under CEQA. In general, impacts to plants or their habitat having a California Rare Plant Rank of 1A (plants presumed extirpated in California and either rare or extinct elsewhere), 1B (plants rare, threatened, or endangered in California and elsewhere), 2A (plants presumed extirpated in California, but common elsewhere), 2B (plants rare, threatened, or endangered in California), or 3 (plants about which more information is needed — a review list) must be analyzed during preparation of the environmental documents relating to CEQA. According to the California Native Plant Society's (CNPS) Rare Plant Program, species with these California Rare Plant Rank rankings meet the definition of "rare and endangered" under the aforementioned CEQA Guidelines.

### *California Endangered Species Act (Fish and Game Code § 2050 et seq.)*

The California Endangered Species Act (CESA) prohibits take of state-listed threatened or endangered species, except as authorized by the California Department of Fish and Wildlife (CDFW). Authorization may be issued as an Incidental Take Permit or, for species listed under both CESA and FESA, through a Consistency Determination with the federal incidental take authorization.

### *Fully Protected Designations (Fish and Game Code §§ 3511, 4700, 5515, and 5050)*

The California Fish and Game Code (CFGC) designates 36 fish and wildlife species as "fully protected" from take, including hunting, harvesting, and other activities. The CDFW may only authorize take of designated fully protected species through a Natural Community Conservation Plan.

***Native Birds (Fish and Game Code §§ 3503 and 3513)***

The CFGC prohibits take, possession, or needless destruction of bird nests or eggs except as otherwise provided by the code. Birds of prey, that is, birds in the orders *Falconiformes* or *Strigiformes*, are protected from possession and egg or nest destruction.

***Natural Community Conservation Planning Act (Fish and Game Code §§ 2800 et seq.)***

The Natural Community Conservation Planning Act provides a regional approach to conservation for multiple species. The Program is implemented by CDFW as a cooperative effort by the State of California and private and public partners, to protect species and their habitats. The program helps identify and provide for large area-wide protection of plants, animals, and their habitats while allowing for compatible and appropriate economic activity.

***Native Plant Protection Act (Fish and Game Code §§ 1900-1913)***

Prior to enactment of CESA and FESA, California adopted the Native Plant Protection Act (NPPA). CESA (above) generally replaces the NPPA for plants originally listed as endangered under the NPPA. However, plants originally listed as rare retain that designation, and take is regulated under provisions of the NPPA.

***Lake and Streambed Alteration Agreements (Fish and Game Code §§ 1600-1616)***

The CDFW regulates projects that would divert, obstruct, or change the natural flow, bed, bank, or channel of a river, stream, or lake. Regulation is formalized in a Lake and Streambed Alteration Agreement (LSAA), which generally includes measures to protect any fish or wildlife resources that may be substantially affected by the project.

***Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.)***

This act regulates surface water and groundwater and assigns responsibility for implementing federal CWA Section 401. It established the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) to protect State waters.

## Local

As provided in CPUC General Order 131-D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary land use regulations. Nonetheless, as part of the environmental review process, the CPUC considers relevant local land use plans and policies that pertain to biological resources as discussed below.

***North County Multiple Habitat Conservation Program***

The Multiple Habitat Conservation Program (MHCP) is a planning process that addresses plant and animal species in northwestern San Diego County, including Oceanside. The goal of the program is to conserve approximately 19,000 acres of habitat (of which 8,800 acres are already in public ownership and contribute toward the habitat preserve system) to protect over 80 rare, threatened, or endangered species.

Subarea plans for the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, and Vista are being prepared and must be adopted by each City Council. Then implementing agreements with the CDFW and the USFWS must be signed before incidental take permits can be issued.

The City of Oceanside is in the process of updating the Subarea Habitat Conservation Plan/Natural Community Conservation Plan (SAP) that will address how the City will conserve natural biotic communities and sensitive plant and wildlife species pursuant to the California NCCP Act of 1991, the CESA and the federal ESA. If adopted, this could provide landowners with more regulatory certainty and aid in conserving the area's biodiversity.

***City of Oceanside General Plan – Land Use Element***

The Land Use Element has a policy that the City shall protect, maintain, and enhance existing sensitive habitats. The Environmental Resource Management Element is also designed to conserve natural resources and preserve open space. It includes goals and objectives geared toward preservation, including ones specifically to enhance vegetation and wildlife habitats, especially those areas with rare, endangered, or threatened species. Areas with unique vegetation and wildlife habitats receive a high priority in the planning of parks; and in areas where habitat modification is inevitable, mitigating and/or compensatory measures such as native plant restoration, land reclamation, or donation will be considered.

***Vegetation and Wildlife Habitats Policies***

- *A biological survey report, including a field survey, shall be required for a proposed project site if the site is largely or totally in a natural state or if high interest species of plants or animals have been found on nearby properties.*
- *In areas where vegetation or wildlife habitat modification is inevitable, mitigation and/or compensatory measures such as native plant restoration, land reclamation, habitat replacement, or land interest donation will be considered.*
- *Areas containing unique vegetation or wildlife habitats shall receive a high priority for preservation.*
- *Specific plans shall be developed in conjunction with regional and county agencies where appropriate, for areas where there is occurrence of endangered or threatened species.*

***SDG&E Company Subregional Natural Community Conservation Plan***

Under Section 10(a) of the FESA, SDG&E developed this comprehensive multiple species and habitat NCCP to effectively preserve and enhance covered sensitive species and their native habitats during operation, maintenance, and expansion of its electric and natural gas transmission system (SDG&E, 1995). In addition, the NCCP is a permit issued pursuant to CFGC Section 2081 with an implementation agreement with the CDFW for the management and conservation of multiple species and their associated habitats as established according to the CESA and the state's NCCP Act.

The purpose of the SDG&E NCCP is to establish and implement a long-term agreement between SDG&E, the USFWS, and the CDFW for the preservation and conservation of sensitive species and their habitats while allowing SDG&E to develop, install, maintain, operate, and repair the facilities necessary to provide energy services to customers living within the SDG&E service area. The NCCP does not cover major expansions of the SDG&E electrical system and only covers new electrical substations that result in no more than 20 acres of habitat disturbance.

The NCCP identifies 61 Operational Protocols designed to avoid and minimize potential impacts to sensitive species and their habitats, and to provide appropriate mitigation where such impacts are unavoidable, thus ensuring conservation of protected species and their habitats. These 61 protocols include provisions for personnel training, pre-activity studies, and procedures used to avoid or minimize environmental impacts during maintenance, repair, and construction of facilities.

As described in the Implementing Agreement for the SDG&E NCCP, SDG&E, the USFWS, and the CDFW agree that, absent unforeseen circumstances, the mitigation measures provided in the SDG&E NCCP constitute the only mitigation measures that would be required for any activity covered by the NCCP when a project results in an impact to a covered species or its habitat. The Proposed Project falls within the area where SDG&E utility operations are governed by the NCCP.

While the Proposed Project is located within areas included in both the North County Multiple Habitat Conservation Program and the Oceanside Subarea Plan, SDG&E public utility activities, such as the Proposed Project, are generally not subject to the discretionary regulatory jurisdiction of such local governments; therefore, they are not governed by the terms and conditions of such plans. However, the NCCP is designed to be consistent with local Habitat Conservation Plans.

The Proposed Project would not use the take authority granted by the USFWS and the CDFW in the NCCP for impacts to covered species. Potential take of state species would be handled, as necessary, through consultation with the CDFW in accordance with applicable sections of the CESA. Although the SDG&E Subregional NCCP would not be used for the Proposed Project and the Proposed Project is within the City of Oceanside's Multiple Habitat Conservation Program, proposed construction activities would implement applicable avoidance and minimization measures specified in the NCCP Operational Protocols as standard operating procedures (SDG&E, 1995).

## Standard Operating Procedures

The Proposed Project includes design features and construction and operating procedures that avoid and minimize environmental impacts during the construction and operations and maintenance (O&M) phases. The standard operating procedures incorporated into the Proposed Project include measures that are routinely implemented by SDG&E. Many of these features and procedures have been developed over time to avoid and minimize environmental impacts to comply with applicable environmental laws and regulations. Consistent with its existing operation and maintenance practices, SDG&E would implement these operating procedures as appropriate during construction and O&M to avoid and minimize potential environmental impacts.

**Natural Community Conservation Plan (NCCP) Operation Protocols.** SDG&E would implement the following construction and operation protocols; relevant sections are very briefly summarized below. See SDG&E (1995) for the full text of these protocols.

Section 7.1.1 – General Behavior for All Field Personnel

- Restrict vehicles to access roads and observe a 15 mph speed limit.
- Avoid collecting plants or wildlife, feeding wildlife, or harming wildlife.
- Prohibit littering, pets, and firearms on project rights-of-way.
- Employ appropriate measures to prevent wildfires.
- Refer environmental issues or questions to SDG&E Environmental Surveyor.

Section 7.1.2 – Training

- Worker training program, including the biology, habitat, and legal protections of species covered by the SDG&E Subregional NCCP and a review of the NCCP Operational Protocols.

Section 7.1.4 – Maintenance, Repair, and Construction of Facilities

- Avoid erosion and siltation; minimize disturbance to wetlands and riparian areas.
- Vehicles and equipment to remain on existing access roads and cleared areas.

- Survey for active nests, burrows, or dens prior to clearing brush during breeding season.
- Removed cleared vegetation and dispose of it at a permitted facility.
- Schedule tree trimming at non-sensitive times and conduct pre-activity surveys.
- Avoid or minimize impacts to any previously unidentified dens, burrows, or plants found after the pre-activity survey.
- Conduct monitoring as recommended in the pre-activity survey report and verify compliance.
- Avoid wildlife entrapment in materials and excavations.
- Control fugitive dust.
- Conduct pre-activity survey before using pesticides in areas where burrowing owls may be found.

Section 7.1.5 – Maintenance of Access Roads

- Limit disturbance areas.
- Mow, rather than grade, vegetation for temporary access.

Section 7.1.8 – Survey Work

- Vehicles to remain on existing access roads.
- Approval from Environmental Surveyor required prior to clearing brush during breeding season to avoid impacts to sensitive species.

Section 7.1.9 – Emergency Repairs

- Prohibit unnecessary carelessness resulting in environmental damage.
- Follow Operational Protocols to fullest extent possible during emergency repairs.
- Develop and implement a mitigation plan for any unavoidable environmental damage that occurs during emergency repairs.

## Applicant Proposed Measures

In order to reduce or avoid impacts to biological resources during the construction phase, SDG&E has proposed the following Applicant Proposed Measures (APM). APMs would apply only during the construction phase. Subsequent to submitting its PEA, SDG&E revised some APMs. The APMs below reflect these revisions and are the APMs that would apply to the Proposed Project. During the O&M phase of the Proposed Project, SDG&E would use standard operational protocols, as described above.

***APM BIO-1: General Biological Resources.***

- The Proposed Project work areas shall be limited to the sites specified in the project description. Access to the project site shall utilize existing access roads, where possible. Parking, driving, and storing of vehicles will be limited to previously disturbed, compacted, and developed areas, where possible.
- A contractor education program will be conducted by a qualified biologist. It will be conducted during all project phases and cover: (1) the potential presence of listed species and their habitats; (2) the requirements and boundaries of the project (e.g., areas delineated on maps and by flags or fencing); (3) the importance of complying with avoidance and minimization measures; (4) environmentally responsible construction practices; (5) identification of sensitive resource areas in the field; and (6) problem reporting and resolution methods.
- A qualified biologist will be assigned to the Proposed Project. The designated biologist will have the authority to halt construction in that segment of the Proposed Project to prevent impact to any listed species.

- Heavy equipment, construction, equipment maintenance, and staging activities will occur in designated areas and be restricted to existing roads and disturbed areas to the maximum extent practicable.
- Where possible, laydown, stockpiling, parking, driving, and storing of vehicles and equipment will be limited to previously disturbed/compacted and developed areas within and immediately adjacent to existing roads.

***APM BIO-2: Vegetation and Special Status Plant Species.***

- Disturbance to adjacent native vegetation will be avoided to the greatest extent.

***APM BIO-3: Migratory Birds.***

- Pre-construction nest surveys will be conducted by a qualified biologist if construction or demolition activities on the project site occurs between January 1 and August 31 (nesting season). Surveys shall cover all potential nesting habitat within the PSA and be repeated on a weekly basis throughout the nesting season. If SDG&E determines that any staging yards included in the proposed project, is not needed, then those staging yards will be exempt from nest surveys
- If an active nest is found within the Proposed Project at any time, work will stop immediately in the immediate area of the nest and redirected away from the nest location. A no disturbance buffer zone will be established around each nest. The size of the buffer zone for non-special-status species will be determined by a qualified biologist. Any activities that might, in the opinion of the biological monitor, disturb nesting activities, will be prohibited in the buffer zone. If an active nest of a special-status species is identified, SDG&E shall consult with the USFWS and CDFW to determine the size of the buffer zone (except for burrowing owls, which will be determined in accordance with APM BIO-4). Nest locations will be mapped using GPS technology.
- The biological monitor will monitor all active nests and buffers at least once per week, to determine whether birds are being disturbed. If signs of disturbance or distress are observed, the biological monitor shall immediately implement adaptive measures to reduce disturbance. These measures could include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed, or placement of visual screens or sound dampening structures between the nest and construction activity.
- The qualified biologist or biological monitor will monitor the nest until he or she determines that nestlings have fledged and dispersed or the nest is no longer active. The results of nest surveys and nest monitoring shall be included in biological monitoring reports, described in Mitigation Measure B-1 (Biological Monitoring and Reporting).

***APM BIO-4: Special Status Wildlife Species.***

- Protocol-level surveys for the burrowing owl shall occur prior to the commencement of construction. The survey shall be conducted by a qualified biologist in accordance with the Staff Report on Burrowing Owl Mitigation. The surveys shall commence at least 30 days and not less than 14 days prior to construction. The survey results shall be provided to SDG&E within 14 days following completion of surveys.
- If burrowing owls are detected within the Project Study Area, measures consistent with the methodology as established in the Staff Report on Burrowing Owl Mitigation and in concurrence with the local CDFW office will be implemented. This includes, but is not limited to the use of buffers around burrows, inspection of equipment, monitoring, and the potential for development of a Burrowing Owl Exclusion Plan approved by the local CDFW office.

- Prior to the commencement of the construction phase, a qualified biologist shall conduct a preconstruction survey/sweep of Melrose Staging Yard to determine the presence of the western yellow bat. If the western yellow bat is not found during the initial preconstruction survey/sweep, the staging yard will be resurveyed weekly while the yard is in use for the project. Surveys will be conducted year-round. If roosts are found during the survey sweeps, a no disturbance buffer zone will be established of 165 feet from any active roost and 300 feet from any active maternity roost. The qualified biologist shall consult with CDFW to determine the appropriate buffer limits to adequately protect the species and the buffer sizes listed above may be reduced with concurrence from CDFW. The buffers will remain in place until the staging yard is no longer used for this project or until the bat(s) have left the roost and a buffer is no longer necessary.

## 5.4.2 Environmental Impacts and Mitigation Measures

### Method and Thresholds for Determining Significance

A significant impact is defined under CEQA as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (Cal Code Regs. tit. 14, [hereinafter CEQA Guidelines] section 15382). In this analysis, the following impacts to biological resources are considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species 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, and regulations or by CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, 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 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 Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan?

**Direct and Indirect Impacts and Mitigation.** CEQA Guidelines define direct impacts as those impacts that result from the project and occur at the same time and place. Indirect impacts are caused by the project, but can occur later in time or farther removed in distance and are still reasonably foreseeable and related to the operation of the project. Direct or indirect impacts on biological resources could be permanent or temporary in nature. All impacts that result in the irreversible removal of biological resources are considered permanent. Any impact considered to have reversible effects on biological resources can be viewed as temporary.

Temporary impacts are generally associated with construction activities and the clearing and use of temporary workspace (i.e., staging yards). Temporary impact areas may vary slightly within the PSA because

the positioning of construction vehicles, equipment, and materials cannot be accurately anticipated prior to construction, as locations are dependent upon the contractor safely performing the work. These areas are intended to be restored as near to preconstruction conditions as possible once construction is complete. Permanent impacts are associated with construction and operation of the proposed Ocean Ranch Substation.

Direct impacts to biological resources may include the physical loss or removal of vegetation due to the installation of new facilities or work at staging yards. Indirect impacts to biological resources during construction may include the interruption of normal nesting or foraging behaviors, loss of prey items, such as insects or food resources, or harm due to excessive dust or noise. Impacts to special-status species may occur either through temporary or permanent habitat loss or degradation, interruption of normal behaviors, or through injury or mortality.

***a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.*

**Special-status plants.**

As described above, five special-status plant species have historically been documented within one mile of the PSA. The PSA does not include suitable habitat for any of these species, and no special-status species were observed within the PSA during reconnaissance-level biological surveys.

Due to the previous grading and site preparation activities that were conducted for the Pacific Coast Business Park Master Development Plan and the Ocean Ranch Corporate Center Master Plan, no habitat for special-status plant species remains on the Ocean Ranch Substation site, USPS Staging Yard, or Corporate Center Staging Yard. The San Luis Rey Staging Yard and Melrose Staging Yard are located at existing developed substations and there is no native habitat present. Therefore, construction and O&M of the Proposed Project would have no impacts to special-status plants or their habitat and no mitigation is proposed.

**Special-status wildlife.** Construction and O&M activities could impact special-status wildlife. Direct impacts to special-status wildlife species could include the removal of suitable habitat by construction of project facilities, or direct mortality to individuals, nests, burrows, and young as a result of construction or O&M activities. Temporary impacts may include disturbance from construction or O&M activities that alters normal behavior patterns, including migration and dispersal, courtship and mating, and foraging and roosting. Ten special-status wildlife species have potential to occur within the PSA; see Table 5-4.3.

To ensure sensitive wildlife is not affected, SDG&E would use established Operational Protocols, as applicable and described in the SDG&E Subregional Natural Community Conservation Plan (SDG&E, 1995) for construction and O&M. These protocols include, but are not limited to, providing environmental training to workers, conducting pre-construction surveys, monitoring during clearing and grading activities, requiring all excavations and materials to be inspected for wildlife entrapment, requiring wildlife escape ramps in open excavations, and avoiding wildlife impacts to the extent practicable. Additionally, SDG&E would implement APM BIO-1 through BIO-4, as described above. APM BIO-1 (General Biological Resources) requires activities to be limited to specified work sites and access roads, implementation of a worker environmental awareness education program, and assignment of a qualified biologist to the project. APM BIO-2 (Vegetation and Special status Plant Species) requires that disturbance to adjacent native vegetation be avoided. APM BIO-3 (Migratory Birds) requires biological surveys prior to construction activities during

the nesting season and avoidance of active nests. APM BIO-4 (Special-status Wildlife Species) requires surveys and avoidance for burrowing owl and western yellow bat.

Mitigation Measure B-1 (Biological Monitoring and Reporting) would require a biological monitor to inspect the Project site periodically and prepare monthly summary reports. APM BIO-4 (Special Status Wildlife Species) would require implementation of avoidance buffers if special-status bats are found in Melrose Staging Yard. APM BIO-3 (Migratory Birds) specifies surveys and avoidance buffers for nesting birds. Mitigation Measure B-2 (Worker Training) expands on and adds detail to APM BIO-1 and SCE's Natural Community Conservation Plan (NCCP) Operation Protocols, discussed under Standard Operating Procedures. With implementation of SDG&E's NCCP Operational Protocols, APM BIO-1 through BIO-4, and Mitigation Measures B-1 and B-2, the Proposed Project would have a less-than-significant impact on special-status wildlife species.

**Coastal California gnatcatcher.** The San Luis Rey Staging Yard is in adjacent to occupied coastal California gnatcatcher habitat and USFWS-designated critical habitat (discussed below). This staging yard is located in a paved area at the existing San Luis Rey Substation. There is no native habitat in the San Luis Rey Staging Yard. Impacts to adjacent habitat associated with the temporary use of the staging yard would include noise and disturbance during the construction phase. However, the activities associated with the proposed staging yard would be consistent with current activities and use of the proposed staging yard area for O&M activities at the San Luis Rey Substation. Therefore, temporary construction noise and activity adjacent to coastal California gnatcatcher habitat is not anticipated to be substantially greater than existing conditions. The San Luis Rey Staging Yard would be used for the Proposed Project only during the construction phase and no project-related O&M impacts to coastal California gnatcatcher habitat are anticipated. Implementation of APM BIO-1 (General Biological Resources), APM BIO-2 (Vegetation and Special-status Plant Species), Mitigation Measure B-1 (Biological Monitoring and Reporting), and SDG&E NCCP Operational Protocols would further avoid and reduce potential impacts by limiting staging activities to designated areas, imposing vehicle speed limits, requiring worker training, and assigning a qualified biologist to the Proposed Project to conduct periodic inspections. With implementation of APM BIO-1, APM BIO-2, Mitigation Measure B-1, and SDG&E NCCP Operational Protocols, potential temporary impacts to coastal California gnatcatcher would be less than significant.

**Burrowing owl.** Surveys identified potentially suitable habitat for burrowing owl at the Ocean Ranch Substation site, USPS Staging Yard, and Corporate Center Staging Yard. The area outside the San Luis Rey Staging Yard PSA could provide potential habitat for burrowing owl. If burrowing owl is present on the Project site, construction impacts could include habitat loss, disturbance, destruction of burrows, and mortality of adults and young. The staging yards would be used for the Proposed Project only during the construction phase and no O&M impacts to burrowing owl are anticipated at the yards. The entire substation site would be permanently impacted by construction, the developed facility would not provide suitable habitat for burrowing owl, and no additional O&M impacts to burrowing owl are anticipated at the substation site. APM BIO-4 (Special-status Wildlife Species) specifies that protocol surveys for burrowing owl be conducted in suitable habitat prior to construction and, if found, measures be implemented to avoid and reduce impacts. Implementation of APM BIO-1 (General Biological Resources), APM BIO-2 (Vegetation and Special-status Plant Species), Mitigation Measure B-1 (Biological Monitoring and Reporting), and SDG&E NCCP Operational Protocols would further avoid and reduce potential impacts by limiting staging activities to designated areas, requiring worker training, and assigning a qualified biologist to the Proposed Project to conduct periodic inspections. Habitat within the staging yards would be restored to pre-project conditions after construction. Habitat within the proposed substation site would be permanently impacted. However, as described above, the substation site has been previously graded and existing disturbed habitat is of low ecological value. With implementation of APM BIO-1, APM BIO-2, APM

BIO-4, Mitigation Measure B-1, and SDG&E NCCP Operational Protocols, potential impacts to burrowing owl would be less than significant.

**Western yellow bat.** Surveys identified potential roosting habitat for western yellow bat in the trees, particularly palm trees, at the Melrose Staging Yard. No trimming or removal of these trees is anticipated for the Project, but temporary impacts include construction noise, vibration, and disturbance. If present, western yellow bat may be deterred from using the trees as roosts during construction activities. Impacts to maternity roosts, if present, would be particularly adverse. The Melrose Staging Yard would be used for the Proposed Project only during the construction phase and no project-related O&M impacts to western yellow bat are anticipated. APM BIO-4 (Special-status Wildlife Species) requires preconstruction surveys for western yellow bat at the Melrose Staging Yard and implementation of avoidance measures if bat roosts are found. SDG&E NCCP Operational Protocols and Mitigation Measure B-1 (Biological Monitoring and Reporting) would further avoid and reduce potential impacts by limiting staging activities to designated areas, requiring worker training, and assigning a qualified biologist to the Proposed Project to conduct periodic inspections. In addition, implementation of APM BIO-4, SDG&E NCCP Operational Protocols, and Mitigation Measure B-1, potential impacts to western yellow bat would be less than significant.

**Special-status birds.** Special-status birds may use the Project site for foraging, although the habitat is marginal and potential for occurrence of these species is low; special-status birds are not likely to nest on the Project site. If present on the Project site, construction impacts to foraging special-status birds could include habitat loss and disturbance. The staging yards would be used for the Proposed Project only during the construction phase and would be restored to pre-project conditions after construction. No project-related O&M impacts are anticipated at the staging yards. The entire substation site would be permanently impacted by construction and no additional adverse O&M impacts to special-status birds are anticipated at the substation site, except as discussed below.

Implementation of APM BIO-1 (General Biological Resources), APM BIO-2 (Vegetation and Special-status Plant Species), Mitigation Measure B-1 (Biological Monitoring and Reporting), and SDG&E NCCP Operational Protocols would further avoid and reduce potential impacts by limiting staging activities to designated areas, controlling fugitive dust, requiring worker training, avoiding disturbance to adjacent native vegetation, and assigning a qualified biologist to the Proposed Project to conduct periodic inspections. With implementation of APM BIO-1, APM BIO-2, Mitigation Measure B-1, and SDG&E NCCP Operational Protocols, impacts to foraging special-status birds, if any, would be adverse, but less than significant, and no mitigation is proposed.

**Nesting birds.** A variety of common birds may nest on the Project site and in adjacent areas. Nests may be built in trees or other vegetation or on the ground in the staging yards or substation site, or on adjacent structures. Birds may nest on structures in the proposed Ocean Ranch Substation, both during construction of the substation and once completed. Birds may also attempt to nest in construction materials or on idle construction equipment.

Nesting birds are protected under the MBTA as well as California Fish and Game Code. Potential impacts to nesting bird species include the removal of potential nesting habitat (e.g., trees and vegetation), damage to nests and injury or mortality to eggs and young, and disruption of nesting behavior or care of young due to noise and disturbance during construction and O&M.

To avoid and minimize impacts to nesting birds, SDG&E would implement APM BIO-3 (Migratory Birds), which requires a biological survey prior to construction activities during the breeding season and avoidance of active bird nests. SDG&E would also use Operational Protocols that require pre-construction

surveys for bird nests prior to brush clearing during the breeding season. APM BIO-3 provides specifications regarding surveys and avoidance buffers for nesting birds. Mitigation Measure B-1 (Biological Monitoring and Reporting) would require a biological monitor to inspect the Project site periodically. With implementation of SDG&E's NCCP Operational Protocols, APM BIO-3, and Mitigation Measure B-1, the Proposed Project would have a less than significant impact on nesting birds.

**Critical habitat and preserves.** There is no USFWS-designated critical habitat within the Proposed Project site. However, critical habitat for coastal California gnatcatcher is located immediately north of the San Luis Rey Staging Yard. Potential impacts to adjacent critical habitat associated with the temporary use of the staging yard would include noise and disturbance during the construction phase. However, the activities associated with the proposed staging yard would be consistent with the current use of the proposed staging yard area for O&M activities for the San Luis Rey Substation. Therefore, construction noise and activity is not anticipated to be substantially greater than existing conditions. The San Luis Rey Staging Yard would be used for the Proposed Project only during the construction phase and no project-related O&M impacts to coastal California gnatcatcher critical habitat are anticipated.

The Proposed Project site is located within the City of Oceanside SAP. This plan designates preserves that are set aside as protected areas of importance for wildlife, flora, or other resources. A preserve area is reserved and managed for conservation. Preserve boundaries are immediately adjacent to the northwest corner of the Corporate Center Staging Yard and immediately north of the San Luis Rey Staging Yard. As with critical habitat, construction noise and activity at the San Luis Rey Staging Yard is not anticipated to be substantially greater than existing conditions and no project-related O&M impacts to preserve areas are anticipated.

Habitat in the preserve area adjacent to the Corporate Center Staging Yard has been disturbed through past grading and vegetation management activities. Adjacent land uses include commercial/industrial buildings, public roadways, and landscaped areas. The Corporate Center Staging Yard would be used for the Proposed Project only during the construction phase and would be restored to pre-project conditions after construction. No project-related O&M impacts to preserve areas are anticipated.

Implementation of APM BIO-1 (General Biological Resources), APM BIO-2 (Vegetation and Special-status Plant Species), Mitigation Measure B-1 (Biological Monitoring and Reporting), and SDG&E NCCP Operational Protocols would further avoid and reduce potential impacts to critical habitat and preserves by limiting staging activities to designated areas, controlling fugitive dust, requiring worker training, avoiding disturbance to adjacent native vegetation, and assigning a qualified biologist to the Proposed Project to conduct periodic inspections. With implementation of APM BIO-1, APM BIO-2, Mitigation Measure B-1, and SDG&E NCCP Operational Protocols, impacts to critical habitat and preserves at the San Luis Rey and Corporate Center Staging Yards would have an adverse, but less than significant effect.

**Collision and electrocution.** Birds are known to collide with communications towers, power lines, and other elevated structures. Estimates of the number of bird fatalities specifically attributable to interactions with utility structures vary considerably. Nationwide, it is estimated that hundreds of thousands to as many as 175 million birds are lost annually to fatal collisions with transmission and distribution lines (Erickson et al., 2001). In California, even general estimates are unavailable, although it is plausible that such collisions result in the deaths of hundreds of thousands of birds each year (Hunting, 2002).

The risk of bird collisions with power lines is influenced by a number of factors, including the type and size of bird, weather, visibility, season, surrounding habitat, and size, configuration, and placement of power lines (APLIC, 2012). Collisions with power lines are generally due to poor visibility of electrical lines, but

collisions may also occur with other structures such as utility poles and substation structures. Collisions may occur in poor weather or visibility conditions, or when birds are startled and flushed from cover, fleeing from predators, or focused on pursuing prey.

Electrocution can occur when a bird perches, lands or takes off from a utility pole or substation structure if the animal makes contact with two conductors to complete the electrical circuit, or simultaneously contacts energized phase conductors and other equipment, or simultaneously contacts an energized wire and a grounded wire. Electrocution on power lines is a greater potential hazard to larger birds, such as raptors, because their body size and wing span are large enough to span the distance between the conductor wires and thus complete the electrical circuit. Within substations, raptor electrocutions are uncommon, but smaller birds such as songbirds and crows may perch, roost, or nest on substation structures and be exposed to electrocution risks (APLIC, 2006).

The power line component of the Proposed Project consists of new underground line segments. No additional electrocution or collision impacts are anticipated from power lines associated with the Proposed Project because they would be underground.

The new substation would create opportunities for birds to perch, roost, and nest on electrical equipment within the substation, creating the potential for electrocution. New substation structures, including the telecommunications monopole, would also create the possibility for bird collisions to some degree. However, within this urbanized area, additional structures associated with the proposed Ocean Ranch Substation would not substantially increase the collision hazard relative to existing conditions. Limited night lighting would be employed at the substation; however, with the exception of the gate entry lights, which would remain on at night for safety purposes, the remaining substation lighting would not be turned on unless it is required for nighttime work or an emergency. The existing urban environment is extensively lit at night, including street lighting in the substation vicinity. Night lighting can disorient migrating birds and lead to collisions, but in this urbanized area the substation lighting would not substantially increase the overall wildlife collision hazard relative to the existing condition.

To reduce potential collision and electrocution risks to birds and bats, SDG&E would construct the power line and substation in compliance with current Avian Power Line Interaction Committee (APLIC) guidelines (APLIC, 2006). SDG&E has incorporated the APLIC's Suggested Practices for Avian Protection into SDG&E's Avian Protection Plan and SDG&E's standard for both transmission and distribution substations (SDG&E, 2016b). These methods ensure a minimum separation between electrical components to prevent simultaneous contact and covering electrical components with protective materials to prevent contact. Implementation of APLIC guidelines and SDG&E's Avian Protection Plan would reduce impacts to birds from electrocution and collision to a less than significant level.

**Water quality basins.** The proposed Ocean Ranch Substation would include water quality basins, constructed as flow-through planters. The flow-through planters have been proposed to comply with the Municipal Storm Water Permit and associated stormwater standards adopted by the City of Oceanside. The proposed flow through planters would be landscaped and would be comprised of a soil matrix that includes well-draining planting soil and layers of pea gravel and crushed rock, underlain by an impermeable liner. Runoff from the site would be directed to the flow through planters and allowed to filter through the layers of soil and gravel, eventually being collected in a perforated subdrain pipe that would connect to the existing storm drain infrastructure. The planters would be gently sloped on at least one side to allow wildlife to exit the facility. The planters would be maintained by SDG&E throughout the life of the Proposed Project. Maintenance includes removal of excessive trash, sediment or debris from within each planter; pruning of overgrowth that interferes with the function of the planters; replacement of mulch as necessary; removal of and replacement of dead vegetation as necessary; and removal of invasive species.

Wildlife may be attracted to the flow-through planters, but with lack of open surface water, the sloping design to allow wildlife escape, and implementation of SDG&E Operational Protocols, no adverse impacts to special-status or common wildlife as a result of the flow-through planters is anticipated and no mitigation is proposed.

**Mitigation Measure for Special-Status Animal Species**

**B-1** **Biological monitoring and reporting.** SDG&E shall assign a qualified biologist or biological monitor to the Project to monitor work during the construction phase and inspect the Project site at least once per week, or until such time that construction activities at locations identified by the monitor no longer have the potential to impact special-status species, native vegetation, wildlife habitat, or sensitive biological resources. The qualified biologist or biological monitor is responsible for ensuring that impacts to special-status species, native vegetation, wildlife habitat, and sensitive or unique biological resources are avoided or minimized to the fullest extent safely possible. Monitors are also responsible for communicating with construction supervisors and crews to ensure that work activities are conducted in compliance with APMs, mitigation measures, permit conditions, and other project requirements.

The qualified biologist or biological monitor shall clearly mark sensitive biological resource areas with staking, flagging, or other appropriate materials that are readily visible and durable, and ensure that work activities are contained within approved disturbance area boundaries at all times. The monitors will inform work crews of these areas and the requirements for avoidance, and will inspect these areas at appropriate intervals for compliance with regulatory terms and conditions.

The qualified biologist or biological monitor shall have the authority and responsibility to halt any project activities that are not in compliance with applicable mitigation measures, APMs, permit conditions, or other project requirements, or will have an unauthorized adverse effect on biological resources.

The qualified biologist or biological monitor shall, to the extent safe, practicable, and consistent with mitigation measures and permit conditions, actively or passively relocate wildlife out of harm's way. Handling, relocation, release from entrapment, or other interaction with wildlife shall be performed consistent with mitigation measures, safety protocols, permits (including CDFW and USFWS permits), and other project requirements. If safety or other considerations prevent the qualified biologist or biological monitor from aiding trapped wildlife or wildlife in harm's way, SDG&E shall consult with the construction contractor, CDFW, wildlife rehabilitator, or other appropriate party to obtain aid for the animal.

The qualified biologist or biological monitor shall communicate with work crews to ensure that all excavations, open tanks, trenches, pits, or similar wildlife entrapment hazards have been covered or have ramps installed to prevent wildlife entrapment, and communicate with work crews to ensure these structures are installed and functioning properly.

Monitoring activities shall be thoroughly and accurately documented during each monitoring visit or inspection and shall include:

- Any special-status species observations, including location of observation, location and description of project activities in the vicinity, and any measures taken to avoid the species. In addition, all special-status species observations shall be reported to the California Natural Diversity Database (CNDDB).

- Bird nesting activities and buffers established.
- Wildlife entrapments and relocations.
- All non-compliance incidents, including nest buffer incursions, with resolution or remedial actions taken.
- Any other information relevant to compliance with biological resource APMs, mitigation measures, permit conditions, or other project requirements.

The qualified biologist or biological monitor shall compile this information into a brief monthly summary report to be submitted to the CPUC within 30 calendar days of the end of each month. At the conclusion of construction activities, a final project summary report shall be submitted to the CPUC within 90 calendar days of the end of construction.

**B-2** **Worker Training.** The contractor education program defined by APM BIO-1 shall stipulate the following general behavior requirements:

1. No wildlife may be harmed, except to protect life and limb.
2. Firearms shall be prohibited except for those used by security personnel.
3. Feeding of wildlife shall be prohibited.
4. SDG&E personnel shall not bring pets to work areas.
5. Plant or wildlife species shall not be collected under any circumstance, unless by an authorized/permitted biologist.
6. Littering shall not be allowed. SDG&E shall not deposit or leave any food or waste in any work area.
7. Wildfires shall be prevented or minimized by exercising care when driving and by not parking vehicles where catalytic converters can ignite dry vegetation. The use of shields, protective mats, or other fire prevention methods shall be used during grinding and welding to prevent or minimize the potential for fire. Care shall be exhibited when smoking in permitted areas.
8. Field crews shall refer environmental issues, including wildlife relocation, dead or sick wildlife, hazardous waste, or questions about avoiding environmental impacts, to a biologist(s) approved by the CPUC, USFWS, and CDFW. Other CPUC, USFWS, or CDFW biologists or experts in wildlife handling may need to be brought in for assistance with wildlife relocations.
9. Night lighting shall be of the lowest illumination allowed for human safety, selectively placed, shielded, and to the maximum extent practicable, directed so as to not disturb adjacent land uses or streets.
10. Vehicle speeds on the project site shall be maintained at 15 mph or less.

***b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

*LESS THAN SIGNIFICANT*. Sensitive natural communities are communities that have limited distribution statewide or within a county or region and are often vulnerable to the environmental effects of projects. One sensitive vegetation community was identified in the Proposed Project site: Disturbed Southern Riparian Scrub. The construction of the proposed Ocean Ranch Substation would result in 0.16 acres of permanent impacts to Disturbed Southern Riparian Scrub, see Table 5.4-1.

This vegetation is supported by runoff that collects in the drainage basin and developed only in the past few years. It is a mix of native and non-native species in an isolated patch of disturbed riparian habitat. The ecological value of this patch of disturbed habitat is low. Therefore, permanent loss of 0.16 acres of Disturbed Southern Riparian Scrub on the Project site would be adverse, but less than significant, and no mitigation is proposed.

The jurisdictional delineation report for the Proposed Project (Pangea and Borcher, 2016) indicates that there is one "small patch" of emergent wetland with cattail in the southwest corner of the USPS Staging Yard that is supported by an irrigation leak on the slope above. Photos included with the jurisdictional report show that the patch is, at most, a few square feet. Permanent loss of a few square feet of cattails on the Project site would be adverse, but less than significant, and no mitigation is proposed.

***c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?***

*NO IMPACT*. A jurisdictional delineation did not identify any waters or wetlands in the PSA under the jurisdiction of USACE, RWQCB, or CDFW. Therefore, construction of the Proposed Project would not result in impacts to jurisdictional waters or wetlands.

***d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. The Project site, including the substation site and staging yards, is within an urbanized area and adjacent to busy roadways. However, pockets of open space remain and may be used by wildlife for foraging and breeding habitat and dispersal routes. The Oceanside SAP (Oceanside, 2010) identifies the existing San Luis Rey Substation, and the power line from the San Luis Rey Substation, east along El Camino Real to Rancho Del Oro Road as being within a designated Wildlife Corridor Planning Zone (WCPZ); see Figure 5.4-6. The San Luis Rey Staging Yard is also within the regional coastal California gnatcatcher corridor, as identified in the Oceanside SAP (Oceanside, 2010); see Figure 5.4-5. As described above, the San Luis Rey Staging Yard and Corporate Center Staging Yard are in proximity to preserve areas identified in the Oceanside SAP, which may function as stepping-stone patches of habitat for bird species.

The San Luis Rey and Corporate Center Staging Yards would be used for the Proposed Project only during the construction phase and no project-related O&M impacts to preserve areas are anticipated. The Corporate Center Staging Yard would be restored to pre-project conditions after construction.

The proposed San Luis Rey Staging Yard consists of a paved area located immediately north of the existing San Luis Rey Substation. The proposed staging yard would be used to store equipment needed during the construction phase of the Proposed Project. However, construction noise and activity at the San Luis Rey Staging Yard are not anticipated to be substantially greater than existing conditions. The temporary impacts that result from using the site to store equipment and the additional vehicles traveling to and from the staging yard are not expected to significantly affect the movement of wildlife along any existing or potential wildlife movement corridors with the PSA.

The Corporate Center Staging Yard has been disturbed through past grading and vegetation management activities and adjacent land uses include commercial/industrial buildings, public roadways, and landscaped areas. Construction noise and activity at the Corporate Center Staging Yard would have an adverse, but less-than-significant effect on preserve areas that may function as wildlife movement corridors.

The Ocean Ranch Substation site, the USPS Staging Yard, and the Melrose Staging Yard are not located within areas that represent an important corridor for terrestrial wildlife movement. Furthermore, the Proposed Project would not occur within or adjacent to existing drainages that can serve as wildlife movement corridors.

Implementation of APM BIO-1 (General Biological Resources), APM BIO-2 (Vegetation and Special-status Plant Species), Mitigation Measure B-1 (Biological Monitoring and Reporting), and SDG&E NCCP Operational Protocols would further avoid and reduce potential impacts by limiting staging activities to designated areas, requiring worker training, and assigning a qualified biologist to the Proposed Project to conduct periodic inspections. With implementation of APM BIO-1, APM BIO-2, Mitigation Measure B-1, and SDG&E NCCP Operational Protocols, potential impacts to wildlife movement corridors would be less than significant. There are no established native wildlife nursery sites located in the PSA; therefore, no impacts to native wildlife nursery sites are anticipated as a result of the Proposed Project.

***e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

*NO IMPACT*. Construction and operation and maintenance of the Proposed Project will not conflict with any local environmental policies or ordinances promulgated to protect biological resources. Implementation of Project APMs, mitigation measures, and SDG&E Standard Operating Procedures would ensure the Proposed Project would be consistent with the goal of preserving regional ecosystems and conserving endangered, threatened, and key sensitive species and their habitats.

***f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan?***

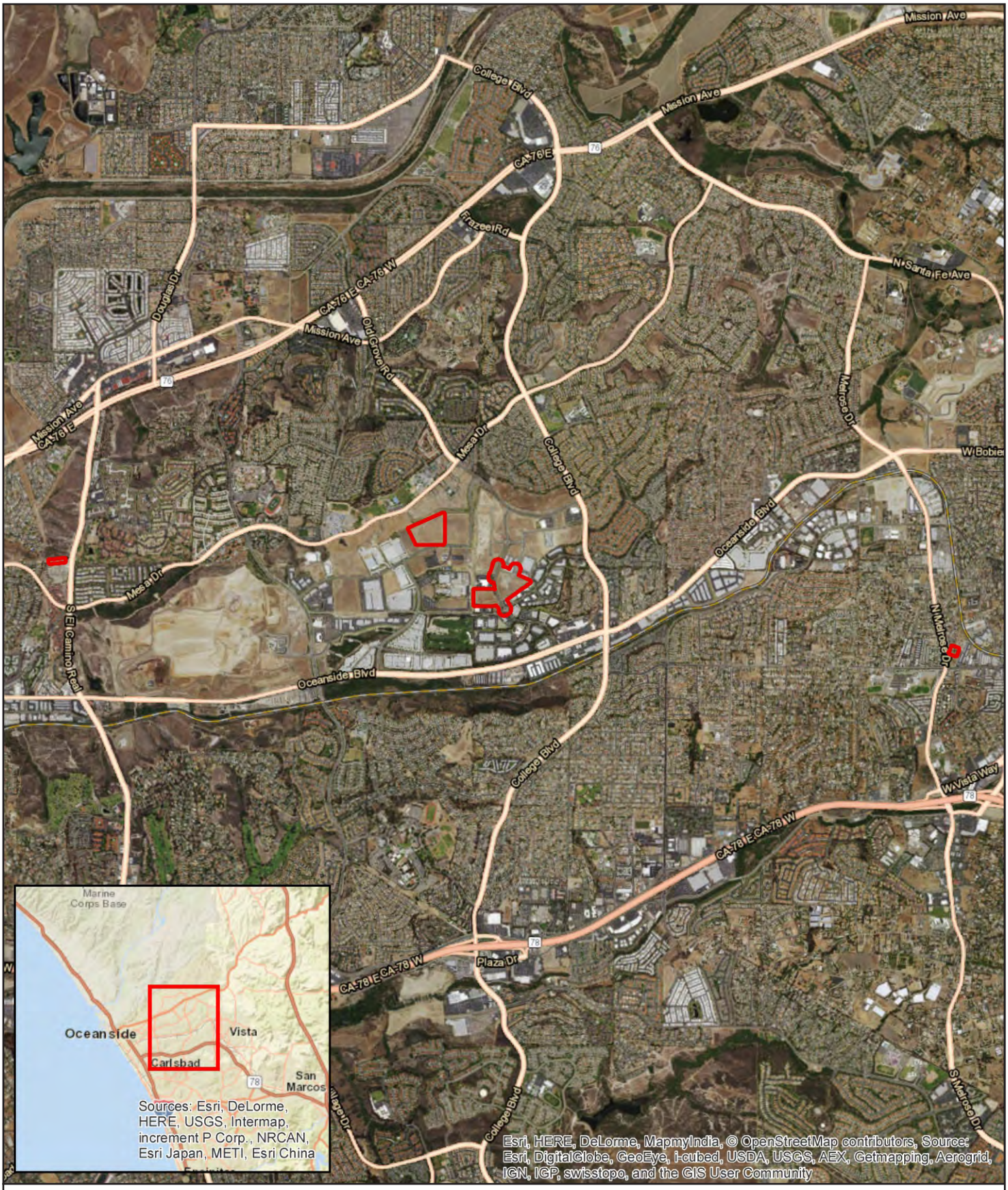
*NO IMPACT*. The SDG&E NCCP and the San Diego MHCP are the only conservation plans that apply to the Proposed Project. The Oceanside SAP is the City's implementing conservation plan under the MHCP.

The City of Oceanside SAP identifies areas within the City that are envisioned to provide natural community conservation or require special considerations for habitat modification due to preserve planning parameters from the SAP. The project is located in areas that are designated as Wildlife Corridor Planning Zone and Off-site Mitigation Zone; see Figure 5.4-6. The proposed San Luis Rey Staging Yard is located within an area designated as a Wildlife Corridor Planning Zone within the City of Oceanside SAP. However, as discussed above, the Proposed Project would be located in an existing SDG&E transmission corridor on a paved area adjacent to the existing San Luis Rey Substation. The activities associated with the proposed staging yard would be consistent with activities that occur at the existing substation and the current use of this staging yard for operation and maintenance activities, and therefore, impacts to the wildlife corridor would not result.

Although the proposed underground portion of the power line (TL 6966), the proposed Ocean Ranch Substation, Corporate Center Staging Yard, and USPS Staging Yard would be located in an area designated as an Off-site Mitigation Zone, construction would be conducted within disturbed or developed lands or paved roads. The Oceanside SAP does not require mitigation for impacts to these land types. Therefore, the Proposed Project does not conflict with the SAP.

The Proposed Project would not use the take authority granted by the USFWS and the CDFW in the NCCP for impacts to covered species. Potential take of state species would be handled, as necessary, through consultation with the CDFW in accordance with applicable sections of the CESA. Although the SDG&E NCCP take authority would not be used for the Proposed Project, proposed construction activities would implement applicable avoidance and minimization measures specified in the NCCP Operational Protocols as standard operating procedures.

The Proposed Project would not conflict with the SDG&E NCCP or the Oceanside SAP, and no impact would occur.

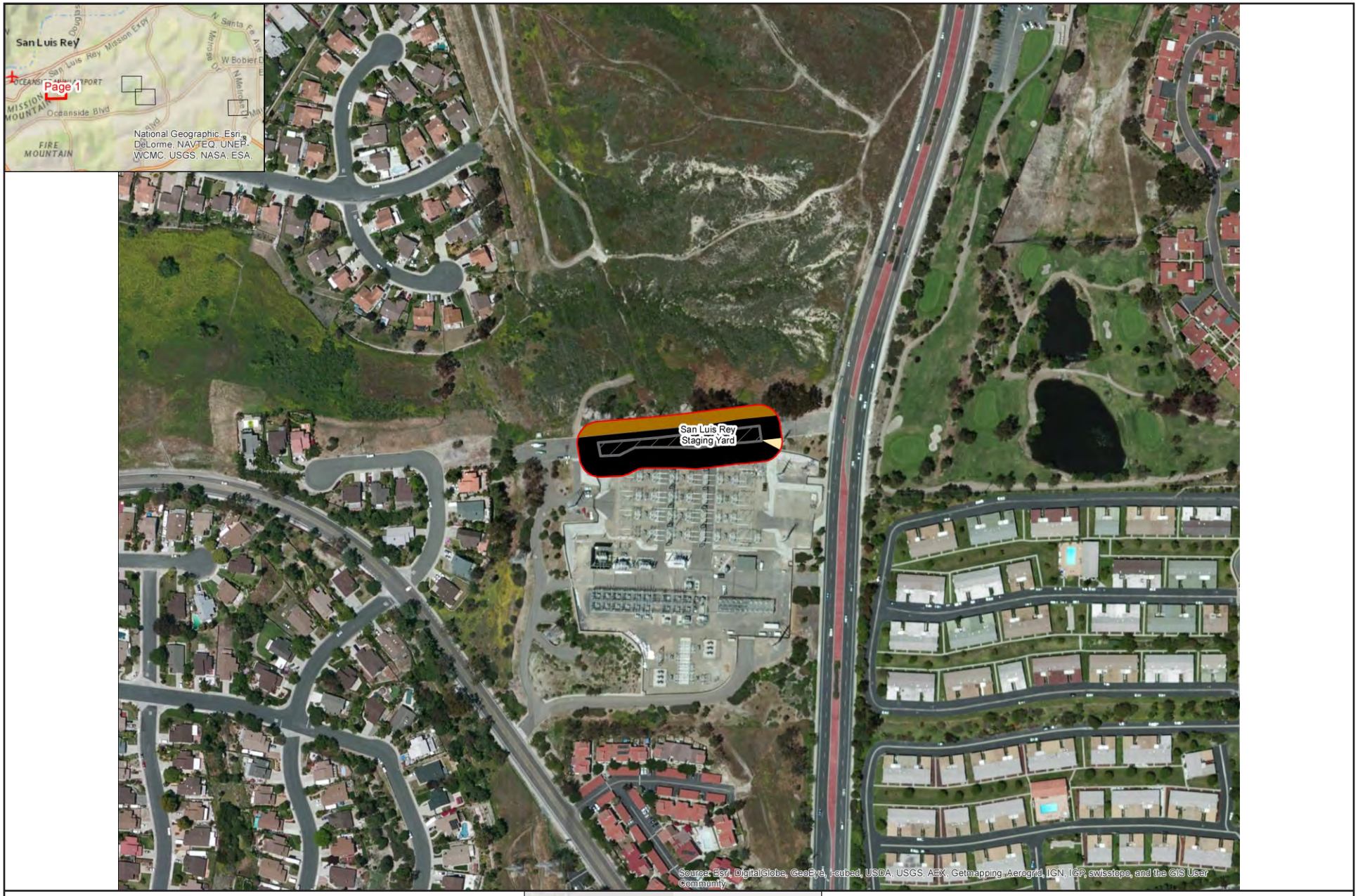



Source: Pangea, 2016.

0 0.5 1 Miles

Project Survey Area

**Figure 5.4-1**
**Project Survey Area - Biological Resources**




Source: Pangea, 2016.

0 375 750 Feet

Legend

Staging Yard

Project Survey Area

Vegetation

Disturbed Habitat

Landscape/Ornamental

Pavement/Developed

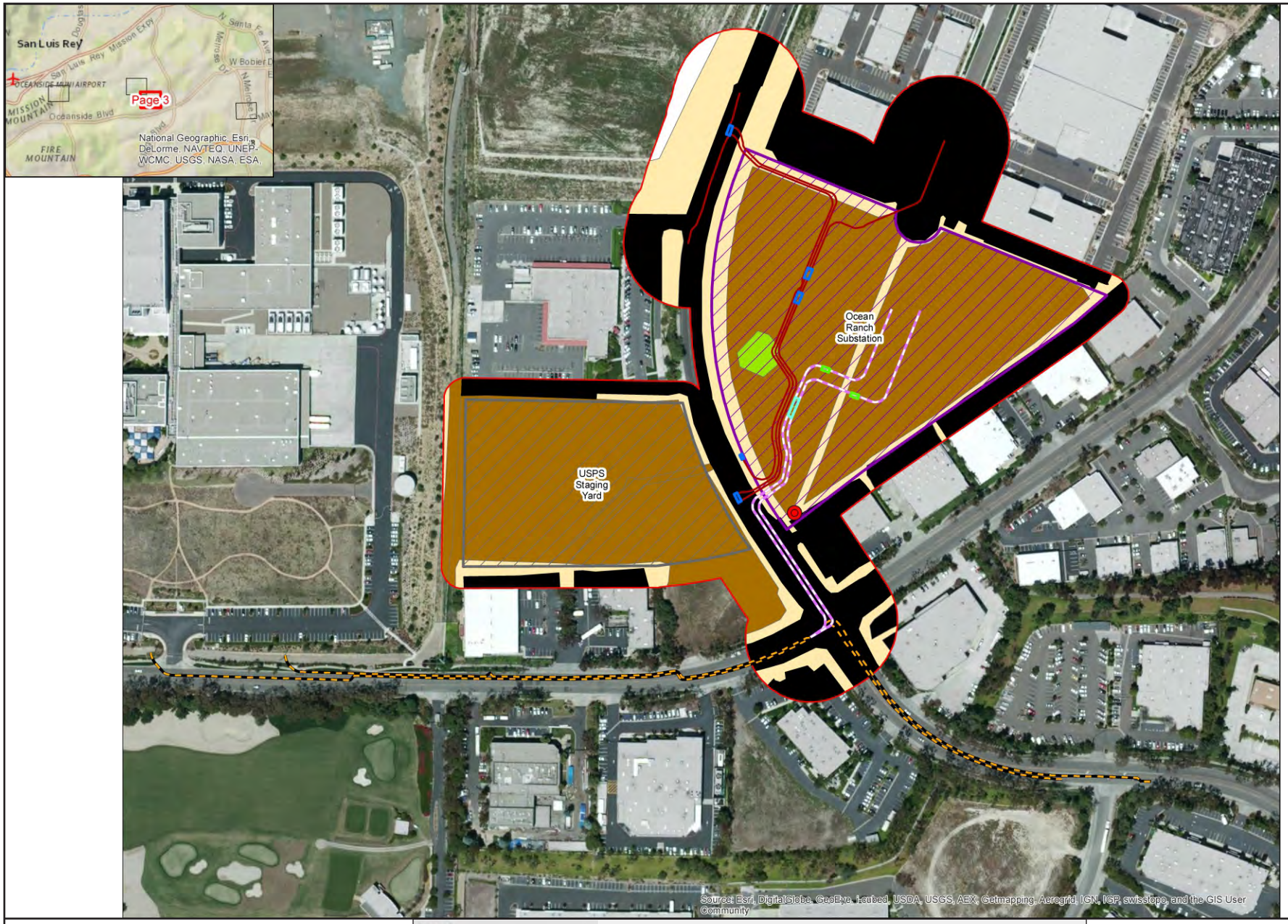
**Figure 5.4-2a**

**Vegetation Communities**


Source: Pangea, 2016.

**Figure 5.4-2b**

**Vegetation Communities**




Source: Pangea, 2016.

0 375 750 Feet

Legend

Monopole

Transmission

Existing Underground

Proposed Underground

Proposed Underground Distribution

Underground Transmission Structure

Underground Distribution Structure

Ocean Ranch Substation

Staging Yard

Stringing Site

Project Survey Area

Vegetation

Bare Ground

Pavement/Developed

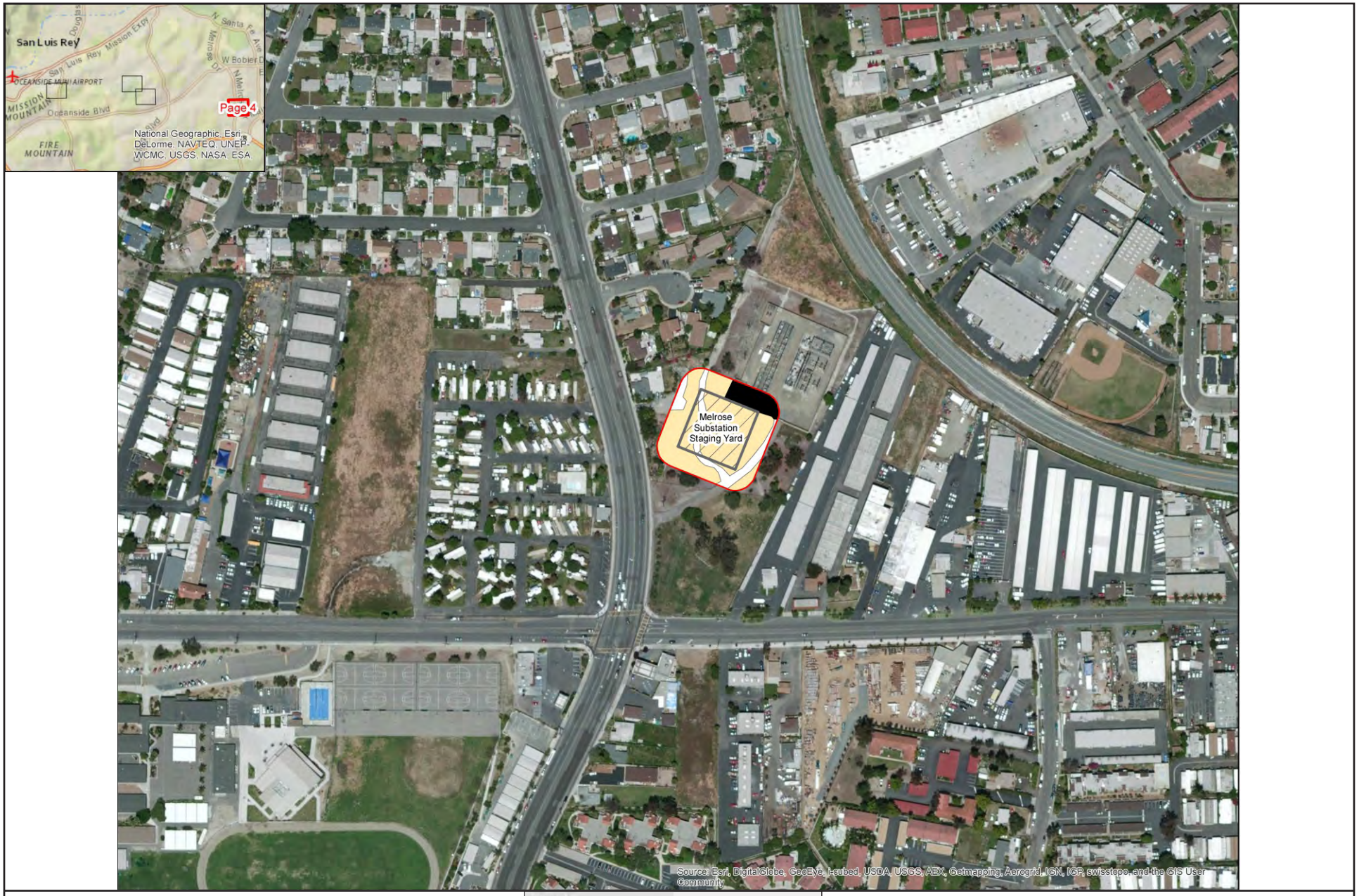
Disturbed Habitat

Southern Riparian Scrub (Disturbed)

Landscape/Ornamental

**Figure 5.4-2c**

**Vegetation Communities**




Source: Pangea, 2016.

0 375 750 Feet

Legend

Staging Yard

Project Survey Area

Vegetation

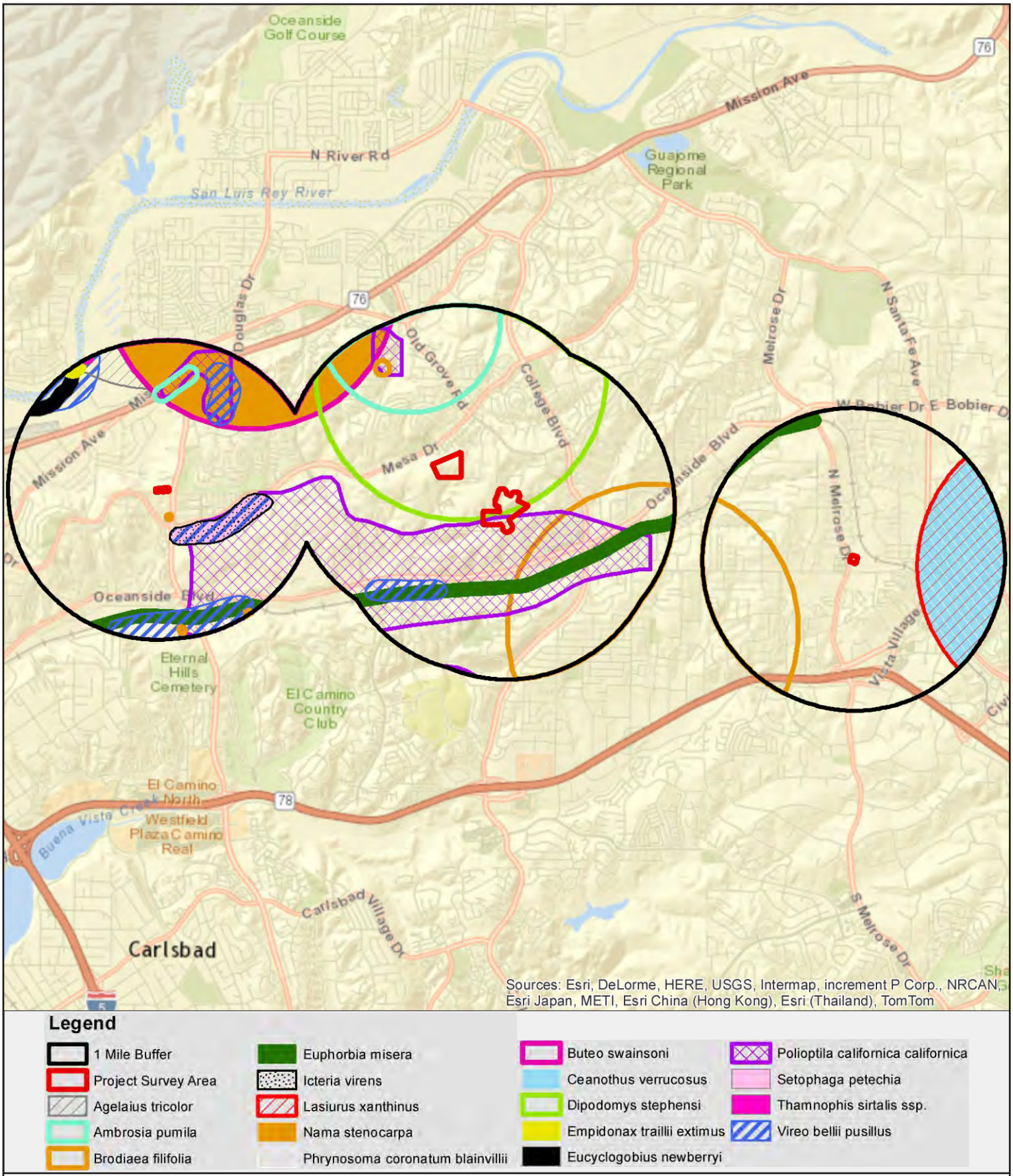
Bare Ground

Landscape/Ornamental

Pavement/Developed

**Figure 5.4-2d**

**Vegetation Communities**

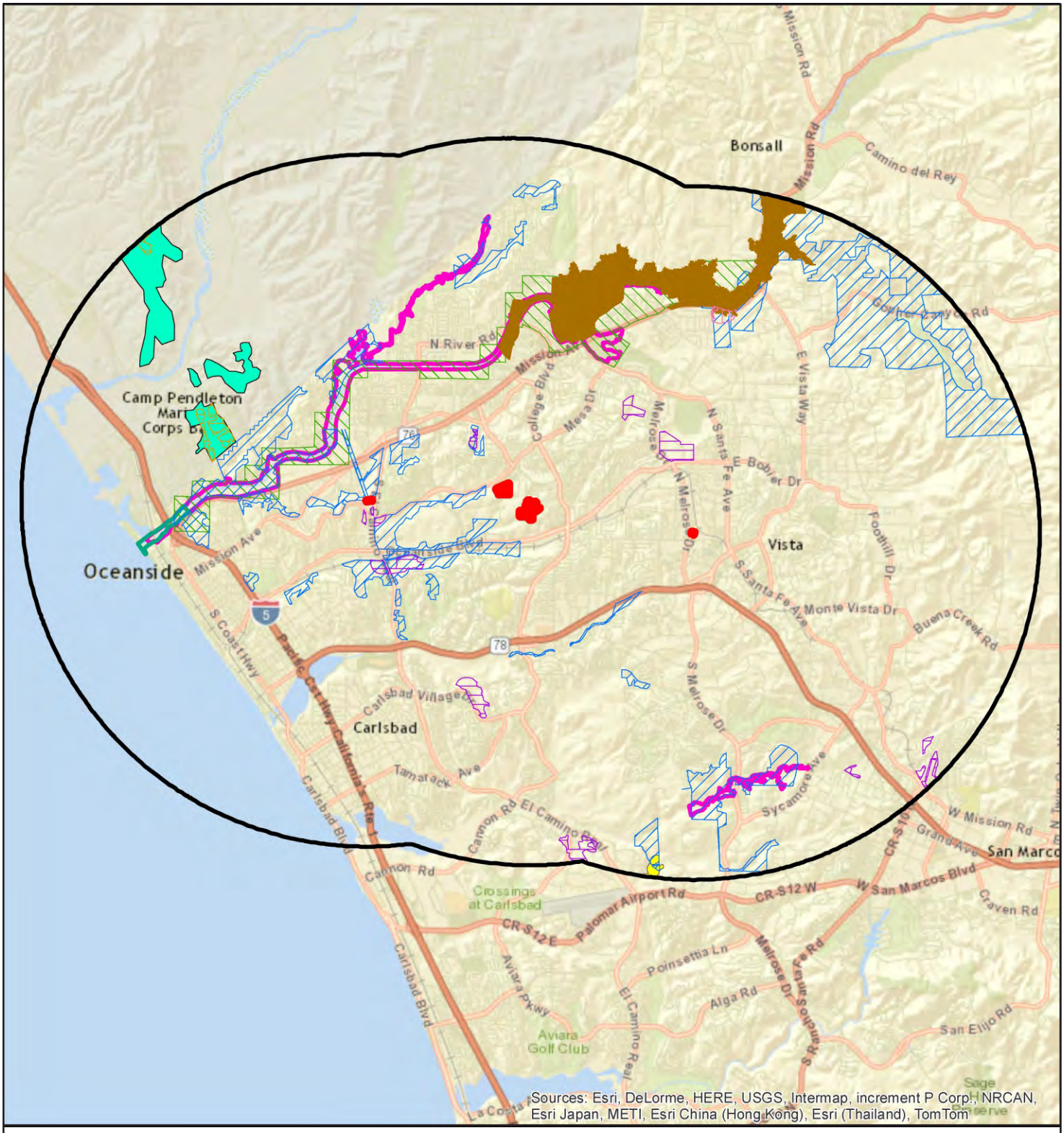



Source: Pangea, 2016.

0 0.7 1.4 Miles

**Figure 5.4-3**

**CNDDB Sensitive Species within 1 Mile of the Project Survey Area**



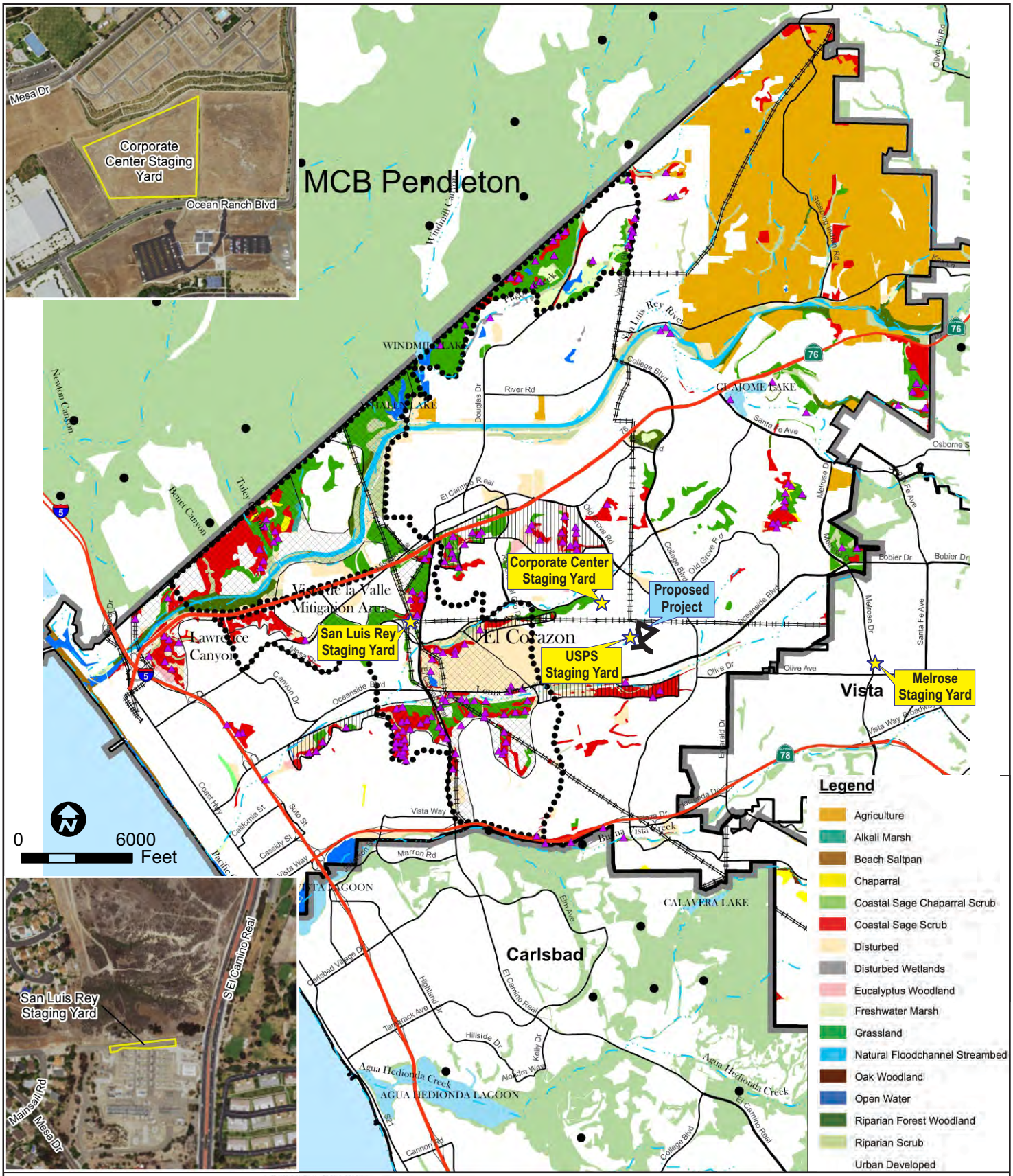

Source: Pangea, 2016.

- Project Survey Area
- 5-Mile-Buffer
- Arroyo (=Arroyo Southwestern) Toad
- Coastal California Gnatcatcher
- Cushenbury Oxytheca
- Least Bell's Vireo
- San Diego Ambrosia
- San Diego Fairy Shrimp
- San Diego Thornmint
- Southwestern Willow Flycatcher
- Spreading Navarretia
- Thread-leaved Brodiaea
- Tidewater Goby

0 1.5 3 Miles

**Figure 5.4-4**

**Critical Habitat within 5 Miles of the Project Survey Area**




Source: Oceanside, 2010.

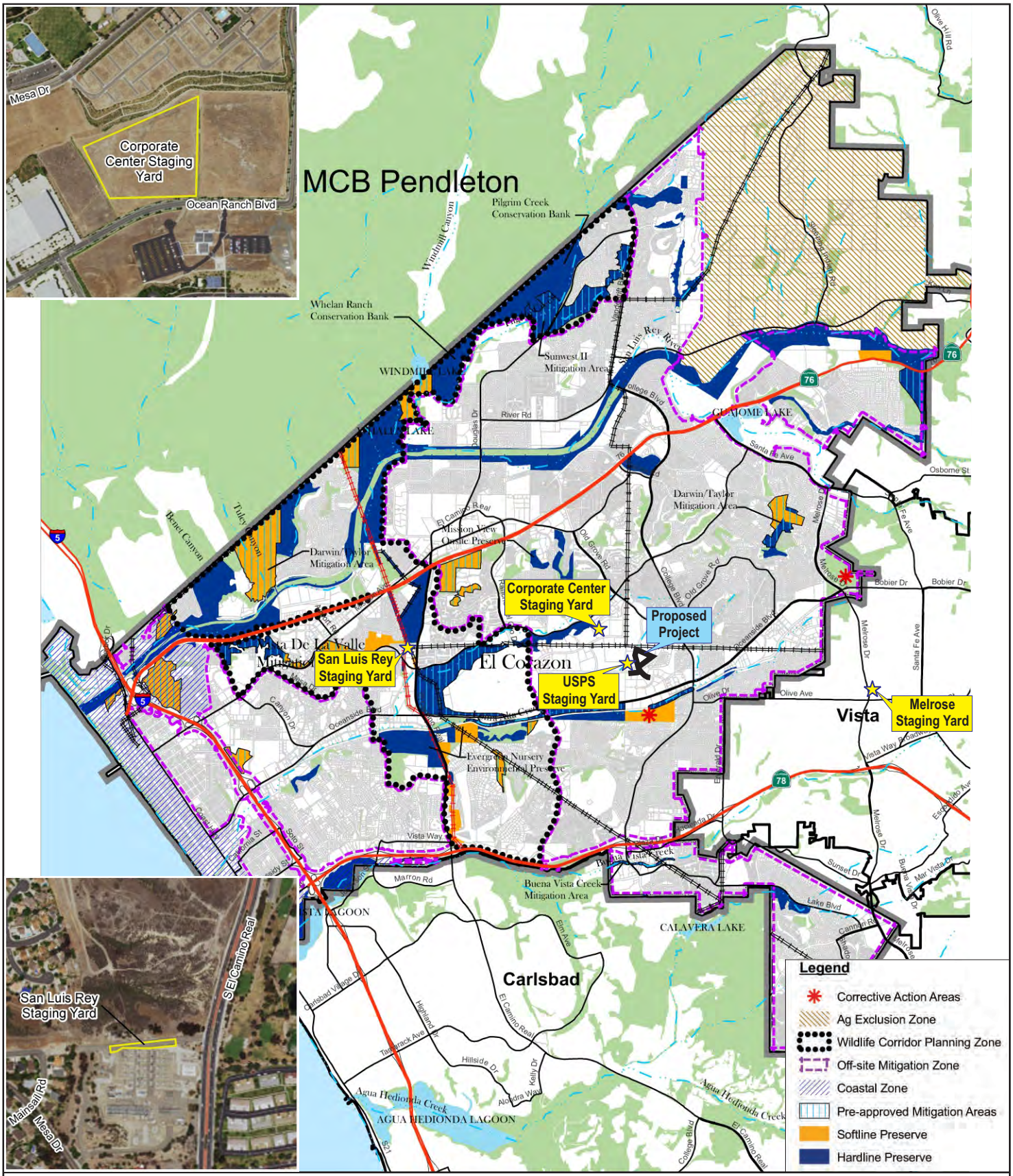
- Regional Cooridor
- Local Gnatcatcher Cooridor
- Gnatcatcher Points inside Oceanside SAP
- Wildlife Corridor Planning Zone

**Base Map Features**

- Gnatcatcher Points Outside Oceanside SAP
- Oceanside City Boundary
- Other City Boundaries
- SDG&E Transmission Cooridors
- Freeways
- Major Roads
- Natural Vegetation
- Lakes/Lagoons
- Streams

**Figure 5.4-5**

**City of Oceanside Subarea Plan Gnatcatcher Corridor**




Source: Oceanside, 2010.

**Figure 5.4-6**

**City of Oceanside Subarea Plan Preserves**

# 5.5 Cultural and Paleontological Resources

| CULTURAL RESOURCES<br>Would the project: | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | ☐ | ☒ | ☐ | ☐ |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ☒ | ☐ | ☐ |
| c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☒ | ☐ | ☐ |
| d. Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☒ | ☐ | ☐ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.5.1 Cultural and Paleontological Resources Setting

Cultural resources reflect the history, diversity, and culture of the region and people who created them. They are unique in that they are often the only remaining evidence of activity that occurred in the past. Cultural resources can be natural or built, purposeful or accidental, physical or intangible. They encompass archaeological, traditional, and built environmental resources, including buildings, structures, objects, districts, and sites.

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the geologic record. They include both the fossilized remains of ancient plants and animals and their traces (e.g., track ways, imprints, burrows, etc.). In general, fossils are greater than 5,000 years old (middle Holocene) and are typically preserved in sedimentary rocks.

### Cultural Resources Setting

#### *Approach to Analysis of Cultural Resources and Previous Cultural Resources Studies*

Information presented in this section was gathered from a review of the July 2016 report, "Volume II of II (Part A) Proponent's Environmental Assessment for the Ocean Ranch Substation Project," prepared by San Diego Gas & Electric Company (SDG&E). A cultural resources literature and records search was completed by Hector et al. (2015) at the California Historical Resources Information System's (CHRIS) South Coastal Information Center (SCIC) to identify any previously recorded cultural resources and existing survey reports in the Project study area and surrounding area. Cultural resources field surveys were conducted by NWB Environmental Services, Inc., in 2015 and 2016 (results are presented below).

The Proposed Project's effects on cultural resources were evaluated using the significance criteria set forth in Appendix G of the CEQA Guidelines. The conclusions are summarized in the impact summary table above and discussed in more detail below. There are no known sensitive cultural resources within the Proposed Project area. The incorporation of SDG&E's Standard Operating Procedures would minimize any potential impacts to presently unknown or unrecorded cultural resources.

#### Records Searches

The results of the CHRIS SCIC records search indicate that there are no known sites recorded within the Project study area (the project site plus 0.25 miles around the site) and that there are five (5) cultural resources recorded beyond 1,700 feet of the site boundary. These five resources represent prehistoric

groundstone, lithic, and shell midden deposits, two of which have been characterized as small camps or habitation areas (CA-SDI-1280, CA-SDI-6136, CA-SDI-8090, CA-SDI-10445, and CA-SDI-10446). The nearest known historic site is Mission San Luis Rey de Francia, located 2 miles northwest of the study area. It is a National Historical Landmark, is listed in the National Register of Historic Places, and is a California Historical Landmark.

**Pedestrian Survey**

NWB Environmental Services, Inc. completed two separate pedestrian surveys of the Ocean Ranch Sub-station site in November 2015 and March 2016 using closely spaced transects at intervals of no more than 15-meters. The survey included the Ocean Ranch Substation site, monopole location, staging yards, and an additional 50' buffer around these locations. All access roads were covered by a field survey, with an additional 20' buffer outside the road edge. In all, 39 acres were surveyed. Field methods included the inspection of animal burrows, road clearings, and cuts and slopes to examine any exposed stratigraphy. All mapping was recorded using a Trimble GPS unit.

The results of the survey indicate that no previously recorded or newly identified cultural resources are present on the ground surface in or adjacent to the Project study area. One cultural resource, CA-SDI-6136, was identified during a search of the CHRIS SCIC as being located adjacent to the substation; however, the survey crew was unable to relocate the resource and reported the site as likely to have been destroyed.

***Native American Consultation***

A Sacred Lands File search for the Project study area was received from the California Native American Heritage Commission (NAHC) on April 22, 2015. The Sacred Lands File search results prepared by the NAHC failed to indicate the presence of Native American cultural resources within the Project study area (Hector et al., 2016). Follow-up correspondence was sent on June 19, 2015 to all individuals and groups indicated by the NAHC as having affiliation with the Proposed Project area. These tribes included: La Jolla Band of Mission Indians, Pala Band of Mission Indians, Pauma Band of Luiseño Indians, Rincon Band of Luiseño Indians, San Luis Rey Band of Mission Indians, Soboba Band of Luiseño Indians, and the Temecula Band of Luiseño Indians (Pechanga).

Follow-up correspondence consisted of a letter describing the Proposed Project and a map indicating the Project's study area. Recipients were requested to reply with any information they could share about Native American resources that might be adversely affected by the Proposed Project. Four responses were received, including the Pala Band of Luiseño Indians (response on June 25, 2015), the Soboba Band of Luiseño Indians (response on June 29, 2015), the Rincon Band of Luiseño Indians (response on July 6, 2015), and the Temecula Band of Luiseño Indians (Pechanga) (response on July 27, 2015). All four responses stated that no resources were identified in the Project study area, although the project is located within tribal ancestral lands. The four tribes requested that a qualified Native American Monitor be present for any ground disturbing work.

***Paleoenvironment***

The Proposed Project is located in the San Luis Rey River Coastal Subbasin, which is characterized by a Mediterranean semiarid climate (Hector et al., 2015). Vegetation in the region consists of coastal sage scrub. Typical plants include buckwheat *(Eriogonum fasciculatum),* black *sage (Salvia mellifera),* white sage *(Salvia apiana),* sugar bush *(Rhus ovata),* squaw bush *(Rhus trilobata),* laurel sumac *(Rhus laurinia),* cattail *(Typha sp.),* spike-rush *(Eleocharis sp.),* bulrush *(Scripus sp.),* pickleweed *(Salicornia virginica),* salt grass *(Distichlis spicata),* willow *(Salix sp.),* cottonwood *(Populus fremontii),* and sycamore *(Platanus*

*racemose)* (Hector et al., 2015). The area is also home to a variety of mammals, birds, and reptiles, including coyote *(Canis lantrans),* desert wood rat *(Neotoma lepida),* California ground squirrel *(Spermophilus beecheyi),* desert cottontail *(Sylvilagus audubonii),* and many bats and mice (Hector et al., 2015).

Soils that underlie the Proposed Project area consist primarily of loose to medium dense fill, medium dense to very dense, or hard to very hard colluvium. At greater depths, very dense formational soils primarily of the Eocene-age Santiago Formation are found. The Proposed Project area consists of documented fill up to 75 feet deep overlying alluvial and colluvial deposits above native moderate to very highly cemented Santiago Formation materials.

### *Prehistory*

Human occupation began in the Proposed Project area between 11,200 to 10,600 Before Present (BP); however, people may have lived in the region as far back as 15,000 BP. The Paleoindian occupation of the region is called the San Dieguito culture, which is characterized by large stone tools, eccentric stone artifacts, and groundstone. Paleoindians lived in highly mobile, small groups, primarily hunted large game animals, and processed limited amounts of plants and seeds.

The Archaic Period dates from 8,500 to 1,300 BP. Archaic people lived in mobile, small groups and primarily relied on marine resources including mollusks, fish, and plants, as well as fewer terrestrial game and plant species. Coastal Archaic sites are often referred to as the La Jolla Complex and are characterized by shell middens, stone tools, cobble tools, groundstone metates and manos, and discoidal stone artifacts. Inland Archaic sites are often referred to as the Pauma Complex, which are similar to the coastal sites except that they lack evidence of shellfish consumption and exhibit a reduced reliance on consumption of mammals as evidenced by the lower densities of animal bone found in middens. The practice of following the seasonal availability of food likely began during the Archaic Period.

The Late Prehistoric Period dates from 1,300 to 200 BP. Changes in the artifact assemblages from these types of sites include the use of bow and arrow technology and ceramics and an increase in the consumption of plant foods (e.g., acorns). People tended to live in large villages that housed multiple activities. Two different groups occupied the region during the Late Prehistoric. These included the Yuman-speaking Kumeyaay in the south, who developed into the Diegueño people during the ethnohistoric period, and the Tacik-speaking People in the north, including the Luiseño (*'Atáaxum*) and Juaneño (Acjachemen).

### *Ethnography*

The ethnohistoric period in San Diego County begins at the time of European contact with Native Americans, often cited as having begun with the voyage of Juan Rodríguez Cabrillo in 1542 and encompassing much of the Spanish Period (1769-1821). The Luiseño occupied the Project area during the ethnohistoric period and may have displaced the Kumeyaay, who later occupied the southern region of the County. Missions were established in the region in the late 1700s, including Mission San Diego de Alcalá in 1769, Mission of San Juan Capistrano in 1776, and Mission San Luis Rey de Francia in 1798. At the time of contact, the Luiseño population may have ranged from 5,000 to as many as 10,000 individuals. To the south, the Kumeyaay population was at the same level or perhaps somewhat higher. Along with the introduction of European diseases, missionization greatly reduced their populations. The missions converted the Native Americans to Christianity; used the Native Americans as laborers; and introduced European diseases, agriculture, and animal husbandry to the Native Americans. Most villagers, however, continued to maintain many of their aboriginal customs while adopting the agricultural and animal husbandry practices learned from the Spanish.

### *Regional History*

San Diego history can be divided into the Spanish Period (discussed above), Mexican Period (1821-1846), and American Period (1846-Present). Expansion of private land grants to inland areas increased during the 1820s after Mexico won independence from Spain, which also initiated a departure from the mission system. California was occupied by the United States during the Mexican-American War of 1846-1848. After the Treaty of Guadalupe-Hidalgo was signed in 1848, California was annexed to the United States and the U.S. government had to recognize legitimate land claims, including those of Mexicans. Waves of settlers arrived after the Gold Rush in 1849, which created tension between the settlers squatting on Mexican-owned land (Hector et al., 2015).

Much of the land in the region was used for ranching, but by the 1860s, many of the original landowners lost their land holdings through the Board of Land Commissioners, which was created by the California Land Claim Act of 1851. Settlers continued to flock to the area, facilitated by the Homestead Act of 1862, the Timber Culture Act of 1873, and the transcontinental railroad that reached California by 1885. The population of San Diego increased from 5,000 in 1885 to 40,000 in 1889. The growth in the 1890s was primarily focused in the coastal areas and adjacent inland valleys (Hector et al., 2015).

### *Regulatory Background*

This section includes a description of the cultural resources regulatory framework.

### *Federal*

No federal regulations related to cultural resources are applicable to the Proposed Project. Section 106 of the National Historic Preservation Act does not apply because no federal agency discretionary action is required for the Proposed Project, and no federal lands or monies are involved.

### *State*

#### California Environmental Quality Act

CEQA requires that impacts to cultural resources be identified and, if impacts would be significant, that mitigation measures be implemented to reduce those impacts to the extent feasible (Public Resources Code (PRC) Section 21081). In the protection and management of the cultural environment, both the statute and the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.) provide definitions and standards for cultural resources management. Pursuant to Guideline 15064.5(a), the term "historical resource" includes:

A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (CRHR). A resource included in a local register of historical resources…or identified as significant in a historical resource survey…shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR, including the following:

- It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- It is associated with the lives of persons important in our past;
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- It has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources, or identified in a historical resources survey, does not preclude a lead agency from determining that the resource may be a historical resource.

As defined in PRC Section 21083.2(g), a "unique archaeological resource" is, an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- It contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- It has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- It is directly associated with a scientifically recognized important prehistoric or historical event or person.

Section 15064.5(b)(1) of the CEQA Guidelines explains that effects on historical resources would be considered adverse if they involve physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. Adverse effects on historical resources may result in a project having a significant effect on the environment. Section 15064(c)(3) requires that unique archaeological resources receive treatment under PRC Section 21083.2, which requires these resources to be preserved in place or left in an undisturbed state. If these treatments are not possible, then mitigation for significant effects is required, as outlined in PRC Section 21082.2(c).

The statutes and guidelines cited above specify how cultural resources are to be analyzed for projects subject to CEQA. Archival and field surveys must be conducted, and identified cultural resources must be inventoried and evaluated in prescribed ways.

**California Register of Historical Resources (CRHR)**

The CRHR is a public listing that was established by the California Office of Historic Preservation to encourage public recognition and protection of resources of architectural, historical, archeological, and cultural significance (Section 5024.1). Any resource eligible for listing in the CRHR must also be considered significant under CEQA. A historical resource may be listed in the CRHR if it meets one or more of the following criteria:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
- It is associated with the lives of persons important to local, California, or national history;
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic value; or

- It has yielded or has the potential to yield information that is important in the prehistory or history of the local area, California, or the nation.

Automatic listings include properties listed in the National Register of Historic Places (NRHP) or State Historical Landmarks from number 770 onward (PRC Section 5024.1(d)). In addition, Points of Historical Interest nominated since January 1998 are to be jointly listed as Points of Historical Interest and in the CRHR. Landmarks prior to number 770 and Points of Historical Interest may be listed through an action of the State Historical Resources Commission.

Resources listed in a local historic register or deemed significant in a historical resources survey, as provided under PRC Section 5024.1(g), are presumed to be historically or culturally significant unless the preponderance of evidence demonstrates that they are not (PRC Section 21084.1). A resource that is not listed on or determined to be ineligible for listing in the CRHR, not included in a local register of historical resources, or not deemed significant in a historical resources survey may, nonetheless, be historically significant.

**State Regulations Concerning Human Remains**

Broad provisions for the protection of Native American cultural resources are contained in the California Health and Safety Code, Division 7, Part 2, Chapter 5 (Sections 8010 through 8030), including the California Native American Graves Protection and Repatriation Act (Cal NAGPRA). Cal NAGPRA established a state policy to ensure that California Native American human remains and cultural items are treated with respect and dignity. Cal NAGPRA also provides the mechanism for disclosure and return of human remains and cultural items held by publicly funded agencies and museums in California. In addition, Cal NAGPRA outlines the process that California Native American tribes who are not recognized by the federal government may follow to file claims for human remains and cultural items held in agencies or museums.

Several provisions of the California PRC govern archaeological finds in terms of human remains or any other related object of archaeological or historical interest or value. Procedures are detailed under PRC Section 5097.9 through 5097.994 (Native American Historic Resource Protection Act) for actions to be taken whenever Native American remains are discovered. Under these provisions, if a county coroner determines that human remains found during excavation or disturbance of land are Native American, the coroner must contact the California Native American Heritage Commission (NAHC) within 24 hours (Health and Safety Code Section 7050.5(c)), and the NAHC must determine and notify the most likely descendant, who may make recommendations for removal and nondestructive analysis of the remains and for the removal of items associated with Native American burials or cremations within 24 hours (Section 5097.98).

Furthermore, Section 7050.5 of the California Health and Safety Code states that any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in PRC Section 5097.99. Any person removing any human remains without authority of law or written permission of the person or persons having the right to control the remains under PRC Section 7100 has committed a public offense that is punishable by imprisonment (Health and Safety Code Section 7051).

***Local***

As provided in CPUC General Order 131-D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary land use regulations. Nonetheless, as part of the environmental review process, SDG&E considers relevant

local land use plans and policies that pertain to cultural resources. The City of Oceanside General Plan, Land Use Element, contains the following policies that are relevant to the Proposed Project:

Policy 3.2 C states that "cultural resources that must remain in-situ to preserve their significance shall be preserved intact and interpretive signage and protection shall be provided by project developers."

Policy 3.2 D states that "an archaeological survey report shall be prepared by a Society of Professional Archaeologists certified archaeologist for a project proposed for grading or development if any of the following conditions are met:

- The site is completely or largely in a natural state,
- There are recorded sites on nearby properties,
- The project site is near or overlooks a water body (creek, stream, lake, freshwater lagoon),
- The project site includes large boulders and/or oak trees, or
- The project site is located within a half-mile of Mission San Luis Rey.

***Applicant Proposed Measures***

There are no Applicant Proposed Measures (APMs) proposed related to cultural resources. However, SDG&E's Standard Operating Procedures include providing a project specific environmental and safety awareness program for project personnel that includes discussion of required procedures if cultural resources are encountered unexpectedly during project construction.

## Paleontological Setting

***Approach to Analysis of Paleontological Resources and Previous Paleontological Studies***

Information presented in this section was gathered from a review of the July 2016 report, "Volume II of II (Part A) Proponent's Environmental Assessment for the Ocean Ranch Substation Project," prepared by SDG&E. The Proposed Project's effects on paleontological resources were evaluated using the significance criteria set forth in Appendix G of the CEQA Guidelines. The conclusions are summarized in the impact summary table above and discussed in more detail below.

There are 66 known sensitive paleontological resources within and surrounding the project area. In addition, the project area overlies the Santiago Formation, which is identified as highly sensitive for paleontological resources. Thus, ground disturbing work should be considered to have a high potential for encountering buried paleontological resources (Demere, 2016). The incorporation of SDG&E's Standard Operating Procedures and the Applicant's Proposed Measures (see below) will minimize any potential impacts to presently unknown or unrecorded paleontological resources.

**Record Searches**

A paleontological records search was conducted at the Department of Paleontology by the San Diego Natural History Museum for the Proposed Project (Demere, 2016). A total of 66 fossil collecting locations have been recorded within a half-mile radius of the Proposed Project area. Many of these fossils are considered significant as they represent multiple past environments. The majority of localities include fluvial, estuarine, and marine deposits of the Santiago Formation (Demere, 2016). These localities produced a wide variety of fossils, including fossilized stem and leaf impressions of terrestrial plants (e.g., freshwater algae and reeds), shell remains and impressions of marine invertebrates (e.g., segmented worms, barnacles, shrimp, crabs, ostracods, bryozoans, brachiopods, sea urchins, snails, clams, mussels, and oysters), mineralized remains of marine vertebrates (e.g., fish, rays, and sharks), and fossilized remains of terrestrial

vertebrates (e.g., amphibians, birds, oreodonts, camels, pigs, bats, arboreal gliding mammals, primitive carnivores, creodonts, insectivores, rabbits, marsupials, brontotheres, amynodonts, horses, tapirs, rhinos, primates, rodents, tortoises, softshell turtles, crocodilians, snakes, and lizards) (Demere, 2016). Terrestrial vertebrates (e.g., bison, horse, rodents, and reptiles) have also been recovered from a late Pleistocene-age stream terrace deposit and a late Oligocene-age Sespe/Vaqueros Formation (Demere, 2016).

**Pedestrian Survey**

A pedestrian survey to identify paleontological resources was not conducted; however, monitoring is recommended for all areas that may encounter previously undisturbed deposits of the Santiago Formation, including the following areas:

- Foundation excavations associated with installation of the 40-foot monopole in the southwestern portion of the substation site,
- Trenching activities for the underground power line duct bank within Avenida del Oro and Avenida de La Plata, and
- Any miscellaneous earthwork operations that will extend deep enough to encounter the Santiago Formation.

Notably, much of the proposed earthwork within the substation site (e.g., mass grading to create a building pad and trenching for underground power line duct banks) is anticipated to only impact the existing engineered artificial fill, which has zero paleontological sensitivity. In addition, work in staging yards is unlikely to require significant earthwork, and thus will not cause a significant impact to the Santiago Formation.

***Paleontological History***

San Diego County is located along the Pacific Rim, an area characterized by island arcs with subduction zones forming mountain ranges, deep oceanic trenches, and active volcanoes and causing earthquakes. During the Mesozoic Era, subduction of the ancient oceanic plate under the continental plate created an archipelago of volcanic islands in the San Diego area. The heat caused by the subduction produced massive volumes of magma that either erupted at the surface forming volcanic rocks or congealed deep in the Earth's crust to form plutonic rocks (e.g., granite). This resulted in the creation of the plutonic rocks now exposed in the mountainous central part of the County. Subsequent heating also metamorphosed the volcanic and sedimentary rocks of the arc as well as the older Paleozoic rocks, forming the foothills of the western part of the ranges. Continuing subduction of the oceanic plate under the continent caused uplifting and erosion that unroofed the deeply buried plutonic rocks to form a steep and rugged, mountainous coastline. Younger Mesozoic and Cenozoic sedimentary rocks have buried these older rocks west of the mountains, while a thick accumulation of Cenozoic sedimentary rocks, including layers of lava and ash, has filled the basins east of the mountains.

During the Cenozoic Era, a tectonic spreading center began to separate the southwestern part of North America, including San Diego County, from the rest of the continent. The spreading center formed the Gulf of California and the Salton Trough Region. The slow northwestward movement of San Diego County caused intermittent uplift with subsequent erosion, as well as down warping with subsequent deposition of thick accumulations of sediments. Recorded in these Cenozoic sedimentary rocks are conditions of higher rainfall and subtropical climates that supported coastal rain forests with exotic faunas and floras, periods of extreme aridity and volcanism, sea level fluctuations (oceanic inundations and retreats), a great Eocene river and delta, and the formation of new seaways.

In the project area, soils consist primarily of loose to medium dense fill, medium dense to very dense or hard to very hard colluvium. At greater depths, very dense formational soils primarily of the Eocene-age Santiago Formation are found. The Proposed Project area consists of documented fill overlying alluvial and colluvial deposits above native moderate to very highly cemented Santiago Formation materials. There are also numerous outcrops of non-marine Pleistocene deposits exposed near the Proposed Project area. The Santiago Formation is highly sensitive for the presence of paleontological resources.

### *Regulatory Setting*

This section includes a description of the paleontological resources regulatory framework.

### *Federal*

No federal regulations related to cultural or paleontological resources are applicable to the Proposed Project. The Paleontology Resources Preservation Act of 2009 does not apply to the Proposed Project because no federal agency discretionary action is required for the project, and no federal lands or monies are involved.

### *State*

#### California Environmental Quality Act

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value that are protected under CEQA. CEQA Appendix G, Part V inquires whether a project will destroy a unique paleontological resource. PRC Section 5097.5 protects paleontological resources located on public lands from the knowing and willful excavation, removal, destruction, injury, or defacement without a permit from the agency with jurisdiction over the land. Section 5097 further outlines the preservation and protection of these resources.

### *Local*

As provided in CPUC General Order 131-D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary land use regulations. Nonetheless, as part of the environmental review process, SDG&E considers relevant local land use plans and policies that pertain to cultural resources. The City of Oceanside General Plan, Land Use Element, contains the following policies that are relevant to the Proposed Project:

Policy 3.23 A states that "paleontological survey reports shall be prepared by a qualified paleontologist approved by the City for all Proposed Projects that are located in the area designated as having a high potential for fossils on the City's natural resource management database system" (City of Oceanside, 2002).

### *Applicant Proposed Measures*

The following APM will be implemented as part of the Proposed Project to reduce any potential impacts to paleontological resources to a less than significant level.

**APM CUL-1:** *Paleontological Resource Monitoring Program.* A paleontological resource monitoring program will be implemented during construction. The program will include construction monitoring, fossil salvage, laboratory preparation of salvaged specimens, curation of prepared specimens, and storage of curated specimens. A qualified paleontologist will be onsite to monitor all ground disturbing activities

(e.g., grading and excavation) within native sediments, until the monitor determines monitoring activities are not necessary. The monitor will inspect all fresh cut slopes and trenches, spoils piles, and graded pad surfaces for unearthed fossil remains. If any paleontological find is identified during monitoring, then the monitor will communicate with the general environmental monitor and the construction manager. Salvage may include techniques such as "pluck-and-run," hand quarrying, and bulk matrix sampling and screen-washing. The monitor will also collect stratigraphic data to define the nature of fossiliferous sedimentary rock units within the Proposed Project area, their geographic distributions, and their lithologic characteristics. Paleontological monitoring would not be required in locations where artificial imported fill materials occur for the full depth of the proposed ground disturbance.

## 5.5.2 Environmental Impacts and Mitigation Measures

***a. Would the project cause a substantial adverse change in the significance of an historical resource as defined in §15064.5 [§15064.5 generally defines* historical resource *under CEQA]?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. There are no known historical resources identified within the Proposed Project area; however, previously unknown buried historical resources could be discovered and damaged, or destroyed, during ground disturbing work. Damage or destruction of a buried historical resource would constitute a significant impact absent mitigation.

**Mitigation Measure.** Implementation of Mitigation Measure C-1 would evaluate and protect unanticipated discoveries of historical resources, thereby reducing this impact to less than significant.

**C-1 Management of Unanticipated Discoveries of Historical Resources or Unique Archaeological Resources.** Unanticipated discovery protocols shall be communicated to project workers as part of the contractor education program. If previously unidentified cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with the County, SHPO, any interested Tribes, and any other responsible public agency, shall make the necessary plans for recording and curating the find(s) and for the evaluation and mitigation of impacts if the finds are found to be eligible to the National Register of Historic Places or California Register of Historical Resources, or qualifies as a unique archaeological resource under CEQA Section 21083.2.

***b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?***

*LESS THAN SIGNIFICANT WITH MITIGATION MEASURES INCORPORATED*. No unique archaeological resources have been identified in the Proposed Project area; however, previously unknown buried archaeological resources could be discovered and damaged, or destroyed, during ground disturbing work. Damage or destruction of a buried historical resource would constitute a significant impact absent mitigation.

**Mitigation Measure.** Implementation of Mitigation Measure C-1, described above, would evaluate and protect unanticipated discoveries of unique archaeological resources, thereby reducing this impact to less than significant.

***c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. There are 66 paleontological resources present within the Project study area and surrounding areas. Therefore, the potential to directly or indirectly destroy

unique paleontological resources is moderate to high. In accordance with SDG&E's Standard Operating Procedures (Section 4.12.1), the Applicant will implement an environmental and safety awareness program for project personnel that will include education about paleontological resources. The Applicant will also implement a paleontological resource monitoring program during construction. A qualified paleontology monitor will ensure that previously unidentified paleontological resources are preserved by methods outlined in the monitoring program if encountered during construction. Therefore, the impacts to unique paleontological resources will be less than significant with the incorporation of APM CUL-1.

**Mitigation Measure.** No additional mitigation is required. Implementation of APM CUL-1, described above, would evaluate and protect unanticipated discoveries of unique paleontological resources or unique geologic features, thereby reducing this impact to less than significant.

***d. Would the project disturb any human remains, including those interred outside of formal cemeteries?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. There is no indication that human remains are present within the Proposed Project area. Background archival research failed to find any potential for human remains (e.g., existence of formal cemeteries). The nature of the proposed ground disturbance in areas of artificial fill and previously disturbed soils makes it unlikely that human remains would be unearthed during construction. However, it is possible that previously unknown human remains could be discovered and damaged or destroyed during ground disturbance, which would constitute a significant impact absent mitigation.

**Mitigation Measure.** Implementation of Mitigation Measure C-2**,** which requires evaluation, protection, and appropriate disposition of human remains, would reduce this impact to less than significant.

**C-2** **Appropriate Treatment of Human Remains.** Upon discovery of human remains, all work within 100 feet of the discovery area must cease immediately, the area must be secured, and the following actions taken:

- The land manager/owner of the site is to be called and informed of the discovery.
- The San Diego County Coroner's Office is to be called. The Coroner has two working days to examine the remains after notification (Health and Safety Code Section 7050.5(b). The Coroner will determine if the remains are archaeological/historic or of modern origin, and if there are any criminal or jurisdictional questions. The Coroner will make recommendations concerning the treatment and disposition of the remains to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.
- If the Coroner believes the remains to be those of a Native American, he/she shall contact the NAHC by telephone within 24 hours. The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the remains.
- The MLD has 48 hours to make recommendations to the land owner for treatment or disposition of the human remains. If the descendant does not make recommendations within 48 hours, the land owner shall re-inter the remains in an area of the property secure from further disturbance. If the land owner does not accept the descendant's recommendations, the owner or the descendant may request mediation by NAHC.

Per California Health and Safety Code, six or more human burials at one location constitutes a cemetery (Section 8100) and willful disturbance of human remains is a felony (Section 7052).

# 5.6 Geology and Soils

| GEOLOGY AND SOILS<br>Would the project: | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☐ | ☒ |
| ii) Strong seismic groundshaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☒ | ☐ |
| b. Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c. Be located on geologic units or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☒ | ☐ |
| d. Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2010), creating substantial risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☒ |

*Geology and Soils question (d) reflects the current 2013 California Building Code (CBC), effective January 1, 2014, which is based on the International Building Code (2009).
Significance criteria established by CEQA Guidelines, Appendix G.

## 5.6.1 Setting

This section describes geology, soils, and seismic conditions and analyzes environmental impacts related to geologic and seismic hazards that are expected to result from the implementation of the Proposed Project. The following discussion addresses existing environmental conditions in the affected area, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid any adverse impacts anticipated from Project construction and operation. In addition, existing laws and regulations relevant to geologic and seismic hazards are described. In some cases, compliance with these existing laws and regulations would serve to reduce or avoid certain impacts that might otherwise occur with the implementation of the Project.

Baseline geologic, seismic, and soils information were collected from published and unpublished literature, GIS data, and online sources for the Proposed Project and the surrounding area. Data sources included the following: the Proponent's Environmental Assessment, geologic literature from the U.S. Geological Survey and California Geological Survey, and online reference materials (See Appendix A). The study area was defined as the locations of Proposed Project components and the areas immediately adjacent to the Proposed Project for most geologic and soils issue areas with the following exception: the study area related to seismically induced ground shaking includes significant regional active and potentially active faults within 50 miles of the proposed Project.

## Regional Geologic Setting

The Proposed Project area is located along the western edge of the Peninsular Ranges geomorphic province of Southern California. The Peninsular Range geomorphic province is approximately 900 miles long, extending from the Transverse Ranges and the Los Angeles Basin southward to the southern tip of Baja California and varies in width from approximately 30 to 100 miles (Norris & Webb, 1976). In the project area, the Peninsular Ranges region can be divided into two geomorphic zones: mountains of the Peninsular Ranges to the east and the Coastal Plain to the west. The Proposed Project is located within the Coastal Plain area. The Coastal Plain area consists of a "layer cake" sequence of Tertiary to late Cretaceous marine and non-marine sedimentary rock units forming terraces and mesas primarily overlying Mesozoic granitic rocks. The terraces and mesas along the Coastal Plain were formed by fluctuations in relative elevations of the land and sea (uplift and sea level changes), which has resulted in the presence of ancient marine rocks preserved in locations up to 900 feet above mean sea level (MSL) and ancient river deposits in areas of as much as 1,200 feet above MSL.

## Local Geology

Prior to development and grading, the project area consisted of a sloping, dissected terrace surface with two small drainages crossing the area: one approximately parallel to Avenida del Oro and the second approximately parallel to Avenida de La Plata. These two drainages merged near the southwest end of the proposed Project site. Original elevations, before grading of the site and surrounding area in the 1980s and in 2006–2007, ranged from about 275 feet to 400 feet above mean sea level (MSL). CGS geologic mapping shows that the proposed project area was entirely underlain by Santiago Formation prior to the grading and fill (Kennedy and Tan, 2007), as shown in Figure 5.6-1, a geologic map of the area. (Note: All figures referenced in the text are located at the end of this section.)

The geotechnical siting study (Kleinfelder, 2012) and project specific geotechnical study (Kleinfelder, 2015) conducted for the proposed Project indicate that the site is underlain by three geologic units: artificial fill, young colluvium, and Santiago Formation. These two studies are provided as Appendix E-1 and E-2, respectively. These units are summarized below:

- Artificial Fill – Two phases of fill occurred at the proposed Project site: in the early 1980s and in 2006-2007 (Kleinfelder, 2015). The early 1980s fill placement (Phase 1) occurred along the western side of the site for construction of Avenida del Oro and along the southeast side of the site during construction of the adjacent subdivision on Avenida de La Plata (Kleinfelder, 2015). The 2006-2007 grading (Phase 2) consisted of filling in the remaining drainage in the area and creating level building pads. Topographic maps and boring data indicate that up to 83 feet of fill has been placed on the project site (Kleinfelder, 2015). The Phase 2 engineered fill was reported as compacted to a minimum of 90 percent relative compaction and to a minimum of 95 percent relative compaction in the upper 50 feet (Kleinfelder, 2015). Kleinfelder' s review of the Phase 2 reports and test data indicates that the Phase 1 fill was overexcavated and recompacted within the bottom area of the site drainage basin and that other areas of the Phase 1 fill, occurring primarily below the western and southeastern side of the property, were not reworked during the second phase of earthwork. The fill materials at the site encountered in the borings and trenches from the two Kleinfelder studies (2012, 2015) were reported to consist of loose to dense, light gray to gray and tan to dark brown clayey sand; hard to very hard olive gray to dark gray sandy clay to clay; and medium dense to dense, olive brown to light gray silty sand. The fill appears to have been derived from local sources.
- Young colluvial deposits – A thin layer of young colluvial deposits, ranging from 3.5 to 11.5 feet thick, underlies the artificial fill in the northeast portion of the proposed substation site (Kleinfelder, 2015). It

appears that the colluvial deposits were removed from the remainder of the site during the Phase 2 over excavation work. The young colluvial deposits encountered in the Kleinfelder borings consist of hard, dark gray to black fat clay and clay with sand.

- Santiago Formation – Cretaceous aged Santiago Formation underlies the fill and colluvium at the Proposed Project site and consists primarily of interbedded fine to coarse, light gray to brownish yellow, massively bedded sandstone, clayey siltstone, and claystone. Santiago Formation sandstones typically vary from very highly cemented with thin concretionary beds to moderately cemented and friable and the siltstones are typically massive to locally thinly bedded, and moderately well-cemented. The Kleinfelder borings and test pits (2012; 2015) encountered Santiago Formation at depths ranging from 2 to 83 feet below ground surface (bgs). The sandstone encountered by the exploration for this project consisted of weathered sandstone and claystone that excavated as medium dense to very dense, light olive gray to brownish yellow sand with silt to silty sand and clayey sand and hard to very hard, grayish brown to gray clay with sand to sandy clay.

## Soils

Soils within the Proposed Project area reflect the underlying rock type, the extent of weathering of the rock, the degree of slope, and the degree of human modification. The Proposed Project is located in a developed urban and industrial area covered by extensive areas of concrete, asphalt, and artificial fill. The geotechnical siting study and geotechnical investigation by Kleinfelder (2012; 2015) indicate that the project area has been highly modified and is covered by a layer of fill of varying depths.

Expansive soils are characterized by their ability to undergo significant volume change (shrink and swell) due to variation in soil moisture content. Changes in soil moisture could result from a number of factors, including rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soils are typically very fine grained with a high to very high percentage of clay. Soils with moderate to high shrink-swell potential would be classified as expansive soils. The Kleinfelder geotechnical study (2015) reports that based on their review of the Phase 2 grading information and their field investigations that the fill soils encountered at the site are expected to have low to medium potential for expansive soils.

Potential soil erosion hazards vary depending on the use, conditions, and textures of the soils. The properties of soil that influence erosion by rainfall and runoff are those that affect the infiltration capacity of a soil, and those that affect the resistance of a soil to detachment and being carried away by falling or flowing water. Additionally, soils on steeper slopes would be more susceptible to erosion due to the effects of increased surface flow (runoff) on slopes where there is little time for water to infiltrate before runoff occurs. Soils containing high percentages of fine sands and silt and that are low in density, are generally the most erodible. With increasing clay and organic matter content of these soils, the potential for erosion decreases. Clays act as a binder to soil particles, thus reducing the potential for erosion. The artificial fill underlying the Proposed Project is variable in texture and contains various amounts of clay, silt, and sand. The surficial layers tend to be silty sand with the deeper layers consisting of clayey sand, sandy clay, and clay. The layers with higher percentages of sand at or near the surface may be subject to wind and water erosion.

## Slope Stability

Important factors that affect the slope stability of an area include the steepness of the slope, the relative strength of the underlying rock material, and the thickness and cohesion of the overlying colluvium and alluvium. The steeper the slope and/or the less strong the rock, the more likely the area is susceptible to landslides. The steeper the slope and the thicker the colluvium, the more likely the area is susceptible to debris flows. Another indication of unstable slopes is the presence of old or recent landslides or debris

flows. Prior to regrading and fill of the area, the original hillslopes underlain by Santiago Formation were mapped with numerous landslides, including landslides mapped to the northwest and south of the substation site as shown in Figure 5.6-1 (Kennedy and Tan, 2005 & 2007). No previously mapped landslides underlay any project components.

The project area has undergone several episodes of grading and slope modifications and is now gently sloping with engineered terraces and flat and gently sloping roads. The majority of the Proposed Project is located on a gently sloping to flat graded terrace and the subtransmission lines would be installed within the graded terrace and within existing, flat to gently sloping graded roads. There is a small graded, engineered slope along the edge of the substation site transitioning down to the road. Hazards in respect to landsliding are considered low at the proposed site because of the gently sloping to relatively flat-lying, engineered surface conditions within and around the site. Static and seismic slope stability analyses conducted by Kleinfelder of the existing fill slopes indicate that the calculated factors of safety exceed the industry minimum (Kleinfelder, 2015).

### Seismicity

The seismicity of the project area is dominated by the north-northwest trending onshore and offshore Continental Borderland faults and the San Andreas Fault zone system. Both systems are responding to strain produced by the relative motions of the Pacific and North American Tectonic Plates. Deformation and effects from this seismic strain and faulting in the San Diego area include mountain building, basin development, deformation of Quaternary marine terraces, widespread regional uplift, and the generation of earthquakes. The San Diego coast and surrounding offshore and inland areas contain faults of varying ages and activity. These faults can be classified as historically active, active, potentially active, or inactive, based on the following criteria (CGS, 1999):

- Faults that have generated earthquakes accompanied by surface rupture during historic time (approximately the last 200 years) and faults that exhibit aseismic fault creep are defined as Historically Active.
- Faults that show geologic evidence of movement within Holocene time (approximately the last 11,000 years) are defined as Active.
- Faults that show geologic evidence of movement during the Quaternary (approximately the last 1.6 million years) are defined as Potentially Active.
- Faults that show direct geologic evidence of inactivity during all of Quaternary time or longer are classified as Inactive.

Although it is difficult to quantify the probability that an earthquake will occur on a specific fault, this classification is based on the assumption that if a fault has moved during the Holocene epoch, it is likely to produce earthquakes in the future. Since periodic earthquakes accompanied by surface displacement can be expected to continue in the study area through the lifetime of the Proposed Project, the effects of strong groundshaking and fault rupture are of primary concern to the safe operation of the Proposed Project components. The Project area will be subject to ground shaking associated with earthquakes on both on- and offshore faults. Active faults of both the Continental Borderland offshore system and of the San Andreas fault system are predominantly strike-slip faults accommodating translational movement; however, some of the faults also have some dip-slip components. Figure 5.6-2 shows locations of active and potentially active faults (representing possible seismic sources) and earthquakes greater than magnitude 5.0 in the region surrounding the Proposed Project. Active and potentially active faults within 50 miles of the Project alignments that are significant potential seismic sources relative to the Proposed Project are presented in Table 5.6-1.

**Table 5.6-1. Significant Active and Potentially Active Faults within 50 miles of the Proposed Project**

| Fault Name | Distance[1] (miles) | Location Relative to Project | Estimated Maximum Magnitude[2,3] |
|---|---|---|---|
| Rose Canyon–Newport-Inglewood fault zone (rupture of Newport-Inglewood alone or with Rose Canyon) | 8.7 | The Oceanside section of the Rose Canyon fault zone is located offshore to west of the proposed Project. | 6.9–7.5 |
| Elsinore fault zone (various rupture combinations of the Whittier, Glen Ivy, Julian, Temecula, and Coyote Mountain Segments) | 18.8 | The southern end of the Temecula section and the northern end of the Julian section of the Elsinore fault zone are about the same distance to the northeast of the proposed Project | 7.1–7.8 |
| Palos Verde–Coronado Bank fault zone (rupture of Coronado Bank alone or with the Palos Verde) | 25.6 | Coronado Bank fault zone is located offshore to the west of the proposed Project. | 7.4–7.7 |
| San Joaquin Hills Thrust | 34.6 | Located north of the proposed Project. | 7.1 |
| San Diego Trough fault zone | 36.5 | Located offshore to the west of the Proposed Project, fault it subparallel to the project so all components approximately the same distance from the fault zone | 6.1–7.7 [4] |
| San Jacinto fault zone (various rupture combinations of Anza segment alone or with San Bernardino, San Jacinto Valley, Coyote Creek, Borrego Mountain, Clark, and Superstition Mountain. | 42.3 | The Anza segment is the closest segment to the proposed project and is located to the northeast. | 6.7-7.8 |

1 - Fault distances obtained from the 2008 National Seismic Hazard Maps – Source Parameters website (USGS, 2016).
2 - Maximum Earthquake Magnitude – the maximum earthquake that appears capable of occurring under the presently known tectonic framework; magnitude listed is "Ellsworth-B" magnitude from USGS OF2007-1437(2007 WGCEP, 2007) unless otherwise noted.
3 - Range of Magnitude represents varying potential rupture scenarios with single or multiple segments rupturing in various combinations.
4 - Maximum potential magnitude is not well defined; potential range provided by the San Diego County Office of Emergency Services (San Diego County, 2016).

**Fault Rupture.** Fault rupture is the surface displacement that occurs when movement on a fault deep within the earth breaks through to the surface. Fault rupture and displacement almost always follows preexisting faults, which are zones of weakness; however, not all earthquakes result in surface rupture (e.g., earthquakes that occur on blind thrusts do not result in surface fault rupture). Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. In addition to damage cause by ground shaking from an earthquake, fault rupture is damaging to buildings and other structures due to the differential displacement and deformation of the ground surface that occurs from the fault offset, leading to the damage or collapse of structures across this zone.

No mapped potentially active, active, or Alquist-Priolo zoned faults cross the Proposed Project (USGS and CGS, 2010). The closest mapped fault to the proposed Project is the Newport Inglewood-Rose Canyon fault zone located offshore approximately 8.7 miles to the west of the site. The closest Alquist-Priolo zoned fault is the Temecula section of the Elsinore fault zone, located approximately 19 miles northeast of the proposed Project (Kleinfelder, 2015).

**Ground Shaking.** An earthquake is classified by the amount of energy released, which traditionally has been quantified using the Richter scale. Recently, seismologists have begun using a Moment Magnitude (M) scale because it provides a more accurate measurement of the size of major and great earthquakes. For earthquakes of less than M 7.0, the Moment and Richter Magnitude scales are nearly identical. For earthquake magnitudes greater than M 7.0, readings on the Moment Magnitude scale are slightly greater than a corresponding Richter Magnitude. The San Diego region is an area of sparse seismicity and has not

experienced many large or significant earthquakes, with only 5 earthquakes of M6.0 or greater occurring within 50 miles of the project site since 1769. Figure 5.6-2 depicts this and other historic earthquakes within the project vicinity.

The intensity of the seismic shaking, or strong ground motion, during an earthquake is dependent on the distance between the Project area and the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the Project area. Earthquakes occurring on faults closest to the Project area would most likely generate the largest ground motion. The intensity of earthquake induced ground motions can be described using peak site accelerations, represented as a fraction of the acceleration of gravity (g). USGS National Seismic Hazard (NSH) Maps were used to estimate approximate peak ground accelerations (PGAs) in the Proposed Project area. The NSH Maps depict peak ground accelerations with a 2 percent probability of exceedance in 50 years, which corresponds to a return interval of 2,475 years for a maximum considered earthquake. The estimated approximate peak ground acceleration from large earthquakes for the Proposed Project ranges from approximately 0.3g to 0.4g for earthquake recurrence interval 2,475 years (USGS, 2014), which corresponds to minor to moderate ground shaking.

**Liquefaction.** Liquefaction is the phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake-induced strong groundshaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silts, sands, and silty sands within 50 feet of the ground surface are most susceptible to liquefaction. In order to determine the liquefaction susceptibility of a region, three major factors must be analyzed. These include: (a) the density and textural characteristics of the alluvial sediments; (b) the intensity and duration of groundshaking; and (c) the depth to groundwater. Liquefaction-related phenomena include lateral spreading, ground oscillation, flow failures, loss of bearing strength, subsidence, and buoyancy effects (Youd and Perkins, 1978). In addition, densification of the soil resulting in vertical settlement of the ground can also occur.

Based on the lack of groundwater encountered in the boring conducted by the geotechnical study at the site and the loose to dense and hard to very hard consistency of the engineered fill and underlying colluvial deposits, Kleinfelder concluded that the potential for liquefaction is low (Kleinfelder, 2015).

**Seismic Slope Instability.** The other form of seismically induced ground failure which may affect the Project area includes seismically induced landslides. Landslides triggered by earthquakes have been a significant cause of earthquake damage; in southern California, large earthquakes such as the 1971 San Fernando and 1994 Northridge earthquakes triggered landslides that were responsible for destroying or damaging numerous structures, blocking major transportation corridors, and damaging life-line infrastructure. Areas that are most susceptible to earthquake-induced landslides are steep slopes in poorly cemented or highly fractured rocks, areas underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits. As noted above in the Slope Stability section, the proposed Project is located on and within previously graded and paved roadways and a previously graded, gently sloping terrace and a seismic slope stability analyses conducted by Kleinfelder of the existing fill slopes indicate that calculated factors of safety exceed the industry minimum (Kleinfelder, 2015).

## Regulatory Background

This section includes a description of the geology and soils regulatory framework.

## Federal

### *The Clean Water Act*

The Clean Water Act establishes the basic structure for regulating discharges of pollutants into the Waters of the U.S. The Act authorized the Public Health Service to prepare comprehensive programs for eliminating or reducing the pollution of interstate waters and tributaries and improving the sanitary condition of surface and underground waters with the goal of improvements to and conservation of waters for public water supplies, propagation of fish and aquatic life, recreational purposes, and agricultural and industrial uses. The Proposed Project construction would disturb a surface area greater than one acre; therefore, SDG&E would be required to obtain a National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity under Clean Water Act regulations. Compliance with the NPDES would require that the applicant prepare and submit a Storm Water Pollution Prevention Plan (SWPPP).

### *The International Building Code (IBC)*

The International Building Code (IBC) is published by the International Code Council (ICC). The scope of this code covers major aspects of the design and construction and structures and buildings, except for three-story one- and two-family dwellings and town homes. The International Building Code has replaced the Uniform Building Code as the basis for the California Building Code and contains provisions for structural engineering design. The 2015 IBC addresses the design and installation of structures and building systems through requirements that emphasize performance. The IBC includes codes governing structural as well as fire- and life-safety provisions covering seismic, wind, accessibility, egress, occupancy, and roofs.

### *The Institute of Electrical and Electronics Engineers (IEEE) 693 "Recommended Practices for Seismic Design of Substations"*

The IEEE 693 "Recommended Practices for Seismic Design of Substations" was developed by the Substations Committee of the IEEE Power Engineering Society and approved by the American National Standards Institute and the IEEE-SA Standards Board. This document provides seismic design recommendations for substations and equipment consisting of seismic criteria, qualification methods and levels, structural capacities, performance requirements for equipment operation, installation methods, and documentation. This recommended practice emphasizes the qualification of electrical equipment. IEEE 693 is intended to establish standard methods of providing and validating the seismic withstand capability of electrical substation equipment. It provides detailed test and analysis methods for each type of major equipment or component found in electrical substations. This recommended practice is intended to assist the substation user or operator in providing substation equipment that will have a high probability of withstanding seismic events to predefined ground acceleration levels. It establishes standard methods of verifying seismic withstand capability, which gives the substation designer the ability to select equipment from various manufacturers, knowing that the seismic withstand rating of each manufacturer's equipment is an equivalent measure. Although most damaging seismic activity occurs in limited areas, many additional areas could experience an earthquake with forces capable of causing great damage. This recommended practice should be used in all areas that may experience earthquakes.

## State

### *The California Building Code, Title 24, Part 2 (CBC, 2013)*

The California Building Code, Title 24, Part 2 provides building codes and standards for design and construction of structures in California. The 2013 CBC is based on the 2012 International Building Code with the addition of more extensive structural seismic provisions. Chapter 16 of the CBC, contains definitions of seismic sources and the procedure used to calculate seismic forces on structures.

### *The Alquist-Priolo Earthquake Fault Zoning Act of 1972, Public Resources Code (PRC), sections 2621–2630 (formerly the Special Studies Zoning Act)*

The Alquist-Priolo Earthquake Fault Zoning Act regulates development and construction of buildings intended for human occupancy to avoid the hazard of surface fault rupture. While this Act does not specifically regulate transmission and telecommunication lines; it does help define areas where fault rupture is most likely to occur. This Act groups faults into categories of active, potentially active, and inactive faults. Historic and Holocene age faults are considered active, Late Quaternary and Quaternary age faults are considered potentially active, and pre-Quaternary age faults are considered inactive. These classifications are qualified by the conditions that a fault must be shown to be "sufficiently active" and "well defined" by detailed site-specific geologic explorations in order to determine whether building setbacks should be established.

### *The Seismic Hazards Mapping Act (the Act) of 1990 (Public Resources Code, Chapter7.8, Division 2, sections 2690–2699)*

The Act directs the California Department of Conservation, Division of Mines and Geology [now called California Geological Survey (CGS)] to delineate Seismic Hazard Zones. The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Act requires that site-specific geotechnical investigations be performed prior to permitting most urban development projects within seismic hazard zones.

### *California Public Utilities General Order 95 (GO 95) and General Order 128 (GO 128)*

GO 95 and GO 128 contain State of California rules formulated to provide uniform requirements for overhead electrical line construction and underground electrical supply and communication systems, respectively, to insure adequate service and secure safety to persons engaged in the construction, maintenance, operation, or use of overhead electrical lines and underground electrical supply and communication systems and to the public. GO 95 and GO 128 are not intended as complete construction specifications, but are intended to embody requirements which are most important from the standpoint of safety and service. Construction shall be according to accepted good practices for the given local conditions in all particulars not specified in the rules. GO 95 applies to all overhead electrical supply and communication facilities which come within the jurisdiction of the California Public Utilities Commission and are located outside of buildings, including facilities that belong to non-electric utilities, as follows: Construction and Reconstruction of Lines, Maintenance of Lines, Lines Constructed Prior to This Order, Reconstruction or Alteration, Emergency Installation, and Third Party Nonconformance. GO 128 applies to: (a) all underground electrical supply systems used in connection with public utility service; when located in buildings, the vaults, conduit, pull boxes or other enclosures for such systems shall also meet the requirements of

any statutes, regulations or local ordinances applicable to such enclosures in buildings; and (b) all underground communication systems used in connection with public utility service located outside of buildings. GO 128 applies to the following activities related to underground electrical supply and communication systems: Construction and Reconstruction of Lines, Maintenance, Systems Constructed Prior to These Rules, Reconstruction or Alteration, and Third Party Nonconformance.

## Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary geological regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local plans and policies that pertain to geology and soils.

### *County of San Diego General Plan – Safety Element*

The *Safety Element* of the County of San Diego General Plan addresses natural hazards and human activities that may pose a threat to public safety within the following topic areas: wildfires, geological and seismic hazards, flooding, hazardous materials, law enforcement, and airport hazards. As it relates to Geology and Soils, goals, policies, guidelines, and standards to reduce the potential effects of known seismic and other geologic hazards are included.

### *City of Oceanside General Plan – Environmental Resource Management Element*

The *Environmental Resource Management Element* of the General Plan has basic objectives for natural resources, which include soils, erosion, and drainage. Objective 1 is to "consider appropriate engineering and land use planning techniques to mitigate rapid weathering of the rocks, soil erosion, and the siltation of the lagoons." The City will continue to enforce the Grading Ordinance (Ord. No. 73-46) to prevent the erosion of soils and hillsides.

### *City of Oceanside General Plan – Public Safety Element*

The *Public Safety Element* of the Oceanside General Plan is a guide for introducing safety consideration into the planning process for reducing loss of life, injuries, and damage to properties. The *Public Safety Element* includes goals and policies to reduce risk from seismic and geologic hazards.

### *City of Oceanside*

The City presently requires soil borings to be taken on all proposed building sites prior to the issuance of building permits. These borings are generally routine in nature and are used to identify water table levels and the presence of expansive soils, uncompacted fill, etc. The City also identifies several other geotechnical investigations that should be accomplished if a site has been identified as being particularly susceptible to certain geologic problems.

## Applicant Proposed Measures

No Applicant Proposed Measures (APMs) related to the Geology and Soils issue areas have been identified by SDG&E.

## 5.6.2 Environmental Impacts and Mitigation Measures

***a. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

***i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

*NO IMPACT*. Fault rupture is the surface displacement that occurs when movement on a fault within the earth breaks through to the surface. Fault rupture and displacement almost always follows preexisting faults, which are zones of weakness. No known active, potentially active, or Alquist-Priolo zoned faults cross the Proposed Project. Additionally, the closest mapped active fault is the Newport Inglewood-Rose Canyon fault zone located offshore about 9 miles to the west and the closest Alquist-Priolo zoned fault is the Temecula section of the Elsinore fault zone located approximately 19 miles northeast. Therefore, there is no potential for surface fault rupture at the Proposed Project site.

***ii) Strong seismic ground shaking?***

*LESS THAN SIGNIFICANT*. Although the Proposed Project is located in an area of southern California with sparse seismicity, there are several onshore and offshore regional and local faults that could cause minor to moderate ground shaking in the Project area. These faults and their distances from the proposed Project are listed in Table 3.6-1. Estimated peak ground acceleration (PGA) for a large earthquake is approximately 0.3-0.4 g (fraction of gravity) for a two percent in 50-year probability of exceedance for the Project area (USGS, 2016b), which corresponds to minor to moderate ground shaking. However, as standard operating procedure, SDG&E will design the Ocean Ranch Substation based on recommendations from the site specific geotechnical study, including the specification that the substation should be designed in accordance with American Society of Civil Engineers (ASCE) 113 Substation Structure Design Guide. Additionally, SDG&E would be required to comply with all appropriate and applicable codes and seismic standards and guidelines, including those presented in IEEE 693 (Recommended Practices for Seismic Design of Substations) and CPUC GO 128 for underground electrical supply and communication systems. Therefore, the potential for adverse effects (damage to Project components and/or injury or death) due to strong ground shaking would be reduced to a less than significant level.

***iii) Seismic-related ground failure, including liquefaction?***

*LESS THAN SIGNIFICANT*. Liquefaction is the phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake-induced strong ground shaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments, and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silts, sands, and silty sands within 50 feet of the ground surface are most susceptible to liquefaction.

The geotechnical siting study (Kleinfelder, 2012) and project specific geotechnical study (Kleinfelder, 2015) did not encounter groundwater to the full depth of exploration of 91.5 feet bgs at the Proposed Project site. The geologic units encountered in the borings were primarily hard to very hard clay and clayey sand with medium dense to dense silty sand layers at or near the surface. Units expected to be encountered along by trenching for the underground lines include thin fill over the young colluvium and Santiago Formation units. These units are expected to have similar consistency and character to those encountered at the substation site. Based on the lack of groundwater to a depth of at least 91 feet below the substation site and the density and consistency of the underlying units, there is a low potential for liquefaction at the Proposed Project and, therefore, a less than significant impact.

***iv) Landslides?***

*LESS THAN SIGNIFICANT*. The slope stability of an area is influenced by the steepness of the slope, the relative strength of the underlying rock material, and the thickness and cohesion of the overlying colluvium and alluvium. The steeper the slope and/or the less strong the rock, the more likely the area is susceptible to landslides. The steeper the slope and the thicker the colluvium, the more likely the area is susceptible to debris flows. An indication of unstable slopes is the presence of old or recent landslides or debris flows. Although the underlying Santiago Formation is known to be landslide prone and landslides have been mapped in the project area, it is unlikely that the current engineered graded and filled slopes and terraces would experience slope failures. It is likely that during area development, any unstable slopes or landslide features were removed and or mitigated. Additionally, as part of the project, the site would be regraded based on final project grading plans and any slopes would be designed at stable inclinations. Therefore, impact from landslides at the Proposed Project site would be less than significant.

***b. Would the project result in substantial soil erosion or the loss of topsoil?***

*LESS THAN SIGNIFICANT.* Ground disturbance of excavation and grading will be required for construction of the Proposed Project and would expose and loosen soils. This could result in triggering or acceleration of soil erosion due to wind or rain. Since the Proposed Project would disturb an area greater than one acre, current regulations require that the proposed Project obtain a National Pollution Discharge Elimination System (NPDES) Permit, which in turn requires the Applicant to submit a SWPPP. As part of SDG&E's standard operating procedures, they will use SDG&E's Water Quality Construction BMP Manual and a project-specific SWPPP to develop and implement BMPs to minimize and control erosion. Compliance with the SWPPP and BMPs would reduce the potential for construction-triggered erosion to less than significant.

During project operation of the developed substation and underground lines, the potential for erosion is considered low due to the site drainage and surfacing improvements that will be in place. Operation and maintenance of the Proposed Project will not typically involve ground-disturbing activities or grading. If grading is required, SDG&E would implement the BMPs outlined in its Water Quality Construction BMP Manual. Therefore, operational impacts related to soil erosion would be less than significant.

***c. Would the project be located on geologic units or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?***

*LESS THAN SIGNIFICANT.* Potential impacts related to liquefaction, liquefaction-related phenomena, unstable slopes, and landslides are discussed in Section 5.6.1. Although the soils located at the proposed Ocean Ranch Substation site and the surrounding area have a low potential for liquefaction, there is still a potential for shaking related deformations, such as differential settlement, lateral spreading, subsidence, or collapse in the unlikely scenario that liquefaction does occur. However, SDG&E's standard operating procedure to consider and implement, as needed, the results and recommendations from the geotechnical investigations to reduce the potential for adverse effects address this concern. Thus, impacts from geologic instability would be less than significant.

***d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?***

*LESS THAN SIGNIFICANT*. Expansive soils are characterized by their ability to undergo significant volume change (shrink and swell) due to variations in soil moisture content. Changes in soil moisture could result

from a number of factors, including rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soils are typically very fine grained with a high to very high percentage of clay. Fine grained clays and clay rich soils are located near the surface within the existing fill and colluvium at the Proposed Project site. Based on the geotechnical investigation, the fill soils at the substation site have a low to moderate potential for expansion (Kleinfelder, 2015). As described in Section 4 (Project Description), trenches and excavations for the duct banks and manholes will be backfilled with engineered backfill (a fluidized thermal backfill). Construction of the proposed Ocean Ranch Substation would require approximately 28,700 cubic yards of imported fill material and 10,100 cubic yards of exported material. Onsite material will be reused to the extent possible, as recommended by the project's Geotechnical Engineer. Kleinfelder (2015) presents the following recommendation:

> *Fill soils within the upper 3 feet below structural foundations should consist of granular material. In general, the onsite fill soils can be reused as materials for placement as compacted fill, provided they have a very low to low expansion index (expansion index of 50 or less), [and] are free of oversized rock, clay clods, organic materials, and deleterious debris.*

Implementation of the final geotechnical recommendations regarding fill characteristics and placement and the use of engineered fill at the substation and within the trenches would reduce potential impacts from expansive soils to less than significant.

***e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?***

*NO IMPACT*. The Proposed Project will not involve the installation of a septic tank or alternative wastewater disposal system. The substation will be unmanned during normal operation; therefore, no impacts will occur.

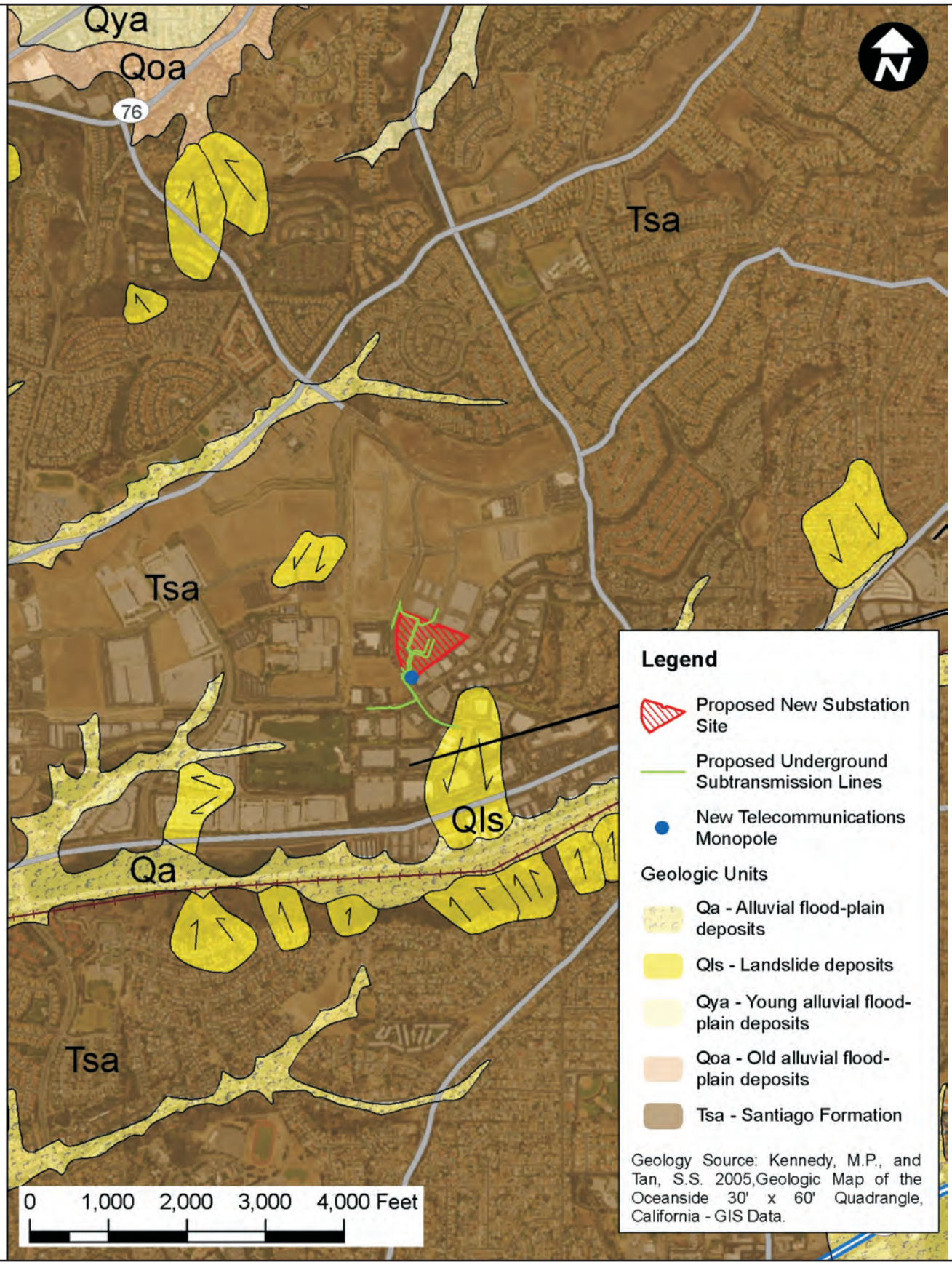



**Figure 5.6-1**

**Geologic Map**

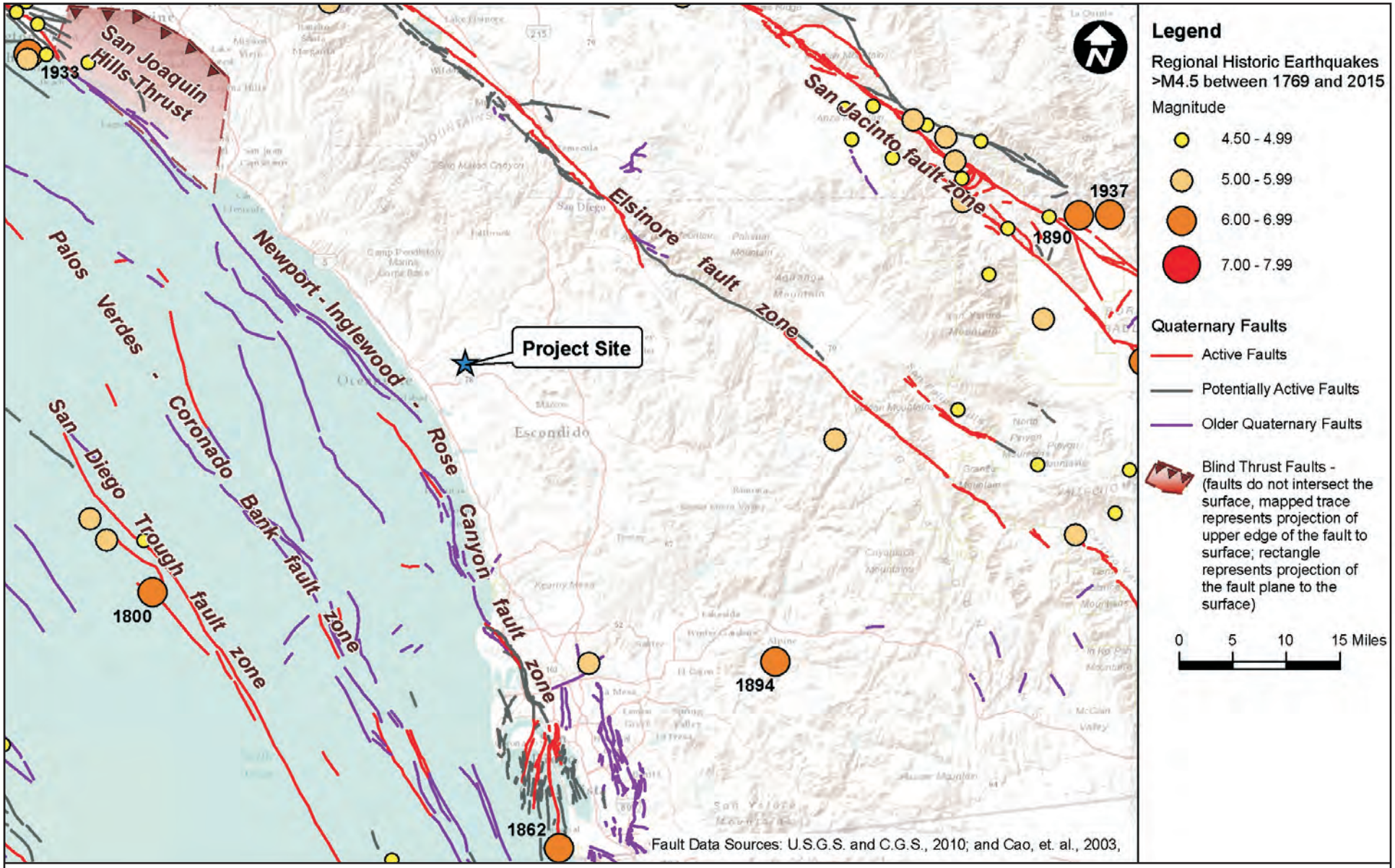



**Figure 5.6-2**

**Regional Active Faults and Historic Earthquakes**

# 5.7 Greenhouse Gas Emissions

| GREENHOUSE GAS EMISSIONS<br>Would the project: | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |

Significance criteria established by CEQA Guidelines, Appendix G

## 5.7.1 Setting

Globally, temperature, precipitation, sea level, ocean currents, wind patterns, and storm activity are all affected by the presence of greenhouse gas (GHG) pollutants in the atmosphere. In contrast to air quality, which is of regional or local concern, human-caused emissions of GHGs are linked to climate change on a global scale. GHGs allow ultraviolet radiation to penetrate the atmosphere and warm the Earth's surface and also prevent some infrared radiation emitted by the Earth from escaping back into space. Human activity contributes to emissions of six primary GHGs: carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride ($SF_6$).

The largest anthropogenic source of GHGs is fossil fuel combustion, which results primarily in $CO_2$ emissions. Other GHG emissions tracked by State inventories occur in much smaller quantities. However, the global warming potential of $CH_4$ is about 25 times that of $CO_2$ (CARB, 2014a). The use of sulfur hexafluoride ($SF_6$) in transformers and circuit breakers at power plants, switchyards, and substations also poses a concern, because this pollutant can slowly escape from the equipment and it has an extremely high global warming potential (one pound of $SF_6$ has the equivalent warming potential of approximately 22,800 pounds of $CO_2$). When quantifying GHG emissions, the different global warming potentials of GHG pollutants are usually taken into account by normalizing their rates to an equivalent $CO_2$ emission rate (identified as CO2e).

When California first formalized a strategy for achieving GHG reductions in 2008, the State produced approximately 487 million metric tons of $CO_2$ equivalent (MMTCO2e), an amount equal to about 537 million tons (CARB, 2014b).[3] In 2012, California's emissions were approximately 459 MMTCO2e (CARB, 2014b) or less than one percent of the 49,000 MMTCO2e emitted globally (IPCC, 2014). Table 5.7-1 shows that in-state electricity generation and electricity imports are approximately 20 percent of statewide GHG emissions in California.

**Table 5.7-1. 2014 California Greenhouse Gas Emissions Inventory**

| Source Category | 2014 (MMTCO2e/yr) | Percent of Total |
|---|---|---|
| Industrial | 106.0 | 24 |
| Transportation | 163.4 | 37 |
| Commercial | 22.1 | 5 |
| Residential | 26.5 | 6 |
| Agriculture | 35.3 | 8 |
| Electricity Generation (Imported and In-State) | 88.3 | 20 |
| Total Emissions | 441.5 | 100 |

Source: CARB 2016.

### Regulatory Background

This section includes a description of the greenhouse gas emissions regulatory framework.

[3] One metric ton (MT) equals 1,000 kilograms, which is 2,204.6 pounds or about 1.1 short tons.

## Federal

### *U.S. EPA GHG Mandatory Reporting Program (40 CFR Part 98)*

This rule requires mandatory reporting of GHG emissions for industrial facilities and power plants that emit more than 25,000 MTCO2e emissions per year. Currently, there are no federal regulations limiting GHG emissions from the Proposed Project.

## State

### *California Global Warming Solutions Act of 2006 (AB 32)*

The California Global Warming Solutions Act of 2006, Assembly Bill 32 (AB 32, Chapter 488, Statutes of 2006) requires that California's GHG emissions be reduced to 1990 levels by 2020. The reductions are occurring through an enforceable statewide cap on global warming emissions, fuel standards, and source-specific regulatory programs. AB 32 also directs the CARB to develop regulations and a mandatory reporting system to track and monitor global warming emissions levels. The initial CARB Climate Change Scoping Plan, approved December 2008, provides the framework for achieving California's goals.

In passing AB 32, the California Legislature found that:

> *Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.*

### *California Senate Bill 32 (SB 32)*

The update to California Global Warming Solutions Act of 2006 made by Senate Bill 32 (SB 32) in 2016 requires that California's GHG emissions be reduced to 40 percent below 1990 levels by 2030. As the requirements set by AB 32 appear likely to be reached by 2020, California took the initiative to enact SB 32 and to formalize the GHG emissions reductions targets for 2030.

### *Renewable Portfolio Standard (RPS)*

In April 2011, Senate Bill 2 of the 1st Extraordinary Session (SB X1-2) was signed into law. SB X1-2 applies a 33 percent RPS by December 31, 2020 to all retail sellers of electricity and establishes renewable energy standards for interim years before 2020. This codified the requirement to achieve 33 percent RPS statewide by the end of 2020, as specified in the initial AB 32 Scoping Plan (CARB, 2008). With the Clean Energy and Pollution Reduction Act of 2015 (SB 350), signed into law on October 7, 2015, California expanded the specific set of objectives to be achieved by 2030, with the following:

- To increase the Renewable Portfolio Standard (RPS) from 33 percent to 50 percent for the procurement of California's electricity from renewable sources; and
- To double the energy efficiency savings in electricity and natural gas end uses by retail customers.

The CPUC is taking steps to address climate change by implementing these RPS and energy efficiency targets through various planning proceedings. Additionally, the CPUC established requirements for

power supplies contracted by the utilities under the Electricity Greenhouse Gas Emission Standards Act[4] (SB 1368), which requires that generation and contracts be subject to a GHG Environmental Performance Standard of 1,100 pounds (or 0.5 metric tons) of $CO_2$ per megawatt-hour (MWh) of electricity produced. The Emissions Performance Standard applies to base load power from new power plants, new investments in existing power plants, and new or renewed contracts with terms of five years or longer, including contracts with power plants located outside of California.[5]

Achieving California's climate change goals requires careful coordination on the State's energy policies, meaning that CPUC and CARB are working closely to implement the recommendations in the Scoping Plan and the requirements of SB 350. Additionally, the Intergovernmental Panel on Climate Change (IPCC), an international scientific body, has established that one of its Key Mitigation Technologies and Practices for Energy Supply is improved energy supply and distribution efficiency.[6]

#### *CARB $SF_6$ Regulations (17 CCR 95350)*

In early 2010, CARB adopted a regulation for reducing $SF_6$ emissions from electric power system gas insulated switchgear (CARB, 2010b). The regulation requires owners of such switchgear to: (1) annually report their $SF_6$ emissions; (2) determine the emission rate relative to the $SF_6$ capacity of the switchgear; (3) provide a complete inventory of all gas insulated switchgear and their $SF_6$ capacities; (4) produce a $SF_6$ gas container inventory; and (5) keep all information current for CARB enforcement staff inspection and verification.

#### *Mandatory Reporting of Greenhouse Gas Emissions (17 CCR 95100)*

Mandatory reporting of GHG emissions applies to electric generating facilities with a nameplate capacity equal or greater than 1 MW capacity and GHG emissions exceeding 2,500 metric tons per year.

### Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and constructions of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary greenhouse gas emissions regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local land use plans and policies that pertain to greenhouse gas emissions.

#### *San Diego County Climate Action Plan*

In July 2015, San Diego County Planning and Development Services initiated work on the County's Climate Action Plan (CAP). An EIR will be prepared and is scheduled for adoption in the Fall of 2017. The City of San Diego CAP was initiated pursuant to AB 32 with a goal for municipal operations and community-wide emissions reduction by approximately 15 percent from current levels by 2020. The City of Oceanside and SDAPCD have not adopted a CAP or GHG thresholds under CEQA.

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4 Public Utilities Code § 8340 et seq.

5 See Rule at http://www.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/64072.htm

6 IPCC (Intergovernmental Panel on Climate Change). 2007. Working Group III contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report, Climate Change 2007: Mitigation of Climate Change. May.

### Applicant Proposed Measures

There are no applicant proposed measures associated with greenhouse gas emissions.

## 5.7.2 Environmental Impacts and Mitigation Measures

***a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

*DURING CONSTRUCTION, LESS THAN SIGNIFICANT*. Construction of the proposed substation, subtransmission lines, and other project facilities would result in GHG emissions from on-site construction equipment and off-site vehicles transporting workers and materials. Primary GHG emissions during construction are associated with $CO_2$ from the combustion of gasoline and diesel fuel in equipment and vehicles. $CH_4$ and $N_2O$ are also emitted from fuel combustion but at rates of less than 1 percent of the mass of $CO_2$ combustion emissions. The other three primary GHGs ($SF_6$, HFCs, and PFCs) are not emitted during construction activities and are not included in construction emissions calculations.

Construction GHG emissions are based on the proposed quantities and types of equipment and activities required for the proposed project and are estimated using the California Air Pollution Officers Association's (CAPCOA) California Emissions Estimator Model (CalEEMod), version 2016.3.1. Based on the proposed duration and frequency of construction activities and equipment to be used, approximately 1,154 MTCO2e would be emitted over the entire construction phase of the proposed project (SDG&E 2016; response dated November 18, 2016). Construction-related emissions would be distributed over 20 months. These estimated levels would not exceed the threshold level of 25,000 metric tons per year for annual mandatory reporting of GHGs (40 CFR Part 98) or the threshold level of 2,500 metric tons per year for electric generating facilities over 1 MW in capacity (17 CCR 95100). Estimated emissions would also be below 10,000 metric tons per year, which is a threshold of significance recommended by the nearby South Coast Air Quality Management District[7] for industrial facilities. Because the project construction emissions of approximately 1,154 MTCO2e over the 20-month duration would be less than the threshold levels identified here, impacts resulting from direct or indirect construction-related GHG emissions would be less than significant.

*DURING OPERATION AND MAINTENANCE, LESS THAN SIGNIFICANT.* The operation and maintenance of the proposed substation, subtransmission lines, and other project facilities would result in a small, but unquantified amount of GHG emissions from mobile sources ($CO_2$, $CH_4$, and $N_2O$). SDG&E claims that operation and maintenance activities would not materially increase with the addition of the proposed facilities to SDG&E's system. Crews would conduct maintenance roughly six times per year, and one or two workers would visit the substation daily or weekly. The emissions of HFCs and PFCs are negligible during operation and maintenance of the proposed substation. Primary GHG emissions during operation would result from the use of $SF_6$ gas as an insulating agent within the new circuit breakers of the proposed substation, which could be released into the environment if there were any accidental leaks in the equipment. The new circuit breakers would be required to comply with CARB $SF_6$ Regulations (17 CCR 95350) and existing SDG&E $SF_6$ Mitigation Strategies (See Section 4. Project Description, Standard Operating Procedures).

The potential GHG emissions due to unanticipated $SF_6$ gas leakage would be 62.46 MTCO2e per year (SDG&E, 2016). These estimated levels along with the small, but unquantified amount of GHG emissions from mobile sources for operation and maintenance activities would be well below the threshold level

[7] For example, see: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. March 2015.

of 2,500 metric tons per year for annual mandatory reporting of GHGs (17 CCR 95100). Because total project operation and maintenance emissions would be less than the threshold level identified here, impacts resulting from direct or indirect operation-related GHG emissions would be less than significant.

***b Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?***

*LESS THAN SIGNIFICANT*. Over the project life, GHG emissions from project operation and maintenance activities would occur at a rate well below the federal reporting threshold for stationary sources (25,000 MTCO2e/yr) and below the reporting threshold for electric generating facilities over 1 MW in capacity (2,500 MTCO2e/yr). The Proposed Project would improve the infrastructure used in distribution of California's energy supply, and would not affect California's ability to supply renewable energy. The Proposed Project would not affect SDG&E's ability to meet its RPS obligations. Similarly, the Proposed Project would not affect or conflict with any local goals or programs to achieve GHG reduction targets. SDG&E would comply with CARB $SF_6$ regulations to inventory, report, and minimize $SF_6$ leaks through the use of new technology. By complying with these requirements, the proposed project would not conflict with any applicable GHG management plan, policy, or regulation. Therefore, this impact would be less than significant.

# 5.8 Hazards and Hazardous Materials

| **HAZARDS AND HAZARDOUS MATERIALS**<br>**Would the project:** | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☒ | ☐ |
| d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☒ | ☐ | ☐ |
| h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.8.1 Setting

This section addresses issues related to environmental hazards and hazardous materials in the existing conditions. Environmental hazards include accidental spills of hazardous materials, the presence of existing subsurface contamination, the risk of wildfire, and aircraft safety. Hazardous materials include fuel, oil, and lubricants. If encountered, contaminated soil can pose a health and safety threat to workers or the public.

### Land Use

The project site is a vacant, graded site that is part of a much larger industrial park. Industrial park grading and development begin with the U.S. Post Office due west of the site in the early 2000s; grading of the remaining areas north of Avenida de la Plata was completed in 2007 (SDG&E, 2016a). The properties in the area surrounding the project site are used for light industrial and commercial uses. Prior to the development of the business park the area was used for row crop farming, with a longer earlier history of dry farming (SDG&E, 2016a).

### Hazardous Materials

During construction, hazardous materials such as cleaning solvents, paints, adhesives, vehicle fuels, oil, hydraulic fluid, and other vehicle and equipment maintenance fluids would be used and stored in construction staging yards. Spills and leaks of hazardous materials during construction activities could result in soil or groundwater contamination. As part of the Project Standard Operating Procedure (see Section 4.12.3), all hazardous materials would be stored, handled, and used in accordance with applicable regulations, worker training on hazardous material protocols, and best management practices (BMPs) detailed in: the Safety and Worker Environmental Awareness Program (SWEAP; SDG&E Water Quality Construction BMP Manual; Spill Prevention, Control, and Countermeasures Plan (SPCC); and the Stormwater Pollution Prevention Plan (SWPPP) prepared for the Proposed Project. No acutely hazardous materials would be stored or used at the Project sites during the construction or operation of the Proposed Ocean Ranch 69/12 kV Substation Project.

### Environmental Contamination

Components of the Proposed Project where ground disturbance would occur would be susceptible to encountering environmental contamination if located near commercial or industrial sites with known contamination or adjacent to sites that store and use large quantities of hazardous materials. Ground disturbing activities for the Proposed Project include:

- Grading, trenching, and excavation for construction and installation of the new Ocean Ranch Substation facilities and equipment and the new telecommunication monopole.
- Trenching for installation of underground duct banks.

A Phase I Environmental Site Assessment (ESA) was conducted for the proposed Ocean Ranch Substation project (Geosyntec, 2015). The ESA identified four small quantity generators of hazardous waste located on Avenida de la Plata east of Avenida del Oro and one large quantity generator west of Avenida del Oro. No known hazardous waste sites or leaking underground storage tank sites are located near the project.

### Schools

Two schools, La Petite Academy pre-school and Coastal Academy, are located 0.25 miles east of the Substation site at College Boulevard and Avenida de la Plata. There are no other schools within one-quarter mile of the Proposed Project.

### Airports and Airstrips

The Proposed Project is located 3 miles southeast of the Oceanside Municipal Airport and 2.1 miles from the nearest airport safety zone (SDALUC, 2010). There are no private airstrips in the Project vicinity.

### Wildland Fires

The Proposed Project is located in an urban environment with no risk of wildland fire considering the lack of vegetation at the proposed substation site and surrounding areas or along the public roadways. The Project area is not located in a Very High Fire Hazard Severity Zone (CALFIRE, 2009).

### Electromagnetic Fields

Electric voltage and electric current from transmission lines create electromagnetic fields (EMF). Possible health effects associated with exposure to EMF have been the subject of scientific investigation since the 1970s, and there continues to be public concern about the health effects of EMF exposure. How-

ever, EMF is not addressed here as an environmental impact under CEQA. The CPUC has repeatedly recognized that EMF is not an environmental impact to be analyzed in the context of CEQA because (1) there is no agreement among scientists that EMF does create a potential health risk, and (2) there are no defined or adopted CEQA standards for defining health risks from EMF. See Section 4.15, where EMF is discussed in more depth.

## Regulatory Background

Hazardous substances are defined by federal and State regulations that aim to protect public health and the environment. Hazardous materials have certain chemical, physical, or infectious properties that cause them to be considered hazardous. Hazardous substances are defined in the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 101(14) and in the California Code of Regulations (CCR), Title 22, Chapter 11, Article 2, Section 66261, which provides the following definition:

> *A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of or otherwise managed.*

For this analysis, soil that is excavated from a site containing hazardous materials would be considered to be a hazardous waste if it exceeded specific CCR Title 22 criteria or criteria defined in CERCLA or other relevant federal regulations. Remediation (cleanup and safe removal/disposal) of hazardous wastes found at a site is required if excavation of these materials occurs; it may also be required if certain other activities occur. Even if soils or groundwater at a contaminated site do not have the characteristics required to be defined as hazardous wastes, remediation of the site may be required by regulatory agencies having jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking lead jurisdiction.

### *Federal*

The federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a program administered by the U.S. Environmental Protection Agency (EPA) for regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle-to-grave" system of regulating hazardous wastes. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by HSWA.

CERCLA, including the Superfund program, was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List (NPL). CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

### *State*

#### California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) was created in 1991. It unified California's environmental authority in a single cabinet-level agency and brought under once agency the Air Resources Board (ARB), State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), Integrated Waste Management Board (IWMB), Department of Toxic Substance Control (DTSC), Office of Environmental Health Hazard Assessment (OEHHA), and Department of Pesticide Regulation (DPR). These separate agencies were placed within the CalEPA "umbrella" for the protection of human health and the environment and to ensure the coordinated deployment of State resources. Their mission is to restore, protect, and enhance the environment to ensure public health, environmental quality, and economic vitality.

#### California Hazardous Waste Control Law

The California Hazardous Waste Control Law (HWCL) is administered by CalEPA to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the USEPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

#### Department of Toxic Substance Control

DTSC is a department of CalEPA and is the primary agency in California that regulates hazardous waste, cleans-up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

#### California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. Employers are required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings.

### *Local*

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary hazards and hazardous materials regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local plans and policies that pertain to hazards and hazardous wastes.

#### County of San Diego

The San Diego County Hazardous Materials Division (HMD) of the Department of Environmental Health is the Certified Unified Program Agency (CUPA) responsible for the implementation and regulation of the Aboveground Petroleum Storage Act (APSA) Program, California Accidental Release Prevention (CalARP) Program, Hazardous Materials Business Plan (HMBP) Program, Hazardous Materials Management and

Inventory Program, Hazardous Waste and Hazardous Waste Treatment Program, and Underground Storage Tank (UST) Program. The HMD regulates facilities that: handle or store hazardous materials; are part of the California Accidental Release Prevention Program (CalARP); generate or treat hazardous wastes, generate or treat medical wastes; store at least 1,320 gallons of above ground petroleum; and own or operate underground storage tanks. The HMD conducts routine inspections at facilities that are subject to the hazardous Materials Business Plan (HMBP) requirements. The HMBP is prepared by each facility and submitted to the California Environmental Reporting System (CERS).

**City of Oceanside General Plan – Hazardous Waste Management Element**

The *Hazardous Waste Management Element* of the City of Oceanside General Plan addresses the City's goal of preventing pollution and minimizing hazardous waste that cannot be re-used or recycled on site. The City provides methods by which this goal may be realized, including the reduction, elimination, secure containment, recycling, on-site treatment, and detoxification of hazardous materials and wastes, as well as the improvement of processes and practices that involve the use or production of hazardous materials and waste. Another goal is the prevention of pollution of the City's air, water, and soil by hazardous materials and hazardous waste to the greatest extent possible.

### Applicant Proposed Measures

No hazardous material measures are proposed by the applicant for the Ocean Ranch Substation project. SDG&E has standards, plans, and procedures in place to address wildland fire and fire prevention. SDG&E's Electric Standard Practice 113.1 constitutes SDG&E's wildland fire prevention and fire safety standards for all activities, including construction activities. The SDG&E Fire Prevention Plan was prepared in compliance with CPUC Decision 12-01-032 (Fire Safety Order) and provides "a comprehensive inventory of the organizational and operational activities that SDG&E undertakes to address the risk of fire in the SDG&E service territory" (PEA, 2016, Chapter 4.8). As part of SDG&E's fire threat and risk mapping program, SDG&E uses a network of weather stations to monitor for high risk weather conditions, such as extreme winds (SDG&E, 2016a).

## 5.8.2 Environmental Impacts and Mitigation Measures

***a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

*LESS THAN SIGNIFICANT.* Construction and operation of the Proposed Project will use hazardous materials that could cause soil and groundwater contamination as the result of accidental spills or leaks. Hazardous materials associated with construction include fuel, lubrication oil, hydraulic fluid, solvents, paints, and adhesives. These materials and transformer oil would also be used during project operation. Considering the lack of contaminated sites, especially leaking underground storage tanks, contaminated soil is not anticipated to be encountered during grading and excavation of the Substation site or along new 12 kV and 69 kV duct bank trenches and vault sites. Five commercial facilities located along Avenida de la Plata and Avenida del Oro are known small or large quantity generators of hazardous materials. However, each facility is without violation and contamination within the roadway where the duct bank excavations will occur is not anticipated.

SDG&E will implement the following standard operating procedures as related to hazardous materials that are listed and described in Section 4.12.3 under several categories: Hazardous Materials; Hazardous Materials and Waste Management Plan (HMWMP); Safety and Worker Environmental Awareness Program; SDG&E Water Quality Construction BMP Manual; and Spill Prevention, Control, and Countermeasures (SPCC) Plan.

- **Construction and Operation.** For both the construction and operation phases of the proposed Project, SDG&E will comply with all applicable state and federal regulations relating to the handling and use of hazardous materials.
- **Construction.** For the construction phase of the proposed Project, SDG&E will prepare a HMWMP that will outline procedures for proper storage, use, and transportation of hazardous materials (SDG&E, 2016a). The HMWMP will include information to reduce or avoid the use of potentially hazardous materials for the purposes of worker safety, protection from groundwater contamination, and proper disposal of hazardous materials. SDG&E will prepare a Safety and Worker Environmental Awareness Program for project personnel that will include training for relevant topics such as: general safety procedures, general environmental procedures, and hazardous materials protocols and BMPs. Additionally, SDG&E will implement BMPs per the SDG&E Water Quality Construction BMP Manual to reduce and/or eliminate potential water quality impacts during construction the Proposed Project.
- **Operation.** A SPCC Plan will be prepared for the new substation because of the volume of oil that would be transformers at the substation. A SPCC would be required if the completed substation were to have an aggregate aboveground oil storage capacity greater than 1,320 U.S. gallons or a completely buried storage capacity greater than 42,000 U.S. gallons.

Due to the lack of contaminated sites in the project vicinity, contaminated soil is not anticipated to be encountered during grading and excavation for the Proposed Project and, through the implementation of the standard procedures and plans, impacts related to the routine use, storage, or disposal of hazardous materials would be less than significant.

***b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

*LESS THAN SIGNIFICANT.* Accidental spills of hazardous chemicals could occur during construction of the Proposed Project as discussed in Section 5.8.2(a). Additionally, leaks and spills of hazardous chemicals, including transformer oil contained in transformers or stored at the substation site, could occur during Project operation. Implementation of the SDG&E standard operating procedures discussed above would protect workers, the general public, and the environment in the event of accidental spills or releases of hazardous materials, thus resulting in less than significant impacts.

***c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

*LESS THAN SIGNIFICANT*. Two schools are located within one-quarter mile of the proposed Project: Coastal Academy and La Petite Academy. No acutely hazardous material will be used for project construction or operation. With implementation of SDG&E's standard operating procedures, as discussed above, impacts related to any hazardous material spills or accidental releases during construction and/or maintenance of the Proposed Project would be less than significant.

***d. Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

*NO IMPACT*. The proposed Ocean Ranch Substation site and 69 kV and 12 kV duct banks are not located on any known hazardous materials sites as identified on government agency listings.

***e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?***

*NO IMPACT*. The proposed Ocean Ranch Substation and 69 kV and 12 kV duct banks would not be located within an airport land use plan and would not result in a safety hazard for people residing or working in the project area.

***f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?***

*NO IMPACT*. The proposed Ocean Ranch Substation and the associated 69 kV and 12 kV duct banks would not be located in the vicinity of a private airstrip and would not result in a safety hazard for people residing or working in the project area.

***g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

*LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED*. The construction and operation of the proposed Ocean Ranch Substation would occur within the site boundaries and would not affect emergency vehicles using the public rights-of-way (ROWs). However, construction of the 12 kV and 69 kV duct banks to and from the substation would occur in the public roadways. This work requires lane closures, possibly for several weeks, and may include temporary one-way traffic on some routes. SDG&E's Standard Operating Procedures (Section 4.12.3) would be implemented. As part of these Standard Operating Procedures, the Project would obtain the required City of Oceanside encroachment permits, coordinate with emergency service providers in the event of lane closures, and implement the required traffic control and safety measures. However, the Standard Operating Procedure is not sufficiently detailed with regard to traffic. Therefore, a mitigation measure (Mitigation Measure T-1, Construction Traffic Control Plan) has been identified that provides more specificity. With implementation of this measure the Project impacts would be less than significant impacts during construction. Operation and maintenance of the Proposed Project occasionally may require accessing vaults and temporarily closing lanes. Use of standard traffic control procedures, such as appropriate signage and traffic control devices, would result in less than significant impacts to the use of public roadways by emergency vehicles.

## Mitigation Measure

**T-1 Construction Traffic Control Plan** (See Section 5.16.2 for complete text of measure.)

***h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?***

*NO IMPACT.* The Proposed Project is in an urban environment with no risk of wildland fire owing to the lack of extensive vegetation at the substation site or along the public roadways. The project is not located in a Very High Fire Severity Zone as determined by CAL FIRE. SDG&E's Electric Standard Practice 113.1 identifies risk-related activities, as well as measures (including tools and procedures), to address said risks for all activities, including construction activities. Therefore, there would be no impact related to wildland fire.

# 5.9 Hydrology and Water Quality

| HYDROLOGY AND WATER QUALITY<br>Would the project: | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Violate Regional Water Quality Control Board water quality standards or waste discharge requirements? | ☐ | ☐ | ☒ | ☐ |
| b. Substantially deplete groundwater supplies or interfere substantially with groundwater discharge such that there would be a net deficit in the aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☒ | ☐ |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on or off site? | ☐ | ☐ | ☒ | ☐ |
| d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site? | ☐ | ☐ | ☒ | ☐ |
| e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☒ | ☐ |
| f. Otherwise substantially degrade water quality? | ☐ | ☐ | ☒ | ☐ |
| g. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other hazard delineation map? | ☐ | ☐ | ☐ | ☒ |
| h. Place within 100-year flood hazard area structures that would impede or redirect flood flows? | ☐ | ☐ | ☐ | ☒ |
| i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. | ☐ | ☐ | ☐ | ☒ |
| j. Cause inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.9.1 Setting

### Climate and Precipitation

The Proposed Project is within the City of Oceanside, California, which has a Mediterranean climate characterized by mild summers and winters. Average annual temperature at Oceanside Marina, approximately 6 miles west of the project, is 68 degrees Fahrenheit (°F), with an August average of 74 °F and a February average of 63 °F. Most precipitation falls in from October to April. Annual average precipitation at the Oceanside Marina is approximately 10.5 inches per year (WRCC, 2016).

### Surface Waters

The Proposed Project is situated in the San Diego Basin, within the Carlsbad Hydrologic Unit (904) and the Loma Alta hydrologic subarea (904.1). The Loma Alta watershed is 9.8 square miles and extends

westward for approximately 7.25 miles to the Pacific Ocean (Carlsbad Watershed Management Area Responsible Agencies 2014, as cited in SDG&E, 2016). Ninety-seven percent of the watershed area is within the City of Oceanside and 3 percent is within the City of Vista (SDG&E, 2016).

The project site is located in an urban area and is not within the 100-year or 500-year floodplain. It is served by the municipal drainage system of the City of Oceanside. There is negligible drainage entering the project site from offsite and the only water features on the site are two desilting basins draining to the public storm drain system. Elevations in the Proposed Project area range from approximately 194 to 372 feet above mean sea level (SDG&E, 2016).

A drainage study (Fuscoe, 2015) determined that the site is divided into five separate drainage areas, as shown in Figure 5.9-1. (Note: All figures referenced in the text are located at the end of individual sections.) There are two mass-graded pads totaling 8.74 acres which drain to two temporary desilting basins. The desilting basins collect and convey onsite drainage through underground drain pipes to the public storm drain system located beneath Avenida del Oro, which runs parallel to the western border of the site. Discharge from each of the desilting basins flows through a series of structural stormwater treatment devices prior to leaving the site.

Small portions of the site, comprising the remaining three drainage areas totaling 1.01 acres, drain either to the south, where runoff is then collected by a concrete swale that is connected either to the public storm drain system in Avenida del Oro, directly into Avenida del Oro, or into the public storm drain system in the Rocky Point Drive cul-de-sac, from where it is conveyed to Avenida del Oro. Total 100-year discharge from the site is 11.8 cubic feet per second (cfs). All flow from the site is ultimately collected and conveyed in the existing storm drain system in Avenida del Oro.

The two staging yards are located in undeveloped parcels nearby the site, are not within a floodplain, and have no onsite watercourses or other water features. The proposed underground 69 kV powerline is within the rights of way of Avenida del Oro and Avenida de la Plata, which are served by underground storm drains.

All site drainage, including drainage from the staging yards, is conveyed by the municipal drainage system to Loma Alta Creek, located about 0.5 miles south of the project. Loma Alta Creek, the nearest watercourse to the substation site, drains to the Pacific Ocean about 5 miles west of the project.

**Water Quality**

Loma Alta Creek has sufficiently high levels of selenium and general toxicity to be classified by the State of California as not meeting water quality standards (RWQCB, 2016). In the channelized portions of Loma Alta Creek, high nutrient levels occur and there are extensive algal blooms (SDGE, 2016). Sedimentation may be an issue, due to the presence of erodible soils and extensive habitat disturbance in the watershed. Other pollutants of concern in this watershed include trace metals and pesticides (SDGE, 2016). Urban runoff has been identified as a key source of bacteria and nutrient pollution to Loma Alta Creek. High pollutant levels at the lagoon at Buccaneer Beach resulted in frequent beach closures, leading to the City of Oceanside constructing the Loma Alta Creek Ultraviolet Radiation Stormwater Treatment Facility to address this issue during dry weather flows (SDGE, 2016).

The California State Water Resources Control Board designates beneficial uses of surface waters in order to protect these uses against water quality degradation. Beneficial uses for Loma Alta Creek are described in the Water Quality Control Plan for the San Diego Basin (RWQCB, 2016). The listed beneficial uses are: noncontact recreation; wildlife habitat; and warm freshwater habitat. Loma Alta Creek drains

into a coastal estuary, Loma Alta Slough, which has beneficial uses of contact and noncontact recreation; estuarine, marine, and wildlife habitat; and rare, threatened, or endangered species.

**Groundwater**

According to the California Department of Water Resources Groundwater Bulletin 118 (DWR, 2003), there are no groundwater basins in the area of the project site. The nearest groundwater basin is the San Luis Rey Valley Groundwater Basin located along the San Luis Rey River about 2 miles north of the project. Although local groundwater at the site is possible, and is known to exist along Loma Alta Creek, geotechnical borings at the project site found no groundwater at a depth of 70 to 80 feet below the ground surface (Geosyntec, 2015).

## Regulatory Background

This section includes a description of the hydrology and water quality regulatory framework.

## Federal

### *Clean Water Act*

The Clean Water Act (CWA; 33 U.S.C. Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). NPDES permitting authority is delegated to, and administeredby, California's nine Regional Water Quality Control Boards (RWQCBs). In addition, the State Water Resources Control Board (SWRCB) regulates the NPDES stormwater program. The Proposed Project is under the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB) and the SWRCB.

Projects that disturb one or more acres are required to obtain NPDES coverage under the California General Permit for Discharges of Storm Water Associated with Construction Activity. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP describes Best Management Practices (BMPs) the discharger will use to protect stormwater runoff. The SWPPP must contain a visual monitoring program and a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs.

Section 303(d) of the Clean Water Act requires states to establish Total Maximum Daily Load (TMDL) programs for streams, lakes and coastal waters that do not meet certain water quality standards. The California TMDL Program evaluates the condition of surface waters and sets limitations on the amount of pollution that the water can be exposed to without adversely affecting the beneficial uses of those waters. The RWQCBs make a list of waters that are not attaining standards, and develop total maximum daily loads to account for all sources of the pollutants that caused the water to be listed. TMDLs are established at the level necessary to implement the applicable water quality standards. When the TMDL is established as a standard, a program of implementation must be designed to implement the TMDL. TMDLs developed by RWQCBs are designed as Regional Basin Plan amendments and include implementation provisions. Loma Alta Creek is classified by the RWQCB as impaired for selenium and toxicity, and a TMDL is scheduled for completion in 2019 (SWRCB, 2016).

### *Clean Water Act Sections 404 and 401*

Section 404 of the CWA authorizes the U.S. Army Corps of Engineers (USACE) to regulate the discharge of dredged or fill material to the waters of the U.S. and adjacent wetlands. Discharges to waters of the U.S. must be avoided where possible, and minimized and mitigated where avoidance is not possible. The USACE issues individual site-specific permits or general permits (i.e., Nationwide Permits or Regional General Permits) for such discharges.

Under Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity that may result in any discharge into navigable waters must provide the licensing or permitting agency with a Water Quality Certification that the discharge will comply with the applicable CWA provisions or a waiver (33 U.S.C. Section 1341). If a federal permit is required, such as a USACE permit for dredge and fill discharges, the project proponent must also obtain a Water Quality Certification from the RWQCB.

### *Spill Prevention, Control, and Countermeasures Plan (SPCC)*

A facility is covered by the SPCC rule (40 CFR, Part 112 – Oil Pollution Prevention) if it has an aggregate aboveground oil storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons and there is a reasonable expectation of an oil discharge into or upon navigable waters of the U.S. Qualifying facilities must prepare an SPCC in accordance with 40 CFR, Part 112.

## State

### *California Porter Cologne Water Quality Control Act*

The Porter Cologne Water Quality Control Act of 1967, Water Code Section 13000 et seq., requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect State waters. These criteria include the identification of beneficial uses, narrative and numerical water quality standards, and implementation procedures. The criteria for the project area are contained in the Water Quality Control Plan (also referred to as a Basin Plan) for the San Diego RWQCB. Constraints in the water quality control plans relative to the Proposed Project relate primarily to the avoidance of altering the sediment discharge rate of surface waters, and the avoidance of introducing toxic pollutants to the water resource. A primary focus of water quality control plans is to protect designated beneficial uses of waters. In addition, anyone proposing to discharge waste that could affect the quality of the waters of the state must make a report of the waste discharge to the Regional Water Board or State Water Board as appropriate, in compliance with Porter-Cologne.

### *California Streambed Alteration Agreement*

Section 1602of the California Fish and Game Code requires an entity to notify the California Department of Fish and Wildlife (CDFW) prior to commencing any activity that may substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or, deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. If the CDFW determines the alteration may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement would be prepared. The Agreement includes conditions necessary to protect those resources.

### *SWRCB Order 2014-0174-DWQ*

SWRCB Order 2014-0174-DWQ applies to utility companies with short-term intermittent discharges from utility vaults and underground structures to waters of the United States that do not cause, do not have the reasonable potential to cause, or do not contribute to an in-stream excursion above any applicable state or federal water quality objectives/criteria. To obtain coverage under this Order, pollutant concentrations in the discharge must not cause, have a reasonable potential to cause, or contribute to an exceedance of any applicable criterion established by the U.S. Environmental Protection Agency pursuant to Clean Water Act (CWA) section 303. Pollutant concentrations in the discharge must not cause, have a reasonable potential to cause, or contribute to an exceedance of any water quality objective adopted by the State Water Board or Regional Water Quality Control Board (Regional Water Board), nor cause acute or chronic toxicity in the receiving water.

### *SWRCB Order WQ-2014-0090-DWQ*

SWRCB Order WQ-2014-0090-DWQ covers general waste discharge requirements for recycled water use. It serves as a statewide General Order authorizing the use of recycled water by producers, distributors, and users for all Title 22 (recycled water) uses except groundwater recharge. The intent of the order is to streamline the permitting process and delegate the responsibility of administrating water recycling programs to an Administrator (which may be the applicant) to the fullest extent possible. The Administrator must ensure that the use of the water, which may be for construction purposes, meets certain requirements listed in the Order.

## Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary hydrology and water quality regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local plans and policies that pertain to hydrology and water quality.

### *San Diego RWQCB Municipal Stormwater Permit*

San Diego RWQCB Municipal Permit Order No. R9-2013-0001, which covers the City of Oceanside, describes the conditions under which stormwater and non-stormwater discharges into and from municipal separate storm sewer systems (MS4s) are prohibited or limited. The goal is to protect the water quality and designated beneficial uses of waters of the state from adverse impacts caused or contributed to by MS4 discharges. This goal is accomplished through the implementation of water quality improvement strategies and runoff management programs that effectively prohibit non-stormwater discharges into MS4s, and reduce pollutants in stormwater discharges.

### *San Diego RWQCB Waiver 2*

San Diego RWQCB Waiver 2 facilitates discharges to land of recycled water throughout the San Diego Region. To ensure compliance with surface and groundwater quality objectives, permittees must comply with both general and specific conditions of the waiver, which are intended to protect water quality.

### *County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance*

This ordinance addresses watershed protection, stormwater management, and discharge control for the purpose of protecting water quality and complying with State regulations. The ordinance prohibits non-stormwater discharges to the stormwater conveyance system and receiving waters unless authorized, and establishes requirements to: (1) prevent and reduce pollution to water resources; (2) develop project site design to reduce stormwater pollution and erosion; (3) manage stormwater flows from development projects to prevent erosion and to protect and enhance existing water-dependent habitats; (4) establish standards for the use of off-site facilities for stormwater management to supplement on-site practices at new development sites; and (5) establish notice procedures and standards for adjusting stormwater and non-stormwater management requirements.

### *County of San Diego and City of Oceanside General Plans*

The General Plans for the County of San Diego and the City of Oceanside establish policies for water conservation, landscaping and irrigation, stormwater filtration, groundwater contamination, recycled water, floodplains, impervious surfaces, downslope protection, water quality, drainage, and reclaimed water.

### *City of Oceanside Standard Urban Stormwater Mitigation Plan*

The City of Oceanside Standard Urban Stormwater Mitigation Plan establishes regulations for water quality and runoff protection within the City. The City has developed a Best Management Plan (BMP) Design Manual intended to facilitate the implementation of the requirements of the San Diego RWQCB Municipal Stormwater Permit.

## Applicant Proposed Measures

The project description includes no applicant-proposed measures specific to hydrology and water quality. The project does have certain features that are intended to reduce impacts to hydrology and water quality. These are described in the project description or in SDG&E Standards, Plans, and Procedures, and are summarized below:

- Site drainage will be routed by an internal storm drain system to two onsite flow-through planter basins to provide hydromodification management of smaller, more frequent storm events, treatment of stormwater runoff, and peak flow attenuation from larger, less frequent events (such as the 100-year storm). These basins will be planted with locally appropriate grasses and rushes for water quality control.
- SDG&E will prepare a Spill Prevention, Control and Countermeasures Plan in accordance with CFR 40, Part 112 before petroleum products in threshold quantities are stored on-site.
- To the extent that recycled water is used, the Proposed Project will adhere to use restrictions and water quality monitoring and reporting regulations associated with use of tertiary-treated recycled water for construction uses (e.g., dust control, soil compaction, and concrete mixing) permitted under the SWRCB General Order or the San Diego RWQCB Waiver 2 and consistent with the state's anti-degradation policy.
- The Proposed Project plans to adhere to the City of Oceanside Emergency Drought Response Ordinance that may be in effect.
- SDG&E shall address potential impacts relating to the handling and use of hazardous materials through compliance with applicable state and federal regulations.

- SDG&E will prepare a project-specific Hazardous Materials and Waste Management Plan (HMWMP) for the construction phase of the Proposed Project to ensure compliance with all applicable federal, state, and local regulations. The HMWMP will reduce or avoid the use of potentially hazardous materials for the purposes of worker safety, protection from groundwater contamination, and proper disposal of hazardous materials. In addition, SDG&E will address potential impacts relating to the handling and use of hazardous materials through compliance with numerous state and federal regulations, including, but not limited to:
  - Federal OSHA regulations for worker safety in hazardous material remediation and hazardous waste operations (29 CFR Section 1910.120),
  - Federal OSHA regulations hazard communication for workers (29 CFR Section 1910.1200),
  - Federal OSHA regulations for toxic air contaminants for workers (29 CFR Section 1910.1000),
  - CalOSHA regulations for worker safety in hazardous material remediation and hazardous waste operations (8 California Code of Regulations 5192),
  - CalOSHA regulations for hazard communication for workers (8 California Code of Regulations 5194), and
  - Department of Toxic Substances Control regulations implementing Resource Conservation and Recovery Act of 1976 and the California HWCL (22 California Code of Regulations Division 4.5).
- SDGE's Water Quality Construction BMP Manual organizes and presents SDG&E's standard water quality protection procedures for various specific actions that routinely occur as part of SDG&E's ongoing construction, operations, and maintenance activities. The primary focus of most BMPs is the reduction and/or elimination of potential water quality impacts during construction of linear and substation projects. The BMP Manual will be used during construction (by way of preparation and implementation of the SWPPP), operation, and maintenance of the Proposed Project to ensure compliance with all relevant SDG&E and government-mandated regulatory water quality standards.
- Ground and soil disturbance will be minimized through the use of existing access routes, to the extent feasible.
- Once temporary surface disturbances are complete, areas that will not be subject to additional disturbance will be stabilized to control soil erosion. Disturbed areas must be stabilized per the project SWPPP.
- The SDG&E Construction Water Sourcing Investigation provides an overview of all potential water sources available within the SDG&E service territory and is used to determine the most appropriate source(s) of, and regulatory requirements for, water for project construction and operations phases.
- The substation will include containment to prevent any oil resulting from accidental leaks from the installed equipment from leaving the substation perimeter. The global oil containment system that is designed to contain 110 percent of the oil capacity of the installed equipment (which contains the largest amount of oil) will be installed inside the substation to collect any oil resulting from accidental equipment leaks.

## 5.9.2 Environmental Impacts and Mitigation Measures

The project will consist of a new 69/12 kilovolt (kV) low-profile substation on 9.66 acres of undeveloped land within the City of Oceanside. Project features consist of the substation, a 69 kV power line, a 12 kV distribution system, and a telecommunication system. With the exception of above-ground features on

the substation site, all permanent offsite project features will be underground beneath Avenida del Oro or Avenida de la Plata.

There will be staging areas of up to 17.5 acres on undeveloped parcels nearby. At present, two staging yards are identified. On parcel is west of the substation site, separated from the site by Avenida del Oro. The other is approximately 0.34 miles northwest of the substation site. According to the project description, the identified staging yards may not be available by the time the construction is set to begin. If previously identified staging yards are not available at the time of construction, several alternate locations within the general vicinity are potentially available. These sites possess similar characteristics (graded, disturbed habitat, industrial land uses), that would satisfy project needs. This analysis assumes the identified staging areas described above will be the staging areas used.

Project construction and operation would have the potential to introduce pollutants to local water bodies, and alter drainage patterns. This analysis of impacts is based on a review of the project in the context of existing surface water, groundwater, and water quality conditions based on aerial photographs, topographic maps, a review of the Proponent's Environmental Assessment (SDG&E, 2016), and other information from sources cited. Consideration is given to measures proposed by SDG&E in their project description and standard operating procedures to reduce water resources impacts, and to Federal, State and Local regulations intended to reduce impacts to water resources.

***a. Would the project violate any water quality standards or waste discharge requirements?***

*LESS THAN SIGNIFICANT*. Construction of the project would require excavation and grading within the existing SDG&E easements and substation property. Disturbance of soil during construction could result in soil erosion and lowered water quality through increased turbidity and sediment transport into the storm drain system and eventually to Loma Alta Creek, which is already considered impaired. Downstream beneficial uses could be adversely affected through violation of RWQCB water quality objectives for suspended solids, total dissolved solids, sediment and turbidity.

Accidental spills or disposal of harmful materials used during construction could wash into and pollute surface waters or local groundwater during rainfall events. Materials that could contaminate the construction area or spill or leak include lead-based paint flakes, diesel fuel, gasoline, lubrication oil, cement slurry, hydraulic fluid, anti-freeze, transmission fluid, lubricating grease, and other fluids. Treated wastewater may be used for dust control and other construction-related actions. Similar impacts could occur during operations in the form of spills from maintenance vehicles or equipment, oil from transformers or other potential contaminants such as paints, oils or solvents used by maintenance personnel in the normal course of operations. Downstream beneficial uses could be adversely affected through violation of RWQCB water quality objectives for toxicity and chemical constituents.

Although there are no watercourses or other water bodies (aside from the existing collection basins) within the proposed project and staging areas, drainage is directly to the municipal storm drain system which leads directly to Loma Alta Creek. No direct impact to jurisdictional waters is anticipated. No direct, on-site contamination of groundwater is anticipated due to the depth of groundwater.

SDG&E proposes several measures that would reduce construction-related impacts to water quality, as described in the Project Description and under Applicant-Proposed Measures (APMs) above. These include development of a HMWMP, adherence to SDG&E's Water Quality Construction BMP Manual, minimizing disturbance to ground, stabilization of disturbed areas, and adherence to use restrictions and water quality monitoring and reporting regulations associated with use of tertiary-treated recycled water. Wastewater generated by construction workers would be minimal and would be contained within the portable restrooms before being treated and properly disposed of by a licensed contractor.

Operations-related measures proposed by SDG&E to reduce water quality impacts include adherence to SDG&E's Water Quality Construction BMP Manual, global containment of oil spills within the substation, development of a Spill Prevention, Control and Countermeasures Plan, and routing site drainage through an internal storm drain system to onsite flow-through planter basins to provide hydromodification management and water-quality treatment of stormwater runoff.

Compliance with water quality regulations would add additional water quality protections. SDG&E will prepare a SWPPP in compliance with Section 402 of the CWA, and develop a SPCC in conformance with 40 CFR, Part 112. Development and adherence to a SWPPP in conformance with the California General Permit for Discharges of Storm Water Associated with Construction Activity, administered by the California State Water Resources Control Board and the Regional Water Quality Control Boards, would require best management practices to prevent and control erosion and siltation during construction, prevent, contain and mitigate accidental spills during construction, and address treatment and disposal of any groundwater encountered during construction to prevent violation of water quality objectives or damaging beneficial uses.

Compliance with Sections 401 and 404 of the Clean Water Act, as well as preparing a California Streambed Alteration Agreement may not be necessary due to the absence of watercourses on the site. According to the PEA (SDG&E, 2016), surveys conducted in October 2015 found no jurisdictional water features on the project area.

Because the existing regulations are intended to prevent damage to beneficial uses of waters and to prevent water quality degradation, and considering additional measures proposed by SDG&E to prevent contamination, it is concluded that the project will not project violate any water quality standards or waste discharge requirements.

***b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?***

*LESS THAN SIGNIFICANT*. The project will not use groundwater. Water use during construction and operations will be from treated wastewater or other municipal source. There are no groundwater basins in the area and local groundwater is not expected to be found during construction. Should trenching expose groundwater, the amount extracted would be negligible and the SWPPP will include measures for groundwater protection and disposal of dewatering water in accordance with procedures outlined in the project description. The site is in an upland area not critical for groundwater recharge, and the relatively small area of the substation (less than 10 acres, most of which would not be paved) will offer little obstruction to the infiltration of groundwater, which will be mitigated by the proposed planter basins. Any local groundwater recharge in the area more probably occurs along Loma Alta Creek, which is nearly 0.5 miles from the substation site and from the nearest staging area. This impact is therefore considered to be less than significant.

***c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on or off site?***

*LESS THAN SIGNIFICANT*. The existing drainage pattern on the site will be altered internally by the removal of the existing collection basins and the construction of new planter basins with altered drainage paths to the basins, but this will have no adverse effect on overall drainage patterns. All site drainage currently

goes to the municipal storm drain system, as would the project drainage at the same locations (Figures 5.9-1 and 5.9-2). The staging areas will be left in their existing condition regarding drainage after construction is complete. All other project features are underground and within municipal streets. Drainage patterns there will not be altered.

Erosion and siltation would be addressed in the SWPPP and further minimized by limiting grading to the amount necessary, stabilizing disturbed areas (such as staging areas), and installing planter basins which serve as siltation control during operations.

As a result of the project features and measures described above, the effect of the minor drainage alterations within the site footprint is considered less than significant.

***d. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?***

*LESS THAN SIGNIFICANT*. As described above under item c, the existing drainage pattern within the site will be altered, but the discharge points will be essentially the same as in the existing conditions, and will drain into the same municipal drainage system. A drainage report prepared for the site found that the new impervious areas on the site could locally increase runoff from a 100-year discharge from 11.8 cubic feet per second (cfs) under existing conditions to 20.2 cfs under the proposed condition. This would be mitigated by sizing the proposed planter basins, which would function as detention basins, for flood attenuation so that the total peak flow from the site will be equal to or less than the existing condition peak flow of 11.8 cfs for the 100-Year event (Fuscoe, 2015). The existing drainage pattern of the site would not be altered at the property boundary, and the project will not increase runoff rates leaving the site. No increase in flooding is anticipated. Therefore, the impact would be less than significant.

***e. Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to provide substantial additional sources of polluted runoff?***

*LESS THAN SIGNIFICANT*. As describe above under item d, the rate of runoff leaving the site would be controlled by the planter basins to the same level or below the existing condition. Therefore, site drainage is not expected to exceed the capacity of the existing storm drain system. There is a potential for additional sources of polluted runoff in the form of oil spills, spills of other materials during construction and operation, application of fertilizers and soil amendments, and contact of substation equipment with rain water. These would be controlled through the implementation of the SWPPP, global containment of oil spills within the site, other measures described above in item a and under Applicant Proposed Measures above, and compliance with existing water quality regulations regarding pollution control and clean-up. Fertilizers and soil amendments would be used according to the manufacturer's specifications and in quantities that minimize the potential to reach nearby waterways. Therefore, the additional sources of polluted runoff are considered to be insubstantial and less than significant.

***f. Would the project otherwise substantially degrade water quality?***

*LESS THAN SIGNIFICANT*. Except as described above in items a, c, and e, with the described measures to control water quality contamination, there is no additional potential to substantially degrade water quality. The impact would be less than significant.

***g. Would the project place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?***

*NO IMPACT*. The project is not within a 100-year floodplain, and the project does not involve the construction of new housing. Therefore, there will be no impact.

***h. Would the project place within a 100-year floodplain structures that would impede or redirect flood flows?***

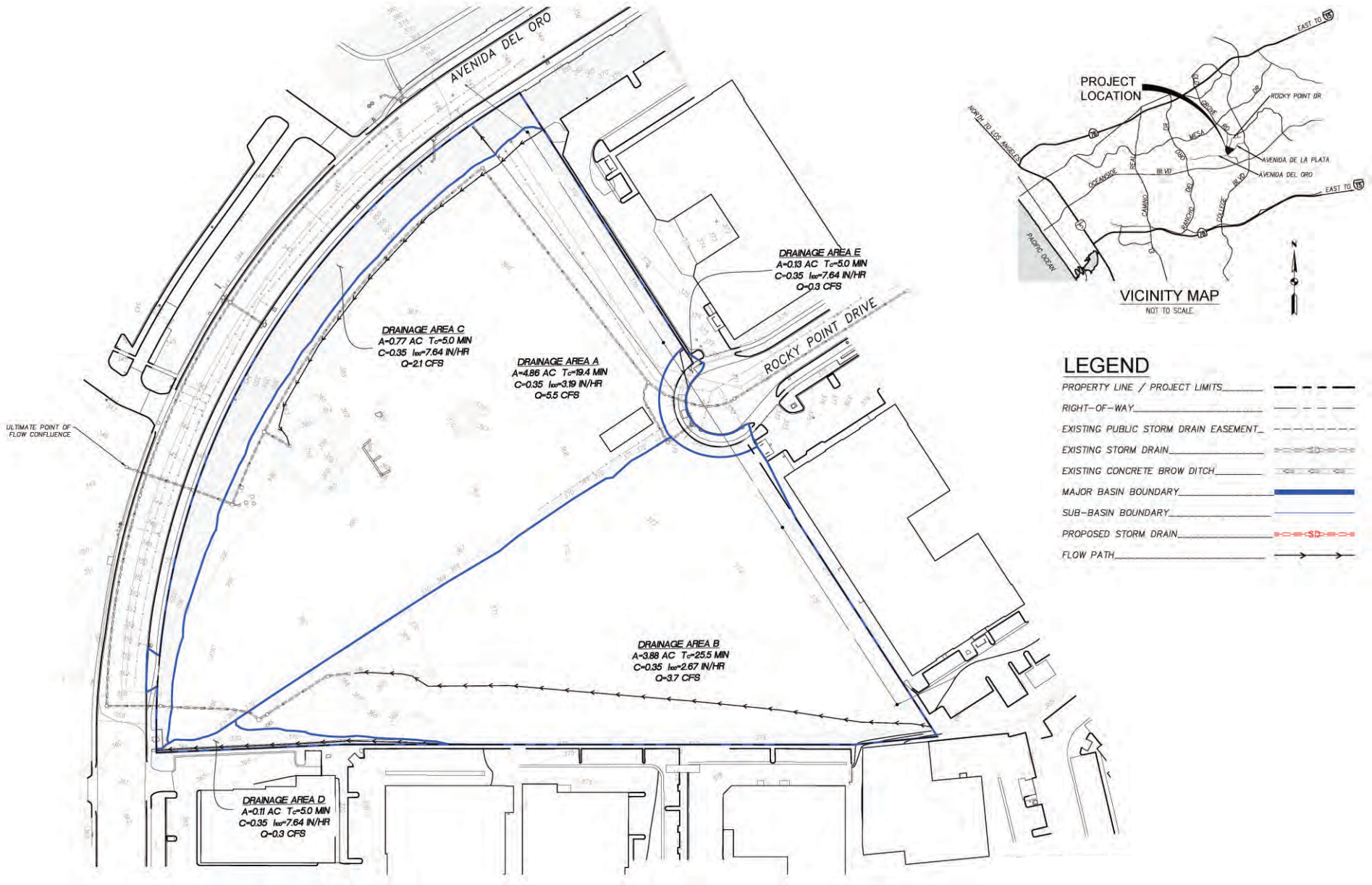
*NO IMPACT*. The project is not within the 100-year floodplain. Drainage entering and leaving the site will remain as in the existing condition and will not be altered except as otherwise described under items a, c, and e above. Therefore, there will be no impact.

***i. Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?***

*NO IMPACT*. The area is not within a floodplain, is approximately 160 feet above the level of the nearest stream (Loma Alta Creek), and is not protected by or downstream of a levee or dam. People visiting the site will be limited to operations and maintenance personnel. There would be no impact related to levee or dam failure. Therefore, there will be no impact.

***j. Would the project cause inundation by seiche, tsunami, or mudflow?***

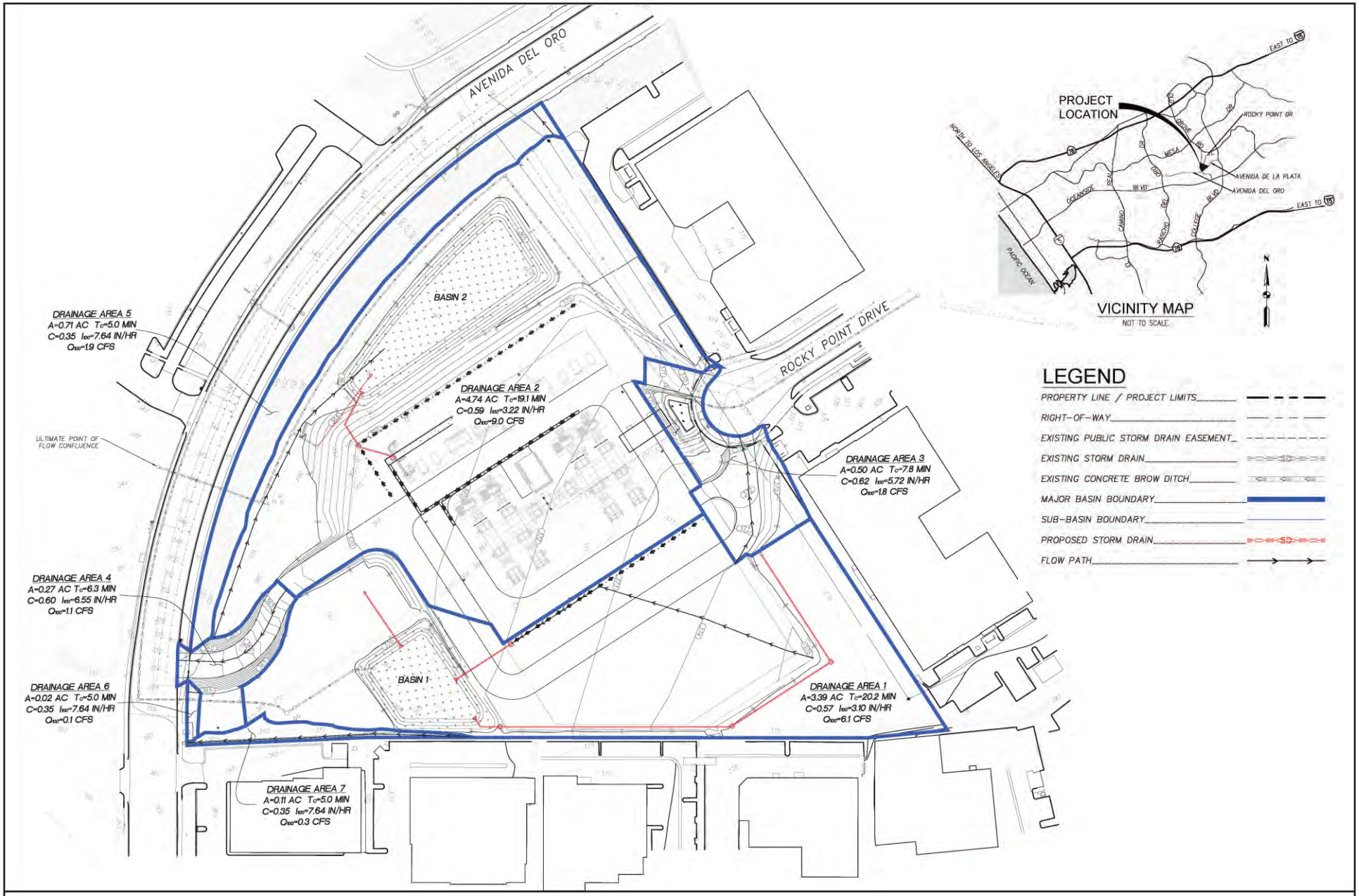
*NO IMPACT*. The project is 5 miles east of and 370 feet above the Pacific Ocean and therefore unlikely to be within reach of a tsunami. There are no waterbodies nearby that could create a seiche. The site is on a gently sloping grade surrounded by urban development that is unlikely to produce a mudflow. Therefore, there will be no impact.




Source: SDG&E, 2016a.

0 75 150 Feet

**Figure 5.9-1**
**Pre-Development Drainage**




Source: SDG&E, 2016a.

0 75 150 Feet

**Figure 5.9-2**
**Post-Development Drainage**

# 5.10 Land Use and Planning

| **LAND USE PLANNING**<br>**Would the project:** | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☐ | ☒ |
| c. Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.10.1 Setting

The proposed Ocean Ranch Substation site is located in the southeastern portion of the City of Oceanside in San Diego County within the Pacific Coast Business Park, which is part of the Rancho Del Oro Specific Plan area. The surrounding land uses in the area include light industrial and commercial (City of Oceanside Planning Department, 2009a). Currently the site is located on disturbed land, which consists of nonnative vegetation and soils characterized by physical disturbance. A portion of the site is a graded area covered with gravel. The existing land uses in the vicinity of the Proposed Project are mostly industrial and commercial, with some open, undeveloped land. North, east, and south of the proposed substation site are office buildings. West of the project site is a United States Postal Service facility and a FedEx Distribution Center that is under construction. Existing commercial and light industrial facilities and a small landscaped corridor separates the proposed substation from single-family residences in a residential development located approximately 0.25 miles to the east of the project site.

The current land use classification for the proposed Ocean Ranch Substation and all four staging yards is undeveloped, disturbed land. The temporary staging areas that may be temporarily used during substation construction occupy approximately 17.5 acres and include the:

- **Corporate Center Staging Yard:** Approximately 11.5 acres of disturbed habitat located north of Ocean Ranch Boulevard and south of Mesa Drive.
- **USPS Staging Yard:** Approximately 5 acres of undeveloped land, located south of the nearby USPS building and west of the Ocean Ranch Substation site. This area is composed of non-native grassland and disturbed non-native grassland.
- **San Luis Rey Staging Yard:** Approximately 0.5 acres of paved, fenced area with an existing access road located next to the existing San Luis Rey Substation.
- **Melrose Staging Yard:** Approximately 0.5 acres of paved, fenced area with an existing access road located next to the existing Melrose Substation and approximately 3 miles away from the proposed Ocean Ranch Substation.

Temporary work areas also include construction of a 69 kV underground power line loop-in that would require approximately 1.10 acres for approximately 1,500 linear feet of work space activities and a 12 kV underground distribution line that will require approximately 3.2 acres for approximately 4,650 linear feet of workspace.

The proposed Ocean Ranch Substation would be located on two land parcels owned by SDG&E: Assessor's Parcel Number 161-512-26, which is 5.6 acres, and Assessor's Parcel Number 161-512-27, which is 4.06 acres. Primary access to the site would be from the north via a cul-de-sac on Rocky Point Drive. SDG&E is requesting access rights from the City of Oceanside to establish secondary access via a new entry point from Avenida del Oro, near the intersection of Avenida del Oro and Avenida de la Plata.

## Regulatory Background

This section includes a description of the land use and planning regulatory framework. There are no federal regulations associated with land use and planning that are relevant to the Proposed Project.

## State

### *Natural Community and Conservation Planning Act*

The Natural Community and Conservation Planning Act (California Fish and Wildlife Code Section 2800-2835) aims to reconcile wildlife and ecosystem conservation with land development and population growth. It allows for the creation of Natural Community and Conservation Plans (NCCPs) to protect state-listed species, usually in connection with the issuance of a Section 2081 take permit under the California Endangered Species Act (CESA) (SDG&E, 2016). Currently, there are 9 approved NCCPs and 14 NCCPs in the active planning phase. Cumulatively, these plans cover more than 9.5 million acres throughout California and will provide conservation for more than 500 special status plant and animal species (CDFW, 2016a).

## Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary land use regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local land use plans and policies.

### *San Diego Gas and Electric Subregional NCCP*

The Proposed Project falls within the area in which SDG&E's utility operations are governed by SDG&E's Subregional NCCP, which extends from southern Orange County to the California-Mexico border (CDFW, 2016b). The NCCP prescribes 61 operational protocols that SDG&E routinely implements with every project to avoid and/or minimize impacts to sensitive ecological resources (SDG&E, 2016). The SDG&E Subregional NCCP addresses 110 plant and animal species and requires mitigation measures that include revegetation and the use of up to 240 acres of credits in land parcels purchased by SDG&E (CDFW, 2016b).

### *North County Multiple Habitat Conservation Program*

The Multiple Habitat Conservation Program is a planning process that addresses plant and animal species in northwestern San Diego County, which includes the City of Oceanside. The goal of the program is to conserve approximately 19,000 acres of habitat (of which 8,800 acres are already in public ownership and contribute toward the habitat preserve system) to protect over 80 rare, threatened, or endangered species.

Subarea plans for the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, and Vista are being prepared and must be adopted by each city council. Afterward, implementing agreements with the CDFW and the USFWS must be signed before incidental take permits can be issued.

The City of Oceanside is in the process of updating their Subarea Habitat Conservation Plan, the most recent version of which is their 2010 Subarea Plan, that will address how the City will conserve natural biotic communities and sensitive plant and wildlife species pursuant to the California Natural Community and Conservation Planning Act of 1991, the California Endangered Species Act, and the federal Endangered Species Act. If adopted, this could provide landowners with more regulatory certainty and it could aid in conserving the area's biodiversity.

***City of Oceanside General Plan Land Use Element – Rancho Del Oro Specific Plan***

The City of Oceanside General Plan provides a framework of policies, objectives, and land use designations to guide long-term development within Oceanside. The proposed Ocean Ranch Substation would be within the Rancho Del Oro Specific Plan area. The Rancho Del Oro Specific Plan is part of the Land Use Element of the General Plan and applies to approximately 1,940 acres of land in the center of Oceanside (San Diego Association of Governments, 2014, as referenced in SDG&E, 2016). The plan was prepared to create a high-quality and comprehensive planned community and it provides for phased mixed-use development with industrial and commercial uses and a variety of residential housing options. It also includes provisions for implementing circulation system and public utility improvements (SDG&E, 2016).

The 11.5-acre Corporate Center staging yard and the 5-acre U.S. Postal Service staging yard have general plan land designations of Light Industrial (LI). The 0.5-acre San Luis Rey staging yard has a general plan land designation of Civic Institutional (CI) (City of Oceanside Planning Department, 2009a) and the 0.5-acre Melrose staging yard has a general plan land designation of Industrial General (IG) (City of Vista, 2011).

***Pacific Coast Business Park Industrial Master Development Plan***

The proposed substation site is within the Pacific Coast Business Park Industrial Master Development Plan, which is a component of the Rancho Del Oro Specific Plan area and is part of the industrially designated area in the central portion of Oceanside encompassing 124.31 acres. Permitted uses include those allowed by the City of Oceanside regulations for the light industrial (LI) zone district. The Industrial Master Development Plan includes some regulations that are in addition to those found in the zoning ordinance, along with design and development standards for the Pacific Coast Business Park. Combined with the existing Light Industrial regulations, the standards serve to protect the property's value and compatibility with adjoining developments (City of Oceanside, 2005, as referenced in SDG&E, 2016).

Proposals for private development within the Pacific Coast Business Park are reviewed by the Pacific Coast Business Park Review Board and the City for compliance with the zoning ordinance and with design and development standards from the Industrial Master Development Plan. The following generally relate to the Proposed Project with respect to land use in the Pacific Coast Business Park (City of Oceanside, 2005):

*Building and Site Regulations*

- *Maximum structure height: 80 feet*
- *Maximum lot coverage: 75 percent*
- *Maximum floor area ratio: 1.0*

*Parking*

- *Adequate off-street parking shall be provided to accommodate all parking needs for the site. No on-street parking is allowed within Pacific Coast Business Park.*
- *Required off-street parking shall be provided on the site of the use served, on a contiguous site, or within 300 feet of the subject site.*
- *Parking provided in structures must be screened by architectural elements and/or landscaping.*

*Walls and Fencing*

- *Fencing and walls shall comply with Section 3040 of the City of Oceanside Zoning Ordinance. Materials used for all fencing and walls shall be of high quality as approved by the Pacific Coast Business Park board.*
- *Fencing and screening treatments must be designed as an integral part of the overall architectural and landscape design for a site.*
- *All fencing shall be constructed of durable materials and shall be maintained, at all times, in good repair.*

*Utilities and Communication Devices*

- *All electric, telephone, gas, and cable service lines to individual lots or sites shall be installed and maintained underground.*
- *Exterior onsite utilities, including but not limited to drainage systems, sewers, gas lines, water lines and electrical, telephone, and communications wires and equipment, shall be installed and maintained underground.*
- *Electrical equipment shall be mounted on the interior of a building wherever practical. When interior mounting is not practical, electrical equipment shall be screened with walls, berms or landscape materials. Where exterior mounting is required, locating electrical equipment along the side or rear of a building is desirable.*

In addition, Pacific Coast Business Park Design Guidelines articulate standards for proposed building, site, and landscape designs, including lighting and signage, planting scheme and plant types, and other architectural features such as entrances. The Design Guidelines are enforced by the Pacific Coast Business Park Covenants, Codes, and Restrictions. The Ranch Maintenance Association is responsible for maintaining the streetscapes within the Rancho Del Oro Specific Plan area. [SDG&E, 2016]

***City of Oceanside Zoning Ordinance***

The proposed Ocean Ranch Substation site is zoned as Planned Development District 1 (PD-1) (City of Oceanside Planning Department, 2009b). The purpose of the PD district is to (City of Oceanside, 1992):

- Establish a procedure for developing parcels of land with less or no rigidity, delays, or inequities;
- Ensure thorough and orderly planning and review procedures;
- Encourage variety and avoid monotony in large developments by allowing more freedom in design selection;
- Provide a mechanism whereby the City of Oceanside may authorize developments consistent with the General Plan without inviting speculative rezoning applications;
- Encourage allocation and improvement of common open space in residential areas;

- Encourage the preservation of serviceable existing structures of historic value or artistic merit; and
- Encourage the assembly of properties that might otherwise be developed in unrelated increments to the detriment of surrounding neighborhoods.

The 11.5-acre Corporate Center staging yard is zoned as LI, the 5-acre U.S. Postal Service staging yard is zoned as PD-1, and the 0.5-acre San Luis Rey staging yard is zoned as Public and Semipublic (PS) (City of Oceanside Planning Development, 2009b). The 0.5-acre Melrose staging yard is under the jurisdiction of the City of Vista and is zoned as Light Manufacturing (M-1) (City of Vista, 2015).

### Applicant Proposed Measures

No Applicant Proposed Measures (APMs) regarding land use and planning are proposed. However, APMs applicable to Section 5.4, *Biological Resources*, are proposed by the applicant to avoid conflicts with applicable Habitat Conservation Plans or NCCPs.

## 5.10.2 Environmental Impacts and Mitigation Measures

***a. Would the project physically divide an established community?***

*NO IMPACT*. The project site is within the Rancho del Oro Master Plan approved by the City of Oceanside. Specifically, it is within the Pacific Coast Business Park. The project site is surrounded by light industrial and commercials land uses, a Post Office, and vacant parcels planned for additional light industrial and commercial development. There are no residences in the immediate vicinity. The main roadways in the vicinity include Avenida del Oro and Avenida de la Plata. The project would not close any existing roads nor impede any pedestrian or bicycle routes. The proposed substation facility would be within the larger property and be surrounded by walls and security gates. It would not physically divide an established community.

***b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?***

*NO IMPACT*. As a public utility project that is subject to the jurisdiction of the CPUC, the Proposed Project is exempt from local regulation and discretionary permits. However, the CPUC takes into account the local land use plans, policies, and regulations when evaluating proposed projects. The proposed project would be located within a developed industrial area of Oceanside. Construction and operation of the proposed project would occur on land designated for light industrial development by the City of Oceanside's land use plan and the locations of the temporary staging areas all occur on zoned land that permits such uses. The proposed project does not conflict with any applicable land use plans, policy, or regulation.

***c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?***

*NO IMPACT*. The SDG&E NCCP and the San Diego MHCP are the only conservation plans that apply to the Proposed Project. The Oceanside SAP is the City's implementing conservation plan under the MHCP.

The City of Oceanside SAP identifies areas within the City that are envisioned to provide natural community conservation or require special considerations for habitat modification due to preserve planning parameters from the SAP. The project is located in areas that are designated as Wildlife Corridor

Planning Zone and Off-site Mitigation Zone; see Figure 5.4-6. The proposed San Luis Rey Staging Yard is located within an area designated as a Wildlife Corridor Planning Zone within the City of Oceanside SAP. However, as discussed above, the Proposed Project would be located in an existing SDG&E transmission corridor on a paved area adjacent to the existing San Luis Rey Substation. The activities associated with the proposed staging yard would be consistent with activities that occur at the existing substation and the current use of this staging yard for operation and maintenance activities, and therefore, impacts to the wildlife corridor would not result.

Although the proposed underground portion of the power line (TL 6966), the proposed Ocean Ranch Substation, Corporate Center Staging Yard, and USPS Staging Yard would be located in an area designated as an Off-site Mitigation Zone, construction would be conducted within disturbed or developed lands or paved roads. The Oceanside SAP does not require mitigation for impacts to these land types. Therefore, the Proposed Project does not conflict with the SAP.

The Proposed Project would not use the take authority granted by the USFWS and the CDFW in the NCCP for impacts to covered species. Potential take of state species would be handled, as necessary, through consultation with the CDFW in accordance with applicable sections of the CESA. Although the SDG&E NCCP take authority would not be used for the Proposed Project, proposed construction activities would implement applicable avoidance and minimization measures specified in the NCCP Operational Protocols as standard operating procedures.

The Proposed Project would not conflict with the SDG&E NCCP or the Oceanside SAP, and no impact would occur.

# 5.11 Mineral Resources

| MINERAL RESOURCES<br>Would the project: | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State? | ☐ | ☐ | ☐ | ☒ |
| b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.11.1 Setting

The Proposed Project components would not be in a classified mineral resource zone (MRZ) and there are no known important mineral resources or active mining operations in the immediate vicinity of the substation site (City of Oceanside, 2002a; City of Oceanside, 2002b). The substation site is located in a developed industrial area zoned for Limited Industrial uses and Planned Development.

### Regulatory Background

This section includes a description of the mineral resources regulatory framework. There are no federal regulations associated with mineral resources that are relevant to the Proposed Project.

### State

#### *California Surface Mining and Reclamation Act of 1975 (SMARA)*

SMARA requires that the State Geologist classify land into MRZs according to the known or inferred mineral potential of the land. The California Department of Conservation's Office of Mine Reclamation (OMR) and the State Mining and Geology Board (SMGB) are jointly charged with administration of the Acts requirements. The OMR provides technical assistance to lead agencies and operators, maintains a statewide database of mine locations and operational information, and is responsible for matters involving SMARA compliance. The SMGB promulgates regulations to clarify and interpret SMARA requirements in addition to serving as a policy and appeals board (DOC, 2016). The SMGB has the authority to further regulate the authority of the local agencies if it finds that the agencies are not in compliance with the provisions of SMARA.

### Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary mineral resources regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local plans and policies that pertain to mineral resources.

#### *City of Oceanside General Plan – Environmental Resource Management Element*

The main objective under this General Plan element is to protect existing mineral resources and regulate mineral extraction activities to minimize hazards and conflicts with other land uses as well as to preserve and enhance the appearance of the area (City of Oceanside 2002a as cited in SDG&E, 2016).

***City of Oceanside General Plan – Land Use Element***

The following policies included in the City of Oceanside General Plan Land Use Element generally relate to the Proposed Project with respect to mineral resources (City of Oceanside 2002b as cited in SDG&E, 2016):

> ***3.31 Mineral Resource Areas***
>
> *Minerals Resource Areas shall remain in effect until the resource has been depleted or no longer exists in sufficient quantity or quality to be of benefit to the City and/or the region.*
>
> ***3.313 Crystal Silica Policy***
>
> *The mining area of the Crystal Silica Company located northeast of the El Camino Real/Oceanside Boulevard intersection contains deposits of silica sand which shall be permitted to be mined under the provision of its permits and the Rancho del Oro Specific Plan and Development Agreement.*
>
> ***3.32 Land Use Compatibility Policies***
>
> - *When considering development proposals within urbanized sections of Mineral Resource Areas, the City shall balance the potential loss of the mineral deposit against the value of the development and consider the importance of the deposit to the regional market and not just its local significance.*
> - *Proposed developments within or adjacent to Mineral Resource Areas shall provide adequate buffering, building placement, and phasing plans to assure compatibility with existing mining operations.*
> - *Development within or adjacent to Mineral Resource Areas shall not be permitted if found to significantly interfere with the future or continued extraction of the resource.*

### Applicant Proposed Measures

There are no APMs proposed with regard to Mineral Resources.

## 5.11.2 Environmental Impacts and Mitigation Measures

***a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?***

*NO IMPACT*. There are no known important mineral resources that would be impacted by the project. There are no designated Mineral Resource Zones in the project vicinity; therefore, the project would have no impact on mineral resources.

***b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?***

*NO IMPACT*. There are no known important mineral resources that would be impacted by the project. There are no designated Mineral Resource Zones in the project vicinity; therefore, the project would have no impact on any locally important mineral resource recovery sites.

# 5.12 Noise

| **NOISE**<br>**Would the project:** | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☒ | ☐ | ☐ |
| b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☒ | ☐ | ☐ |
| c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☒ | ☐ | ☐ |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |
| f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G

## 5.12.1 Setting

### Existing Conditions

**Community Noise.** To describe environmental noise and to assess project impacts on areas that are sensitive to community noise, a measurement scale that simulates human perception is used. The A-weighted scale of frequency sensitivity accounts for the sensitivity of the human ear, which is less sensitive to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. Decibels are logarithmic units that can be used to conveniently compare wide ranges of sound intensities.

Community noise levels can be highly variable from day to day as well as between day and night. For simplicity, sound levels are usually best represented by an equivalent level over a given time period (Leq) or by an average level occurring over a 24-hour day-night period (Ldn). The Leq, or equivalent sound level, is a single value (in dBA) for any desired duration, which includes all of the time-varying sound energy in the measurement period, usually one hour. The L50, is the median noise level that is exceeded fifty per cent of the time during any measuring interval. The Ldn, or day-night average sound level, is equal to the 24-hour A-weighted equivalent sound level with a 10-decibel penalty applied to nighttime sounds occurring between 10:00 p.m. and 7:00 a.m. Community Noise Equivalent Level (CNEL) is another metric that is the average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and after addition of 10 decibels to sound levels in the night from 10:00 p.m. to 7:00 a.m. To easily estimate the day-night level caused by any noise source emitting steadily and continuously over 24-hours, the Ldn is 6.4 dBA higher than the source's Leq. For example, if the expected continuous noise level from equipment is 50 dBA Leq for every hour, the day-night noise level would be 56.4 dBA Ldn.

Community noise levels are usually closely related to the intensity of human activity. Noise levels are generally considered low when below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. In wilderness areas, the Ldn noise levels can be below 35 dBA. In small towns or wooded and lightly used residential areas, the Ldn is more likely to be around 50 or 60 dBA. Levels around 75 dBA are more common in busy urban areas, and levels up to 85 dBA occur near major freeways and airports. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse to public health.

Surrounding land uses dictate what noise levels would be considered acceptable or unacceptable. Lower levels are expected in rural or suburban areas than what would be expected for commercial or industrial zones. Nighttime ambient levels in urban environments are about seven decibels lower than the corresponding daytime levels. In rural areas away from roads and other human activity, the day-to-night difference can be considerably less. Areas with full-time human occupation and residency are often considered incompatible with substantial nighttime noise because of the likelihood of disrupting sleep. Noise levels above 45 dBA at night can result in the onset of sleep interference. At 70 dBA, sleep interference effects become considerable (USEPA, 1974).

**Noise Environment in the Project Area.** Land uses in the vicinity of the proposed substation site are primarily light industrial, commercial, and civic. Baseline noise levels for commercial and urban areas are typically between 60 and 70 dBA or higher (Caltrans, 2009). Project-specific ambient noise levels were not measured for this analysis. However, noise levels for the 1995 conditions were modeled from data gathered by the City of Oceanside for the 1974 Noise Element, and although somewhat out-of-date and outside of the project area, levels were found to be typical for commercial areas at 65 dB for locations within 75 feet of Oceanside Boulevard (City of Oceanside, 1974). The ambient day and night noise sources near the proposed substation site are primarily due to traffic on adjacent roadways and from operations at some light-industrial facilities. At the nearest points, arterial streets Avenida del Oro and Avenida de la Plata are 30 feet and 220 feet from the project site boundary, respectively. The North County Transit District Sprinter line is another potential source of ambient noise located less than half a mile south of the project site. Table 5.12-1 shows typical sound levels of various environmental noises sources.

**Table 5.12-1. Typical Sound Levels Measured in the Environment and Industry**

| Noise Source and Distance | A-Weighted Sound Level (dBA) | Subjective Impression |
|---|---|---|
| Civil defense siren (100 ft) | 130 | Pain threshold |
| Jet takeoff (200 ft) | 120 | |
| Rock music concert (50 ft) | 110 | |
| Pile driver (50 ft) | 100 | Very loud |
| Ambulance siren (100 ft) | 90 | |
| Diesel locomotive (25 ft) | 85 | Loud |
| Pneumatic drill (50 ft) | 80 | |
| Freeway (100 ft) | 70 | Moderately loud |
| Vacuum cleaner (10 ft) | 60 | |
| Light traffic (100 ft) | 50 | |
| Large transformer (200 ft) | 40 | Quiet |
| Soft whisper (5 ft) | 30 | Threshold of hearing |

**Noise-Sensitive Areas.** The City of Oceanside Noise Element recommends protections for the following land uses as they are noise-sensitive: residential uses, schools, hospitals, and convalescent homes. The nearest single family residences are 1,200 feet east of the proposed substation site boundary. There are five educational facilities within 1320 feet of the proposed site, the Coastal Academy Elementary School,

SIATech North County Charter High School, Quantum Learning, The Classical Academy, and La Petite Preschool and Kindergarten. Approximately 950 feet southwest of the proposed site is the Titleist Performance Institute, a public golf training facility. Lastly, Kaiser Permanente Oceanside Medical Offices are approximately 1,500 feet to the northeast. These residences, schools, golf facility, and medical offices are all separated from the project site by existing commercial development and roadways.

## Regulatory Background

The USEPA once published guidelines on recommended maximum noise levels to protect public health and welfare (USEPA, 1974); and the State of California maintains recommendations for local jurisdictions in the General Plan Guidelines published by the Governor's Office of Planning and Research (OPR, 2015).

The following summarizes the local requirements, because the environmental analysis in Section 5.12.2 (Environmental Impacts and Mitigation Measures) considers local requirements and applicable standards of other agencies when determining potential noise impacts under CEQA.

### *City of Oceanside General Plan, Noise Element*

The Noise Element of the Oceanside General Plan identifies the following policies to protect residents from excessive noise in the City of Oceanside (City of Oceanside, 1974):

- Policy 1. Noise levels shall not be so loud as to cause danger to public health in all zones except manufacturing zones where noise levels may be greater.
- Policy 2. Noise shall be controlled at the source where possible.
- Policy 3. Noise shall be intercepted by barriers or dissipated by space where the source cannot be controlled.
- Policy 4. Noise shall be reduced from the structures by the use of soundproofing where other controls fail or are impractical.
- Policy 5. Noise levels shall be considered in the approval of any projects or activates, public or private, which requires a permit or other approval from the City.
- Policy 6. Noise levels shall be considered in any changes to the Land Use and Circulation Elements of the General Plant.
- Policy 7. Noise levels of City vehicles, construction equipment, and garbage trucks shall be reduced to acceptable levels.

The City of Oceanside General Plan, Noise Element (1974) also suggested controls related to construction noise recommending against operating construction equipment that causes noise at a level in excess of 85 dBA at 100 feet from the source or engaging in construction activities between 6:00 p.m. and 7:00 a.m. when such activities exceed the ambient noise level by 5 dBA. Additionally, construction equipment and impact tools that are especially noise-intensive should not be operated within 500 feet of residential areas between 8:00 p.m. and 7:00 a.m.

### *City of Oceanside Municipal Code*

The City of Oceanside Municipal Code, Noise Ordinance (Chapter 38) limits noise generation for industrial land uses within planned development zones. At any point on or beyond the boundaries of the property, the one-hour average sound level may not exceed 70 dBA in the daytime (7:00 a.m. to 10:00 p.m.) and 65 dBA at night (10:00 p.m. to 7:00 a.m.). It is in violation to operate any pneumatic hammer, pile driver, excavator, crane, hoist, parking lot cleaning equipment or other appliance which generates loud or unusual noise from the hours of 10:00 p.m. to 7:00 a.m.

### Applicant Proposed Measures

There are no applicant proposed measures related to noise.

## 5.12.2 Environmental Impacts and Mitigation Measures

***a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

*DURING CONSTRUCTION, LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. Construction of the proposed project would involve use of heavy-duty equipment at the proposed substation site and along the routes where underground electric lines would be installed. Equipment needed for substation construction would include dozers, rollers, loaders, compactors, boom trucks, haul trucks, a grader, backhoe, excavator, forklift, oil rig, pulling rig, work crews, and other equipment at or around the proposed site. Construction of the underground linear facilities would also include a concrete saw, crane, jackhammer, paver, vacuum truck, and other equipment. A generator would be required at the final phases of construction, which would run continuously for approximately 24-hours to fill the distribution banks with oil.

If significant or dense rock is encountered, then SDG&E may need to use explosives to blast the rock to create trenches. SDG&E does not specifically identify whether blasting would be used, or the potential force of explosives under consideration. The general purpose would be to remove hard rock in a manner that would involve less work and disturbance than rock-drilling, rock-breaking, or rock-hammering. To address this, SDG&E proposes to include a Standard Operating Procedure (see Section 4.12.3, Project Description), as follows: "In the event that rock blasting is used during construction, a noise and vibration calculation would be prepared and submitted to SDG&E for review before blasting at each site. The construction contractor would ensure compliance with all relevant local, state, and federal regulations relating to blasting activities, as well as SDG&E's blasting guidelines." SDG&E and the blasting contractor would need to secure approval for rock blasting through a review and permit from the City of Oceanside Fire Department. Although subject to additional review by the City Fire Department, blasting would predictably cause some intense impulse noise and groundborne vibration impacts.

All construction activities, including those for the proposed substation site and distribution line work and any staging areas, would create both intermittent and continuous noises. Intermittent noise would result from periodic, short-term equipment operation, such as cranes for positioning equipment or saw and excavator use during installation of the underground distribution lines. Continuous noise would result from steady equipment operation over longer periods, such as mixer or generator use. Aside from rock blasting, the maximum intermittent construction noise levels would range from 85 to 90 dBA at 50 feet from an active construction area with typical equipment (Caltrans, 2009). Sound from stationary sources naturally attenuates by 6 dBA with every doubling of distance from the source.

The nearest existing noise-sensitive receptor, Coastal Academy, is approximately 850 feet south and east of the substation site. Obstacles such as existing buildings and construction equipment in the path of the sound waves would attenuate noise to even lower levels. As well, once the site is graded, a 10-foot wall would be erected around the area where electrical equipment would be installed. Although noise from construction would attenuate with distance, activities for substation construction, heavy truck traffic, and construction of the underground linear facilities could result in intermittent peak noise levels of approximately 65 dBA for the nearest sensitive receptor, and levels of 75 to 80 dBA within 50 feet of the construction area. Existing ambient noise levels near traffic on area roadways is likely around 65 dBA during the daytime. Similarly, the City of Oceanside Noise Ordinance limits noise to a maximum of 70 dBA in the daytime (7:00 a.m. to 10:00 p.m.) and 65 dBA at night (10:00 p.m. to 7:00 a.m.). Because construction

activities would intermittently increase noise up to 10 dBA above limits set by the local noise ordinance, noticeable noise increases would occur temporarily during construction.

Construction would also cause noise offsite, primarily from commuting workers and from trucks needed to bring materials to the substation site. The peak noise levels associated with passing trucks and commuting worker vehicles would be approximately 70 to 75 dBA at 50 feet, and would be concentrated along Avenida del Oro and the Rocky Point Drive cul-de-sac. Construction traffic would intermittently increase noise approximately 5 dBA above limits set by the local noise ordinance; therefore, noticeable noise increases would occur temporarily during construction. Most construction would be during the day.

Noise from construction activities would be short-term and intermittent in nature and would vary from day to day depending on specific construction activities. To ensure that all construction activities, especially equipment and vehicle noise, comply with local ordinances and standards, Mitigation Measures N-1 and N-2 are recommended to reduce noise from construction activities and to avoid unnecessary noise from equipment, vehicles, and construction traffic. Implementation of Mitigation Measure N-1 would minimize construction noise by requiring mufflers to be in compliance with vendor specifications. Implementation of Mitigation Measure N-2 would ensure compliance with local ordinances by limiting construction noise to daytime hours. Implementation of Mitigation Measure N-3 would ensure that rock blasting, if needed, occurs with CPUC oversight and in a manner compliant with the City Fire Department requirements. By minimizing equipment noise levels and limiting the duration of their occurrence to daytime hours, construction noise associated with the proposed project would not exceed established noise standards. Because there would be no exposure of persons to or generation of noise levels in excess of standards established in the local noise ordinance, noise impacts during construction would be less than significant with mitigation incorporated.

### Mitigation Measure for Construction Noise

**N-1** **Minimize Construction Vehicle, Equipment, and Traffic Noise.** SDG&E shall maintain construction equipment and vehicle mufflers in accordance with equipment vendor specifications on all engines used in construction. Where feasible, construction traffic shall be routed to avoid noise-sensitive areas, such as residences, educational facilities, hospitals, convalescent homes, and parks.

**N-2** **Limit Construction Noise to Daytime Hours.** SDG&E shall not operate any pneumatic hammer, pile driver, excavator, crane, hoist, or other equipment which generates loud or unusual noise from the hours of 10:00 p.m. to 7:00 a.m. Exceptions for work outside of these hours shall be allowed for project safety, to take advantage of the limited times when power lines can be taken out of service, to complete project work that must occur continuously without interruption, or as determined to be warranted by the CPUC. If nighttime work is needed because of clearance restrictions on power lines, SDG&E shall take appropriate measures to minimize disturbance to local residents, if any are within 500 feet of the work site, by informing them in advance of the work schedule and probable inconveniences.

**N-3** **Secure City of Oceanside Explosive Permit for Blasting Activity.** In the event that blasting is required, SDG&E shall prepare and submit a plan for blasting that quantifies the resulting noise and vibration levels from the use of explosives. The plan shall in compliance with City of Oceanside procedures and requirements for all blasting activities and shall be submitted to the CPUC before blasting at each site.

*DURING OPERATION, LESS THAN SIGNIFICANT*. For long-term noise impacts associated with operation of the proposed project, refer to Section 5.12.2(c), below.

***b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?***

*LESS THAN SIGNIFICANT WITH MITIGATION*. Vibration from routine construction equipment and activities might be perceptible to people in the immediate vicinity of construction activities. Tamping of ground surfaces, the passing of heavy trucks on uneven surfaces, and drilling would each create perceptible vibration in the immediate vicinity the activity. Rock blasting, if needed, would create perceptible vibration over a greater area and could result in vibration levels great enough to create physical damage of nearby structures. Depending on the blasting plan, this impact would be significant. The level of groundborne vibration that could reach sensitive receptors depends on the distance to the receptor, the equipment type that is creating vibration (e.g., the frequency being produced), and the soil conditions surrounding the construction site. Installing poles or conduit could cause vibration levels potentially resulting in temporary annoyance to people within 50 feet of construction equipment. Within 50 feet of the northeastern corner of the project site is a corporate business office, a manufacturing facility, and a warehouse. However, the temporary operation of routine construction equipment generating groundborne vibrations would be localized towards the center of the proposed substation site, more than 50 feet from the occupied buildings. Therefore, for activities other than rock blasting, it is not anticipated that vibration would be noticeable to the occupants of the buildings near the project area. Proposed construction activities would not expose people to excessive groundborne vibration; this impact would be less than significant. Mitigation Measure N-4 would address the potentially significant impact due to excessive groundborne vibration from rock blasting.

## Mitigation Measure for Construction Noise

**N-4** **Avoid Blasting Where Damage to Structures Could Occur.** Blasting shall be managed with a plan for each site. The plan shall include the blasting methods, surveys of existing structures and other built facilities, and distance calculations to estimate the area of effect of the blasting. The blasting plan shall identify and implement construction techniques available as an alternative to rock blasting for locations where damage to vulnerable structures could occur, where the distance depends on the force of the explosives under consideration. Rock anchoring or a mini-pile system shall be used if adjacent structures could be damaged as a result of blasting or any construction method used as an alternative to blasting. If any structure is inadvertently adversely affected by construction vibration from rock blasting, the structure shall be restored to conditions equivalent to those prior to blasting. SDG&E shall then fairly compensate the owner of any damaged structure for lost use of the property.

***c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?***

*LESS THAN SIGNIFICANT*. The permanent noise sources that would occur with the project are limited to transformer operation at the substation and noise from crews conducting occasional routine inspection and maintenance of the substation. Maintenance would be rare for the underground subtransmission lines.

Substations usually generate steady noise from the process of power conversion, including the operation of transformers and auxiliary equipment needed to cool the transformer. Transformer noise contains pure-tone or “hum” components which is typically the most offensive characteristic of transformer noise. Auxiliary equipment includes cooling fans and pumps that operate depending on the internal temperature of the transformer oil. With all auxiliary cooling fans operating, the noise level from each of the four proposed transformers at full load would be approximately 61 dBA; SDG&E’s proposed transformer specification would require each unit to satisfy a maximum noise limit of 61 dB at the source (SDG&E 2016;

Response to Data Request No.1 dated October 21, 2016). Simultaneous operation of the four transformers in the ultimate configuration of the proposed substation would create a continuous noise level of approximately 67 dBA Leq for every hour of full load operation within the project site. At the property boundary, this noise level would not exceed the Oceanside Noise Ordinance maximum allowable noise level for industrial land uses of 65 dBA, which applies from 10:00 p.m. to 7:00 a.m.

The nearest sensitive receptor is approximately 850 feet from the proposed project site, and the nearest occupied building is approximately 200 feet north of the proposed location for the transformers. At 200 feet, the modeled noise level from the substation transformers would be approximately 41 dBA Leq and would not exceed approximately 48 dBA Ldn, which would be consistent with the surrounding land uses. The proposed low-profile substation design and 10-foot high masonry perimeter wall enclosing the substation would further minimize the potential increase in noise levels experienced off-site. The resulting noise level at the nearest sensitive receptor would be attenuated over distance to a level that would not be audible over the existing background conditions. As such, a substantial increase in ambient noise levels would not occur due to substation operation. This impact would be less than significant.

Routine inspection and maintenance of the proposed project would be accomplished through periodic visits to the substation site. Visits to the substation would not normally involve a large crew. Additional noise produced at the substation may occur during activation of circuit breakers. Because each of these noise sources would be infrequent and isolated, no substantial permanent noise increase would occur. This impact would be less than significant.

***d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. Noise impacts associated with construction equipment would mainly affect those receptors closest to the substation site and near construction of subtransmission and telecommunications routes. Existing noise-sensitive receptors near the substation site and linear facilities would potentially experience a temporary increase in noise during construction. Given the nearest sensitive receptor is approximately 850 feet south of the proposed substation site, there is sufficient distance between for the noise to attenuate between the source and receptor.

Baseline noise levels for commercial and urban areas are typically between 60 and 70 dBA or higher (Caltrans, 2009). Construction activity noise levels in and around of the project area could potentially reach 75 to 80 dBA, and construction traffic could potentially reach 70 to 75 dBA on the surrounding roadways. Therefore, noise during proposed construction activities would peak at 20 dBA above ambient levels, which is considered a substantial temporary increase in ambient noise levels and would constitute a significant impact absent mitigation. Implementation of Mitigation Measures N-1 and N-2 would minimize the temporary or periodic noise caused by construction equipment and traffic above levels existing without the project. With mitigation incorporated, this impact would be less than significant.

***e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

*NO IMPACT*. The proposed substation site would be located approximately 3 miles east and south of the Oceanside Municipal Airport (OPK). According to the Oceanside Municipal Airport Land Use Compatibility Plan Exhibit III-1, a portion of the proposed substation site lies within the airport influence area but approximately 3 miles southeast of the 60 dB CNEL contour for the projected noise generation from airport operations. The federal government operates an airfield at the Marine Corps Air Station Camp Pendleton (NXF), approximately 7 miles north and west of the proposed substation site with runways

oriented away from the project area. The proposed substation project would not introduce new residences to the area, and because the facility would be unstaffed it would not introduce new workplaces to the area. Therefore, the proposed project would not expose people residing or working in the project area to excessive airport-related noise levels. As such, there would be no impact.

***f. For a project within the vicinity of a private air strip, would the project expose people residing or working in the project area to excessive noise levels?***

*NO IMPACT*. No private air strip is near the proposed substation site. The proposed substation site would be located approximately 12 miles west of the private Blackinton air strip. The proposed substation project would not introduce new residences to the area, and because the facility would be unstaffed it would not introduce new workplaces to the area. Therefore, the construction and operation of the proposed project would not expose people residing or working in the project area to excessive noise levels near a private air strip. As such, there would be no impact.

# 5.13 Population and Housing

| POPULATION AND HOUSING<br>Would the project: | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ |
| b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |
| c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.13.1 Setting

The proposed substation site is within the 120-acre Pacific Coast Business Park, which is under development for commercial, office, and light industrial uses. The business park currently is a mix of recently built structures and vacant, graded building lots. The substation site consists of two vacant parcels totaling 9.66 acres. There are no residences at or in the immediate vicinity of the substation site.

Relative to the Proposed Project, the study area used for consideration of population and housing includes the City of Oceanside, in San Diego County. U.S. Census Bureau 2010 data for population, housing, and employment for the City of Oceanside and San Diego County are presented in Table 5.13 1.

**Table 5.13-1. Year 2011 Existing Conditions – Population, Housing, and Employment: City of Oceanside and San Diego County**

| | | Housing Units | | Employment |
|---|---|---|---|---|
| Location | Population | Total Units | Vacancy Rate | Total Employed[1] |
| City of Oceanside | 175,948 | 65,117 | 6.6% | 79,400 |
| San Diego County | 3,288,612 | 1,193,395 | 5.6% | 1,511,300 |

1 - Accounts for population greater than 16 years of age and in Labor Force
Source: California Department of Finance, 2016; California Employment Development Department, 2016.

The nearest residences to the proposed substation site are in single-family home subdivisions located approximately 0.3 miles east and 0.5 miles north of the site. Overall, Oceanside and its surrounding communities in northwest San Diego County are substantially built out. Substantial increases in population can be achieved only by development of higher density housing, either on vacant land or through redevelopment of existing land uses.

### Regulatory Background

This section includes a description of the population and housing regulatory framework. There are no federal or state regulations associated with population and housing that are relevant to the Proposed Project.

## Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary population and housing regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local plans and policies that pertain to population and housing.

### *City of Oceanside General Plan, Housing Element*

Following is a summary of the City of Oceanside's goals (City of Oceanside 2009 as cited in SDG&E, 2016):

- *Goal 1: Produce opportunities for decent and affordable housing for all of Oceanside's citizens.*
  - *Policy 1.1. Promote a high-quality urban environment with stable residential neighborhoods and healthy business districts.*
  - *Policy 1.2. Encourage and assist in neighborhood rehabilitation and beautification activities.*
  - *Policy 1.3. Promote a high rate of homeownership in Oceanside.*
  - *Policy 1.4. Advocate the rehabilitation of substandard residential properties by homeowners and landlords.*
  - *Policy 1.5. Continue to utilize the City's code enforcement program to bring substandard units into compliance with City codes and to improve overall housing quality and conditions in Oceanside.*
  - *Policy 1.6. Encourage higher density housing development along transit corridors and smart growth focus areas.*
- *Goal 2: Encourage the development of a variety of housing opportunities, with special emphasis on providing:*
  1. *A broad range of housing types, with varied levels of amenities and number of bedrooms.*
  2. *Sufficient rental stock for all segments of the community, including families with children.*
  3. *Housing that meets the special needs of the elderly and persons with disabilities.*
  4. *Housing that meets the needs of large families.*
  - *Policy 2.1. Designate land for a variety of residential densities sufficient to meet the housing needs for a variety of household sizes and income levels, with higher densities being focused in the vicinity of transit stops, smart growth focus areas, and in proximity to significant concentrations of employment opportunities.*
- *Goal 3: Protect, encourage, and provide housing opportunities for persons of low and moderate income.*
  - *Policy 3.1. Continue to utilize federal and state subsidies to the fullest extent in order to meet the needs of lower income residents.*
  - *Policy 3.2. Use the City's regulatory powers to promote affordable housing.*
- *Goal 4: Promote equal opportunity for all residents to reside in housing of their choice.*
  - *Policy 4.1. Prohibit discrimination in the sale or rental of housing with regard to race, ethnic background, religion, disability, income, sex, age, familial status, or household composition.*
  - *Policy 4.2. Assist in the enforcement of fair housing laws by receiving and investigating fair housing allegations, monitoring compliance with fair housing laws, and referring possible violations to enforcing agencies.*

### Applicant Proposed Measures

There are no APMs proposed with regard to Population and Housing.

## 5.13.2 Environmental Impacts and Mitigation Measures

***a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

*LESS THAN SIGNIFICANT*. The Proposed Project is in an urban area that is substantially developed. There would be no direct population growth induced by the project, as it would not provide new housing and would not require an expansion of the SDG&E workforce to service and maintain the substation. During its construction, the substation would provide short-term jobs for a small workforce. These jobs are not anticipated to result in workers relocating to the area. Some land in the project vicinity remains vacant and is zoned for commercial, light industrial, and other uses. The construction and operation of the new substation would facilitate future planned growth by ensuring reliable electricity to the area served by the substation. This would be an indirect effect of facilitating the development of these properties, which would provide employment opportunities to the regional workforce. While the development of these properties may induce some population growth, this has already been accounted for through the General Plan for the City of Oceanside. Therefore, the Proposed Project is considered to not induce substantial population growth, either directly or indirectly.

***b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?***

*NO IMPACT*. The site for the proposed substation is vacant. The Proposed Project would not displace any housing and therefore would not necessitate the construction of replacement housing. Therefore, no impacts would occur.

***c. Would the project displace substantial numbers of people necessitating the construction of replacement housing elsewhere?***

*NO IMPACT*. There is no existing housing on the proposed substation site and the Proposed Project would not displace any residents. Therefore, no replacement housing would be required as a result of implementing the Proposed Project and no impacts would occur.

# 5.14 Public Services

| PUBLIC SERVICES<br>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Fire protection? | ☐ | ☐ | ☒ | ☐ |
| b) Police protection? | ☐ | ☐ | ☒ | ☐ |
| c) Schools? | ☐ | ☐ | ☐ | ☒ |
| d) Parks? | ☐ | ☐ | ☐ | ☒ |
| e) Other public facilities? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.14.1 Setting

For the area where the Proposed Project would be located, fire and police services, as well as school districts, parks, recreational areas, and other public services, are provided by the City of Oceanside, special districts, and private entities.

### Fire Protection

The Oceanside Fire Department has eight stations within the City of Oceanside. The nearest fire station to the Proposed Project site is Oceanside Fire Station 8, about 0.25 miles to the southeast of the project site. The Proposed Project site is not located in an area prone to natural fire hazards (City of Oceanside, 2002b).

### Police Protection

The Oceanside Police Department is about 2.25 miles northwest from the project site and provides police protection to the project site and the surrounding area.

### Schools

Four school districts serve Oceanside: Oceanside Unified School District, Vista Unified School District, Carlsbad Unified School District, and Bonsall/Fallbrook Unified School District (City of Oceanside, 2016b). In addition, there are charter schools operating in Oceanside. There are five schools/learning centers within a 0.25-mile radius of the project site:

- La Petite Academy, located on 4179 Avenida de la Plata;
- Coastal Academy, located on 4096 Calle Platino;
- SIATech North County Independent Study High School, located on 1938 Avenida del Oro;
- Quantum Learning, located on 1938 Avenida del Oro; and
- The Classical Academy, located on 4183 Avenida de la Plata.

## Parks

There are 56 parks in Oceanside (City of Oceanside, 2016a). The parks nearest to the Proposed Project site include:

- Martin Luther King, Jr. Park, approximately 0.6 miles from the proposed site.
- Joseph Sepulveda Park, located approximately 0.6 miles south of the proposed site.
- Rancho Del Oro Park, located approximately 0.75 miles north of the proposed site.
- El Corazon Park, approximately 1.0 miles west from the proposed site.
- Palisades Park, located approximately 1.0 miles southwest of the proposed site.
- John Landes Park, located approximately 1.2 mile southeast of the proposed site.
- Bub Williamson is located about 1.2 miles southeast of proposed site and is in the City of Vista.

## Hospitals

Three hospitals serve the City of Oceanside:

- Scripps Coastal Medical Center, about 1.6 miles northwest of the proposed site;
- Tri-City Medical Center, about 1.7 miles south from the proposed site; and
- Rady Children's Hospital, about 1.5 miles south of the proposed site.

## Regulatory Background

This section includes a description of the public services regulatory framework. There are no federal regulations associated with public services that are relevant to the Proposed Project.

## State

### *2010 Strategic Fire Plan for California*

The 2010 Strategic Fire Plan for California was developed in coordination with the State Board of Forestry and Fire Protection and CAL FIRE to reduce and prevent the impacts of fire in California. Goal 6 of the Plan sets objectives to determine the level of suppression resources (staffing and equipment) needed to protect private and public state resources. Specific objectives include, but are not limited to, maintaining an initial attack policy which prioritizes life, property, and natural resources; determining suppression resources allocation criteria; analyzing appropriate staffing levels and equipment needs in relation to the current and future conditions; increasing the number of CAL FIRE crews for fighting wildfires and other emergency response activities; maintaining cooperative agreements with local, state, and federal partners; and implementing new technologies to improve firefighter safety, where available (State Board of Forestry and Fire Protection, 2010 as cited in SDG&E, 2016). The standards outlined are applicable to the fire protection agency serving the City of Oceanside.

## Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and construction of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary public policy regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local plans and policies that pertain to public services.

***City of Oceanside General Plan – Public Safety Element***

The 2002 City of Oceanside General Plan, *Public Safety Element* contains the objectives and policies established by the City of Oceanside related to fire management and other emergency services. These policies generally relate to necessary equipment, response, and preventative measures for safety personnel.

***City of Oceanside General Plan – Community Facilities Element***

The 2002 General Plan, *Community Facilities Element* contains the goals and policies related to public facilities in the City Oceanside. The policies ensure that adequate public facilities and services are provided to serve existing and future residential, commercial, and industrial development throughout the City and that future facilities sites be closely coordinated with existing and planned facilities. The following policies generally relate to the Proposed Project with respect to community facilities in the City of Oceanside (City of Oceanside, 2002a):

- Policy 1.3. The City of Oceanside aims to provide 5 acres of developed "Community Parks," referring to neighborhood, community, and special use parks, per 1,000 local residents.
- Policy 1.5. The City of Oceanside aims to maintain a parks acquisition and improvement program that considers future growth needs.
- Policy 3.5. Close coordination shall be maintained between the location of future fire stations and planned improvements to the Circulation System, or transportation system, within the City of Oceanside in order to maintain appropriate response times to all areas of the community.

### Applicant Proposed Measures

No applicant proposed measures are proposed for Public Services.

## 5.14.2 Environmental Impacts and Mitigation Measures

***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***

***a) Fire protection?***

*LESS THAN SIGNIFICANT*. Construction activity would be temporary and occur over the course of approximately 20 months. Construction activity would not be anticipated to require new or physically altered fire protection emergency services and fire risk would be not greater than at any other construction site. The Proposed Project area would continue to be adequately supported by the existing fire protection services. Once constructed, the substation would be unmanned and operated remotely. Following construction, operation of the substation could result in instances requiring fire protection services. The operation of the substation would not affect the ability of fire personnel to respond to fires. Fire risk would be comparable to that from other existing electrical infrastructure in the area, and this would not create the need for new or physically altered fire protection facilities. Therefore, construction of the Proposed Project would be expected to result in less than significant impacts related to fire protection services.

***b) Police Protection?***

*LESS THAN SIGNIFICANT*. Construction of the Proposed Project would not require police protection beyond routine patrols and response. An approximately 10-foot-tall masonry wall with gates would enclose the entire substation and barbed wire will be installed horizontally along the interior of the wall and gates so as not to be visible from the exterior of the substation. The majority of construction-related activities would be located away from major emergency access routes and not be expected to significantly interfere with emergency police. Where work would occur in roadways, implementation of approved traffic control procedures would ensure the emergency response is not impeded. Therefore, construction of the Proposed Project would result in less than significant impacts related to police protection.

***c) Schools?***

*NO IMPACT*. The planned substation would not increase the local population and, therefore, would not increase enrollment in schools. No new, altered, or expanded school facilities would be required as a result of constructing and operating the substation.

***d) Parks?***

*NO IMPACT*. The planned substation would not increase the local population and, therefore, would no increase the demand for parks and recreation facilities. Although some workers may use local and regional park facilities during project construction, increased use would be minimal and temporary and would not contribute substantially to the physical deterioration of existing facilities. No new, altered, or expanded parks or recreation facilities would be required as a result of constructing and operating the substation.

***e) Other Public Facilities?***

*NO IMPACT*. No public facilities have been identified that would need to be built, expanded, modified, or otherwise altered as a result of the construction and operation of the Proposed Project.

# 5.15 Recreation

| RECREATION | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☒ |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.15.1 Setting

There are 56 parks in Oceanside. The parks nearest to the Proposed Project site include (City of Oceanside, 2016):

- Martin Luther King, Jr. Park, approximately 0.6 miles from the proposed site. It is 17 acres and includes amenities such as barbecue grills, a baseball/softball field, a drinking fountain, a multipurpose field, a parking area, a picnic area, play equipment, a roller hockey field, and a soccer field.
- Joseph Sepulveda Park, located approximately 0.6 miles south of the proposed site. It is 3 acres and includes amenities such a picnic area.
- Rancho Del Oro Park, located approximately 0.75 miles north of the proposed site. It is 16 acres and includes amenities such as drinking fountains, a parking area, restrooms, a multipurpose field, and a tennis court.
- El Corazon Park, approximately 1.0 mile west from the proposed site. The SoCal Sports Complex is located in this park as well as the El Corazon Senior Center and the El Corazon Aquatic Center. Palisades Park, located approximately 1.0 mile southwest of the proposed site. It is 5 acres and includes amenities such a multipurpose field and play equipment.
- John Landes Park, located approximately 1.2 miles southeast of the proposed site. It is 10 acres and includes amenities such barbecue grills, a baseball field, drinking fountains, a multipurpose field, a parking area, a picnic area, play equipment, restrooms, softballs fields, a tennis court, a basketball court, and a volleyball court.
- Bub Williamson, located about 1.2 miles southeast of proposed site in the City of Vista. Following construction upgrades, the park will include amenities such as a dog park, restrooms, and a soccer arena (City of Vista, 2016).

Other recreational areas nearby include the Emerald Isle Golf Course, about 1.6 miles west from the Proposed Project site, and the San Luis Rey River Trail, a 7.2-mile-long bicycle and hiking trail north and west of the project site that heads west towards the ocean (City of Oceanside, 2016).

### Regulatory Background

This section includes a description of the recreation regulatory framework. There are no federal or state regulations associated with recreation that are relevant to the Proposed Project.

## Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and constructions of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary recreation regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local plans and policies that pertain to recreation.

### *City of Oceanside General Plan – Land Use Element*

With respect to public recreation facilities, the *Land Use Element* of the Oceanside General Plan states that the City's objective is: "to enhance the well-being of City residents by providing opportunities for relaxation, rest, activity, and education through a well-balanced system of private and public park and recreational facilities distributed to serve the entire community" (City of Oceanside, 2002a as cited in SBG&E, 2016). The following policies generally relate to the Proposed Project:

- *Policy 2.74 A. Provide adequate parkland acreage in both location and size to meet the recreation needs of existing and future residents and to preserve natural resources within the City.*
- *Policy 2.74 E. Provide for the optimum functional and aesthetic integration of all recreational, environmental, cultural, and social elements into Oceanside parks.*
- *Policy 2.74 I. Emphasize trail linkage opportunities between community, county, and state open space systems and recreation facilities and throughout those private developments where deemed both suitable and appropriate.*
- *Policy 2.74 J. Foster cooperative use of existing land resources and recreational facilities between other public and quasi-public agencies.*

### *City of Oceanside General Plan – Community Facilities Element*

A goal in the *Community Facilities Element* of the Oceanside General Plan is: "to enrich the quality of life for all residents of Oceanside by providing adequate and accessible public park and recreation facilities, by providing constructive leisure opportunities, and by providing recreational experiences and programs that contribute to the total health of the individual while meeting the overall needs and desires of the community" (City of Oceanside, 2002b as cited in SBG&E, 2016). The following policies generally relate to the Proposed Project (City of Oceanside, 2002):

- *Policy 1.3. states that the City of Oceanside aims to provide 5 acres of developed "Community Parks," referring to neighborhood, community, and special use parks, per 1,000 local residents.*
- *Policy 1.5. states that the City of Oceanside aims to maintain a parks acquisition and improvement program that considers future growth needs.*

### *City of Oceanside General Plan – Environmental Management Element*

An objective within the *Environmental Resource Management Element* is to plan adequate recreation facilities. Areas containing unique vegetation and wildlife habitats receive a high priority in the planning of parks (City of Oceanside 2002c as cited in SBG&E, 2016). The following goal generally relates to the Proposed Project:

- *Encourage the preservation of significant visual open spaces when such preservation is in the best interest of the public health, safety, and welfare.*

***City of Oceanside General Plan – Recreational Trails Element***

The *Recreational Trails Element* outlines several goals and objectives for the City to maintain and improve access to recreational trails. The City aims to provide a safe and efficient system of bicycle, equestrian, and pedestrian trails throughout the City, to create a non-motorized connection to recreational and commuting destinations (City of Oceanside 2002d as cited in SBG&E, 2016).

### Applicant Proposed Measures

There are no APMs proposed with regard to Recreation.

## 5.15.2 Environmental Impacts and Mitigation Measures

***a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

*NO IMPACT*. The Proposed Project would not result in any residential or commercial development that would lead to increased use of existing parks or other recreational facilities. Construction of the Proposed Project would occur over approximately 20 months. The construction is anticipated to be undertaken by members of the existing regional workforce, and no increase in population is expected to result from workers migrating to the region. Although some workers may use nearby park facilities during project construction, increased use would be minimal and temporary and would not contribute substantially to the physical deterioration of existing facilities. The Proposed Project would not result in population growth except to the extent that it would facilitate providing reliable electrical power to areas where any growth has already been accounted for in the City of Oceanside's General Plan.

***b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?***

*NO IMPACT*. The Proposed Project would not directly increase population. In addition, it would not include recreational facilities. The substation is intended to serve areas where the demand for electric power is expected to increase as a result of buildout of land uses already accounted for in the City of Oceanside General Plan and under local zoning and the approved Rancho del Oro Master Plan. Therefore, the Proposed Project would not require the construction or expansion of recreational facilities.

# 5.16 Transportation and Traffic

| TRANSPORTATION AND TRAFFIC<br>Would the project: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)? | ☐ | ☒ | ☐ | ☐ |
| b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | ☐ | ☐ | ☒ | ☐ |
| c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☐ | ☒ |
| d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☒ | ☐ | ☐ |
| e. Result in inadequate emergency access? | ☐ | ☒ | ☐ | ☐ |
| f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | ☐ | ☒ | ☐ | ☐ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.16.1 Setting

The Proposed Project would utilize local roadways for accessing work areas during construction. Roadways adjacent to the substation site would be temporarily disrupted during installation of underground transmission infrastructure. Baseline conditions of regional and local roadways likely used to access the Project site and work locations and those temporarily affected by Proposed Project construction activities are discussed below.

### Highways

The following highways provide regional access to the Project site and staging areas, which are shown in Figure 4-1 (Project Regional Location):

- Interstate 5 (I-5) is a north-south regional arterial highway that provides regional access to the City of Oceanside. Within the City of Oceanside, I-5 is eight lanes (four lanes per direction), with year 2014 average daily traffic (ADT) volumes at Oceanside Boulevard (central portion of the city) of 191,000 vehicles per day (Caltrans, 2014). Year 2014 ADT volumes represent the most recently published data.
- Highway 76, or San Luis Rey Mission Expressway, is a four lane divided east-west highway that connects with I-5 in the City of Oceanside and extends northeast through the city. The Rancho Del Oro Drive exit would likely be used to access the Project area. At this exit, year 2014 ADT volumes on Highway 76 were 46,500 vehicles per day (Caltrans, 2014).
- Highway 78, or Ronald Reagan Parkway, is a six lane east-west highway that connects with I-5 in Oceanside near the City of Carlsbad and extends east to the City of Vista and Escondido, where it connects with Interstate 15. The College Boulevard exit would likely be used to access the Project area. At this exit, year 2014 ADT volumes on Highway 78 were 136,000 vehicles per day (Caltrans, 2014).

## Local Roads

Local roadway classifications in the City of Oceanside are based on the intended function of the roadway in terms of travel speed, trip distance, and access to and from adjacent land uses. Local roadways within the city fall under the following primary designations:

- Arterial streets are intended to accommodate traffic moving at a relatively high speed over a long distance. Access to arterial streets (e.g., via driveways, on-street parking) is generally limited.
- Collector streets accommodate traffic moving over shorter distances and at lower speeds than arterials. The intended function of a collector street is to provide a linkage between local land uses and arterial streets.
- Local streets are designed to provide access to abutting properties and provide connection between neighborhood streets and the collect street network.

The city has established sub-classifications for both arterials and collectors based on the number of lanes, the type of adjacent land use, and design considerations. These include major, prime, and secondary arterial and collector streets.

Roadway and intersection operating conditions, and the adequacy of existing roadway systems to accommodate traffic, can be described in terms of level of service (LOS) ratings. LOS is expressed as A through F, with LOS A as the best operating conditions (characterized by free-flow traffic, low volumes, and little or no restrictions on maneuverability and LOS F being the worst operating conditions (stop-and-go traffic flow with high traffic densities and slow travel speeds).

### *Access Routes*

Table 5.16-1 provides information on primarily local travel routes that would likely be used by Project-related vehicles to access the four construction staging yards and the Project site. These local roadways are shown in Figure 5.16-1 (at the end of this section). While the information provided in Table 5.16-1 is from 2012, it remains the most currently available ADT volume data for these roadways. As shown, these key local roadways operate at LOS B or better conditions with the exception of College Boulevard, which operates at LOS E.

**Table 5.16-1. Existing Local Roadway Conditions**

| Street | Lanes | Classification | ADT Volume | LOS |
|---|---|---|---|---|
| Old Grove Road | 4 | Secondary Collector | 11,600 | A |
| Rancho del Oro Drive | 4 | Secondary Collector | 12,400 | A |
| Oceanside Boulevard | 5 | Major Arterial | 29,900 | B |
| Mesa Drive | 4 | Secondary Collector | 13,300 | B |
| College Boulevard | 4 | Secondary Collector | 38,200 | E |
| El Camino Real | 5 | Major Arterial | 33,000 | B |

Source: City of Oceanside, 2012; SDG&E, 2016 Table 4.16-1

Access to the proposed Ocean Ranch Distribution Substation site would be primarily from the north via a cul-de-sac on Rocky Point Drive. Secondary access would be via a new entry point from Avenida del Oro, near the intersection of Avenida del Oro and Avenida de la Plata. At the Project site, these are both two lane local collector streets.

### *Roadways Disrupted by Project Construction*

Construction of the Proposed Project would result in a temporary disruption to several local roadways adjacent to the Ocean Ranch Substation site. Trenching and vault work areas would be located within the following City of Oceanside collector streets:

- Avenida del Oro is a two-lane north-south street with a separate center lane for turning movements. The affected segment is both north and south of the intersection with Avenida de la Plata and approximately 1,000 feet in length. While ADT volumes along this roadway are unavailable, vehicles traveling along this segment likely include those associated with the U.S. Post Office and other businesses located within the immediate area, including a new Federal Express Ground facility.
- Avenida de la Plata is a two-lane east-west collector street. The affected segment is west of the intersection with Avenida del Oro and approximately 700 feet in length. While ADT volumes along this roadway are unavailable, they are considered low with this segment primarily serving the businesses located within the immediate area.
- Rocky Point Drive is a two lane north-south street, with a cul-de-sac termination at the southern end (where it meets the Project site). The affected segment is approximately 200 feet in length, from the cul-de-sac termination north to Windansea Street. While ADT volumes along this roadway are unavailable, they are considered low with this segment only serving the businesses located on the dead end part of the street.
- Windansea Street is a short two lane east-west street between Rocky Point Drive and Avenida del Oro. The affected segment approximately 100 feet in length, west of the intersection with Rocky Point Drive. While ADT volumes along this roadway are unavailable, they are considered low with this roadway primarily serving the businesses located within the immediate area.

## Mass Transit

### *Bus Service*

The North Country Transit District (NCTD) Breeze is a public bus system for the greater San Diego area, including the City of Oceanside. NCTD bus lines that operate in the city include routes 313, 315, 316, 317, 318, 323, and 325. No NCTD bus routes use Rocky Point Drive or Windansea Street. Routes 315 and 316 travel along Avenida del Oro and Avenida de la Plata near the Project site. The following provides specifics of these routes:

- Route 315 travels on Avenida de la Plata between College Road and Avenida del Oro. It then travels south on Avenida del Oro to Oceanside Boulevard (NCTD, 2016a). The following bus stops are located along the segments of Avenida del Oro affected by the Proposed Project:
  - East side of Avenida del Oro across from the U.S. Post Office.
  - East side of Avenida del Oro just north of intersection with Avenida de la Plata.
  - West side of Avenida del Oro just south of intersection with Avenida de la Plata.
- Route 316 travels on Avenida de la Plata between Corporate Center Drive and Avenida del Oro. It then travels north on Avenida del Oro to Mesa Drive (NCTD, 2016a). The following bus stops are located along the segments of Avenida de la Plata and Avenida del Oro affected by the Proposed Project:
  - East side of Avenida del Oro across from the U.S. Post Office.
  - East side of Avenida del Oro just north of intersection with Avenida de la Plata.
  - South side of Avenida de la Plata just west of intersection with Avenida del Oro.

### *Passenger Rail Service*

The NCTD Coaster and Sprinter, Metrolink, and Amtrak Pacific Surfliner provide commuter rail service to San Diego County and beyond. The Sprinter is the closest transit railway to the Project vicinity, connecting Oceanside, Vista, San Marcos, and Escondido along the State Route 78 corridor. The Sprinter travels east and west immediately south of Oceanside Boulevard with stations at El Camino Real, Rancho Del Oro Drive, and College Boulevard in the project vicinity. The nearest Sprinter station is the College Boulevard Station at the south end of Avenida del Oro, approximately 0.5 miles southeast of the Project site (NCTD, 2016b).

## Rail (Freight)

The LOSSAN Rail Corridor is the nearest railroad providing freight rail services. This north-south rail corridor stretches from San Luis Obispo to San Diego and is located west of I-5 through the City of Oceanside, approximately 4.4 miles west of the Project site (TransNet, 2016).

## Bicycle

The City of Oceanside designates and maintains three types of bicycle facilities:

- Bike paths or trails (also known as Class I bikeways) operate within a right-of-way that is separated from vehicular traffic.
- Bike lanes (also known as Class II bikeways) are located within roadways, but are delineated by warning symbols and striping.
- Bike routes (also known as Class III bikeways) operate in the shoulder lane of roadways, but are not delineated by striping.

The City of Oceanside Bicycle Master Plan includes an inventory of existing bicycle facilities in the city (City of Oceanside, 2012 Appendix A). As indicated in the Bicycle Master Plan, bike lanes exist along Oceanside Boulevard, College Boulevard, Old Grove Road, Mesa Drive, Rancho Del Oro Drive, and El Camino Real. These roadways would likely serve Project-related trips. With respect to roadways affected by construction of the Proposed Project, Avenida del la Plata near the Project site accommodates a bike lane as does on Avenida del Oro (SDG&E, 2016 p. 4.16-5).

## Air Transportation

Oceanside Municipal Airport (also known as the Bob Maxwell Memorial Field) is approximately 3 miles northwest of the Project site. This is a general aviation airport featuring one runway and fuel services. For the 12-month period ending February 28, 2015, the airport averaged 32 aircraft operations per day (AirNav, 2016a).

Marine Corps Base Camp Pendleton airfield (also known as Munn Field) is located approximately 6 miles north of the Project site. Camp Pendleton supports over 180 helicopters and a wide variety of Marine Corps units and visiting aircraft from other branches of the Armed Forces (SDG&E, 2016 p. 4.16-5). The facility contains one 6,000-foot runway, but average daily aircraft operational data is unavailable (AirNav, 2016b).

## Regulatory Background

This section includes a description of the transportation and traffic regulatory framework.

## Federal

### *14 CFR Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace*

Construction of a project could potentially impact aviation activities if a structure or equipment were positioned such that it would be a hazard to navigable airspace. The Federal Aviation Administration (FAA) has established reporting requirements if any construction includes equipment or structures more than 200 feet above ground level or results in an object penetrating an imaginary surface extending outward and upward at a ratio of 100 to 1 from a public or military airport runway out to a horizontal distance of 20,000 feet (approximately 3.78 miles) (FAA, 2016). For areas around heliports, this same requirement applies to any construction that is more than 200 feet above ground level or would penetrate an imaginary surface extending outward and upward at a ratio 25 to 1 from a public or military heliport out to a horizontal distance of 5,000 feet.

## State

### *California Vehicle Code (CVC)*

CVC includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways; safe operation of vehicles; and the transportation of hazardous materials.

### *California Government Code Sections 65352, 65404, 65940, and 65944,*

Sections 65352, 65404, 65940, and 65944, amended by Senate Bill 1462, require local planning agencies to notify the military whenever a proposed development project or general plan amendment is located within 1,000 feet of a military installation, located within special use airspace, or is located beneath a low-level flight path.

### *Caltrans Guide for the Preparation of Traffic Impact Studies (TIS)*

The TIS identifies the following criterion as a starting point in determining when a TIS is needed for a project (Caltrans, 2002):

1. Generates over 100 peak hour trips assigned to a State highway facility.
2. Generates 50 to 100 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS C or D).
3. Generates 1 to 49 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing significant delay; unstable or forced traffic flow conditions (LOS E or F).

Applicable Caltrans highways include I-5, Highway 76, and Highway 78. As stated in Caltrans' *Guide for the Preparation of Traffic Impact Studies*, a TIS may be as simple as providing a traffic count to as complex as a microscopic simulation (Caltrans, 2002). (Because the Proposed Project results in negligible traffic after the temporary construction period, the need for a separate full TIS analysis is not warranted and was not prepared. The analysis provided in Section 5.16.2 compares construction and operational trips against the existing volumes and capacities of affected roadways. This level of analysis is considered consistent with the *Guide for the Preparation of Traffic Impact Studies*.)

### Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and constructions of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary transportation and traffic regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local plans and policies that pertain to transportation and traffic.

#### *City of Oceanside General Plan – Circulation Element*

The *Circulation Element* provides goals, objectives, and policies to maintain and improve the city's transportation system and enhance travel choices for current and future residents, visitors, and workers. The following outlines objectives and policies identified in the Circulation Element that are applicable to the Proposed Project (City of Oceanside, 2012):

**Objectives**

- *Aim for an acceptable LOS D or better on all Circulation Element roadways on an average daily basis and at intersections during the a.m. and p.m. peak periods.*
- *Ensure that all streets within the city achieve the mobility goals and design standards as highlighted throughout the Circulation Element.*

**Policies**

- *If the location and traffic generation of a proposed development will result in congestion on major streets or failure to meet the LOS D threshold, or if it creates safety hazards, the proposed development shall be required to make necessary off-site improvements. Such improvements may be eligible for reimbursement from collected impact fees. In some cases, the development may have to wait until financing for required off-site improvements is available. In cases where development would result in unavoidable impacts, the appropriate findings of overriding consideration will be required to allow temporary undesirable levels of service.*

### Applicant Proposed Measures

No traffic and transportation Applicant Proposed Measures (APMs) are proposed by SDG&E. However, the Project applicant proposes several *Standard Operating Procedures*, which involve various procedures and restrictions related to traffic and transportation (SDG&E, 2016 p.4.16-6). The implementation of these procedures is considered within the analysis provided below in Section 5.16.2.

## 5.16.2 Environmental Impacts and Mitigation Measures

***a. Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. The following provides an analysis of potential impacts during both construction and operation/maintenance of the Proposed Project.

#### *Construction*

**Trip Generation.** As stated in Section 4, Project Description, it is anticipated that a maximum of 40 workers would be employed during construction of the Proposed Project. While the Project applicant has included

a Standard Operating Procedure of encouraging carpooling, this analysis assumes a worst-case scenario of individual commutes, resulting in a maximum of 80 temporary daily passenger vehicle trips. In addition to worker trips, construction would include truck trips associated with the import and export of fill material and the delivery of equipment and materials. An average of approximately 20 truck trips per day for an estimated 6 months would be required to complete the proposed substation grading and boundary wall installation (SDG&E, 2016 p. 4.16-10). In addition, approximately 5 additional trips per day are anticipated for the delivery of materials and equipment for the duration of construction, based on current design criteria. Truck trips are converted to a passenger car equivalent (PCE) at a factor of 1.5, resulting in 38 daily trips during construction. Therefore, this analysis assumed a worst-case temporary addition of 118 daily vehicle trips during the temporary construction period.

The addition of all 118 total daily trips to I-5 would result in a temporary increase of 0.06 percent over existing ADT volumes, a 0.24 percent increase over existing ADT volumes on Highway 76, and a 0.08 percent increase over existing ADT volumes on Highway 78. These temporary increases are considered negligible and would not significantly decrease capacity levels over existing conditions, resulting in a less-than-significant impact to the performance of the highway circulation system.

Table 5.16-2 compares the maximum number of construction vehicle trips (118 trips per day) to the number of trips needed to decrease baseline LOS for each local roadway segment to below the minimum performance standard of LOS D for the City of Oceanside. The addition of 118 trips per day to each roadway is considered worst-case as temporary daily traffic volumes would be spread out along the local roads shown in Table 5.16-2.

**Table 5.16-2. Construction Traffic Volume Impacts on Local Roadways**

| | | | Construction Trips | | |
|---|---|---|---|---|---|
| | Baseline Conditions | | Traffic Volume Increase Triggering | Traffic Volume Increase Triggering | Temporary addition of 118 daily trips |
| Street | ADT Volume | LOS | LOS E | LOS F | Result in LOS E or F? |
| Old Grove Road | 11,600 | A | 19,900 | 23,400 | No |
| Rancho Del Oro Drive | 12,400 | A | 19,100 | 22,600 | No |
| Oceanside Boulevard | 29,900 | B | 19,600 | 25,100 | No |
| Mesa Drive | 13,300 | B | 9,200 | 11,700 | No |
| College Boulevard | 38,200 | E | - | 800 | No (LOS F) |
| El Camino Real | 33,000 | B | 16,500 | 22,000 | No |

Source: City of Oceanside, 2012; SDG&E, 2016 Table 4.16-1

As shown in Table 5.16-2, the addition of 118 trips during the temporary construction period would be negligible compared to the traffic volumes necessary to result in unacceptable traffic conditions (LOS E or F). However, College Boulevard currently operates at LOS E under baseline conditions. Mitigation Measure T-1 is proposed to reduce potential impacts from project-related construction trip volumes by ensuring access routes avoid College Boulevard to the extent feasible. With the incorporation of this mitigation, construction would result in a less-than-significant impact to the performance of the local circulation system.

**Roadway and Travel Lane Disruptions.**

Construction of the Proposed Project would result in temporary disruptions to one or more travel lanes on several roadway segments near the proposed Ocean Ranch Substation site. Underground trenches, manhole, and handhole work areas would be located within segments of Avenida del Oro, Avenida de la

Plata, Rocky Point Drive, and Windansea Street. The construction of underground facilities would require one or more lanes of traffic be temporarily closed along the affected segments of these roadways. Also, construction to establish secondary access to the substation from Avenida del Oro may necessitate the temporary closure of a portion of the northbound lane on this roadway.

Disruption to these roadway segments would be short-term and localized. If feasible, at least one lane of travel through each construction area would remain open throughout the construction period to accommodate roadway users (including motorists, emergency vehicles, transit vehicles, bicyclists and pedestrians). While the Project applicant has included Standard Operating Procedures of obtaining necessary encroachment permits and incorporated standard traffic control procedures, Mitigation Measure T-1 is proposed to provide specificity regarding the requirements of a Construction Traffic Control Plan. The purpose of this plan would be to reduce potential impacts to the circulation system from the closure/ disruption to roadways and travel lanes. With the incorporation of this mitigation, construction would result in a less-than-significant impact to the performance of the local circulation system.

### Mitigation Measures for Construction Impacts

**T-1** **Construction Traffic Control Plan.** Prior to the start of construction, San Diego Gas & Electric (SDG&E) shall prepare and submit a Construction Traffic Control Plan for review and approval to the City of Oceanside for public roads and transportation facilities that would be directly affected by the construction activities and/or would require permits and approvals. SDG&E shall submit the Construction Traffic Control Plan to the California Public Utilities Commission (CPUC) prior to conducting activities covered in the traffic control permits. The Construction Traffic Control Plan shall include, but not be limited to:

- The locations and use of flaggers, warning signs, lights, barricades, delineators, cones, arrow boards, etc., according to standard guidelines outlined in the Manual on Uniform Traffic Control Devices, the Standard Specifications for Public Works Construction, and/or the California Joint Utility Traffic Control Manual.
- Additional methods to reduce temporary traffic delays and trips during peak travel hours (8:00-10:00 a.m. and 4:00-6:00 p.m.) to the maximum extent feasible.
- Typical access routes between all staging areas and the proposed Ocean Ranch Substation work areas. To the extent feasible, access routes should minimize travel on College Boulevard.
- Defining methods to coordinate with all agencies responsible for encroachment permits throughout construction to minimize cumulative lane disruption impacts should simultaneous construction projects affect shared segments/portions of the circulation system.
- Prior to the start of construction, provide (or identify the timing to provide) copies of all approved permits and agreements to the CPUC and methods to comply with all specified requirements.
- Plans to coordinate in advance with emergency service providers to avoid restricting the movements of emergency vehicles. Police departments and fire departments shall be notified in advance by SDG&E of the proposed locations, nature, timing, and duration of any roadway disruptions, and shall be advised of any access restrictions that could impact their effectiveness. At locations where roads will be blocked, provisions shall be ready at all times to accommodate emergency vehicles, such as immediately stopping work for emergency vehicle passage, providing short detours, and developing alternate routes in conjunction with the public agencies.

Documentation of the coordination with police and fire departments shall be provided to the CPUC prior to the start of construction.

- Plans to coordinate in advance with property owners, if any, that may have limited access to properties due to temporary lane closures. Provisions for ensuring secondary access should be provided.
- Plans to coordinate with North Country Transit District at least one month prior to construction to minimize the impacts associated with the interruption or delays of bus transit service to Routes 315 and 316. Documentation of this coordination shall be provided to the CPUC prior to the start of construction.

***Operation and Maintenance***

As discussed in Section 4, Project Description, typical maintenance activities involve both routine inspections and preventive maintenance to ensure service reliability, as well as emergency work to maintain or restore service continuity. Routine operations would require one or two workers in a light utility truck to visit the substation on a daily or weekly basis. During normal routine maintenance, approximately six round-trips per year by a two- to four-person crew would occur (SDG&E, 2016 p. 4-19). One annual major maintenance inspection is expected to result in a maximum of approximately 30 vehicle trips for up to 7 days (SDG&E, 2016 p. 4-19). This represents a conservative worst-case operational traffic volume. The temporary addition of all 30 trips to I-5, Highway 76, Highway 78, and the local roadways shown in Table 5.16-2 would result in a negligible increase over existing volumes. Therefore, maintenance traffic volumes would result in a less-than-significant impact to the performance of the circulation system and no mitigation is required.

***b. Would the project cause, either individually or cumulatively, a level-of-service standard established by the county congestion management agency for designated roads or highways to be exceeded?***

*LESS THAN SIGNIFICANT*. While I-5, Highway 76, and Highway 78 are part of San Diego Association of Governments (SANDAG) 2050 Regional Transportation Plan (RTP) system, no performance standards related to construction or operation of the Proposed Project were identified within the 2050 RTP (SANDAG, 2011). As discussed above in question a, the temporary addition of 118 daily trips during construction to I-5 would result in a temporary increase of 0.06 percent over existing ADT volumes, a 0.24 percent increase over existing ADT volumes on Highway 76, and a 0.08 percent increase over existing ADT volumes on Highway 78. These temporary increase are considered negligible. The worst-case temporary addition of 30 trips to I-5, Highway 76, and Highway 78 during the annual maximum one-week maintenance event would result in a negligible increase over existing ADT volumes. Therefore, construction and operation of the Project is not found to conflict with SANDAG's RTP and overall congestion management process. Less-than-significant impacts would occur.

***c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

*NO IMPACT*. The Project site was compared to the military flight paths and airspace designations of the California Military Land Use Compatibility Analysis (CMLUCA) database to determine whether the Proposed Project would be located within military special-use airspace or located beneath a military designated low-level flight path (CMLUCA, 2016). Based on the CMLUCA, the Proposed Project is not located within special-use military airspace or an area designated for low-level military flight paths and no action is required with respect to notifying the military about the Proposed Project (CMLUCA, 2016).

The Proposed Project does not include any objects over 200 feet in height and is located outside of the height notification boundary established by the FAA. Therefore, the Proposed Project would not involve the construction of any structures near any aviation facilities or of such a height that could pose a hazard to air navigation. No impact to air traffic would occur.

***d. Would the project substantially increase hazards because of a design feature or incompatible uses?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. The Proposed Project does not include any new public roads or permanent changes to roadway features beyond construction of curb cuts to accommodate access driveways. Access to the proposed Ocean Ranch Substation site and construction staging yards would be from existing local roadways with good visibility. Construction of the Proposed Project would involve activities within and adjacent to public roadways, requiring temporary lane narrowing and in some instances temporary lane or roadway closures. To ensure temporary lane closures and construction activities do not result in increased hazards to the traffic circulation system, Mitigation Measure T-1 (Construction Traffic Control Plan) is proposed and would require review and approval of a Project-specific Construction Traffic Control Plan by the CPUC and the City of Oceanside. Mitigation Measure T-1 requires the Project applicant to obtain and adhere to all requirements of an Encroachment Permit from the city, and to prepare a Traffic Control Plan that provides for the safe and efficient movement of emergency vehicles, bicycles, pedestrians, and transit vehicles through or around construction zones while protecting the workers, equipment, and construction areas. While there may be a limited increase in hazards due to construction activities proximate to public roadways, construction would be temporary and with the incorporation of Mitigation Measure T-1, temporary impacts during construction would be less than significant.

Once operational, the Proposed Project would have no impact on the circulation system except during maintenance activities of underground facilities. These activities would be short-term in duration and would comply with standard traffic control procedures (SDG&E, 2015a p. 4.16-7). Therefore, maintenance of the Proposed Project would have a less-than-significant impact on roadway hazards.

## Mitigation Measures

**T-1 Construction Traffic Control Plan.** (See full text above)

***e. Would the project result in inadequate emergency access?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. Primary access to the substation site would be from Rocky Point Drive, a local road terminating in a cul-de-sac at the north side of the substation property. Two gates would be provided at this location. Secondary access would be from a private drive and gate at Avenida del Oro near the south end of the substation site. Internal to the substation would be a paved loop access road. The gates and road provide adequate access to the site for emergency services to enter and navigate the site, should that be necessary. The substation would not impair emergency access to other locations near the site.

During construction, some lane closures would be required on nearby roads. Disruption to roadway segments would be short-term and localized. If feasible, at least one lane of travel through each construction area would remain open throughout the construction period to accommodate roadway users (including emergency vehicles). To ensure temporary lane closures do not result in inadequate emergency vehicle movements or impede access to property, Mitigation Measure T-1 (Construction Traffic Control Plan) is proposed and would require review and approval of a Project-specific Construction Traffic Control Plan, which would include specific measures to address temporary closures/disruptions to travel lanes and

plans to coordinate in advance with emergency service providers. With the incorporation of Mitigation Measure T-1, temporary impacts during construction would be less than significant.

Once operational, the Proposed Project would have no impact on access or movement to emergency service providers, except during maintenance activities of underground facilities. These activities would be short-term in duration and would comply with standard traffic control procedures (SDG&E, 2015a, p. 4.16-7). Therefore, maintenance of the Proposed Project would have a less-than-significant impact to emergency vehicle access and movements.

## Mitigation Measures

**T-1 Construction Traffic Control Plan.** (See full text above)

### *f. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.* Temporary construction activities may intermittently reduce, disrupt, or temporarily eliminate access to an existing bike routes on Avenida del la Plata and Avenida del Oro near the Project site. Additionally, temporary lane closures could slow public transit bus movements along these two roadways. As discussed in Section 5.16.1, NCTD Routes 315 and 316 travel along Avenida del Oro and Avenida de la Plata adjacent to the Project site, with six bus stops in total located along segments of these roadways temporarily disrupted by construction. Finally, temporary construction activities could limit pedestrian movements when roadway disruptions are required.

To ensure temporary lane closures do not impact bicycle, public transit, or pedestrian movements, Mitigation Measure T-1 (Construction Traffic Control Plan), which requires review and approval of a Project-specific Construction Traffic Control Plan, is recommended. This plan requires coordination with and necessary permits be obtained from the City of Oceanside. This plan also requires the Project applicant to ensure proper detours or safe travel through construction areas for bicycles and pedestrians as well as vehicles. The plan also requires coordination with the NCTD at least one month prior to construction to minimize impacts associated with delays of bus transit service. Therefore, with the incorporation of Mitigation Measure T-1, construction of the Proposed Project would have a less-than-significant impact on transit, bicycle, and pedestrian circulation.

Once operational, the Proposed Project would have no impact on pedestrian, bicycle, and public transit movements, except during maintenance activities of underground facilities. These activities would be short-term in duration and would comply with standard traffic control procedures (SDG&E, 2015a, p. 4.16-7). Therefore, maintenance of the Proposed Project would have a less-than-significant impact to emergency vehicle access and movements.

## Mitigation Measures

**T-1 Construction Traffic Control Plan.** (See full text above)

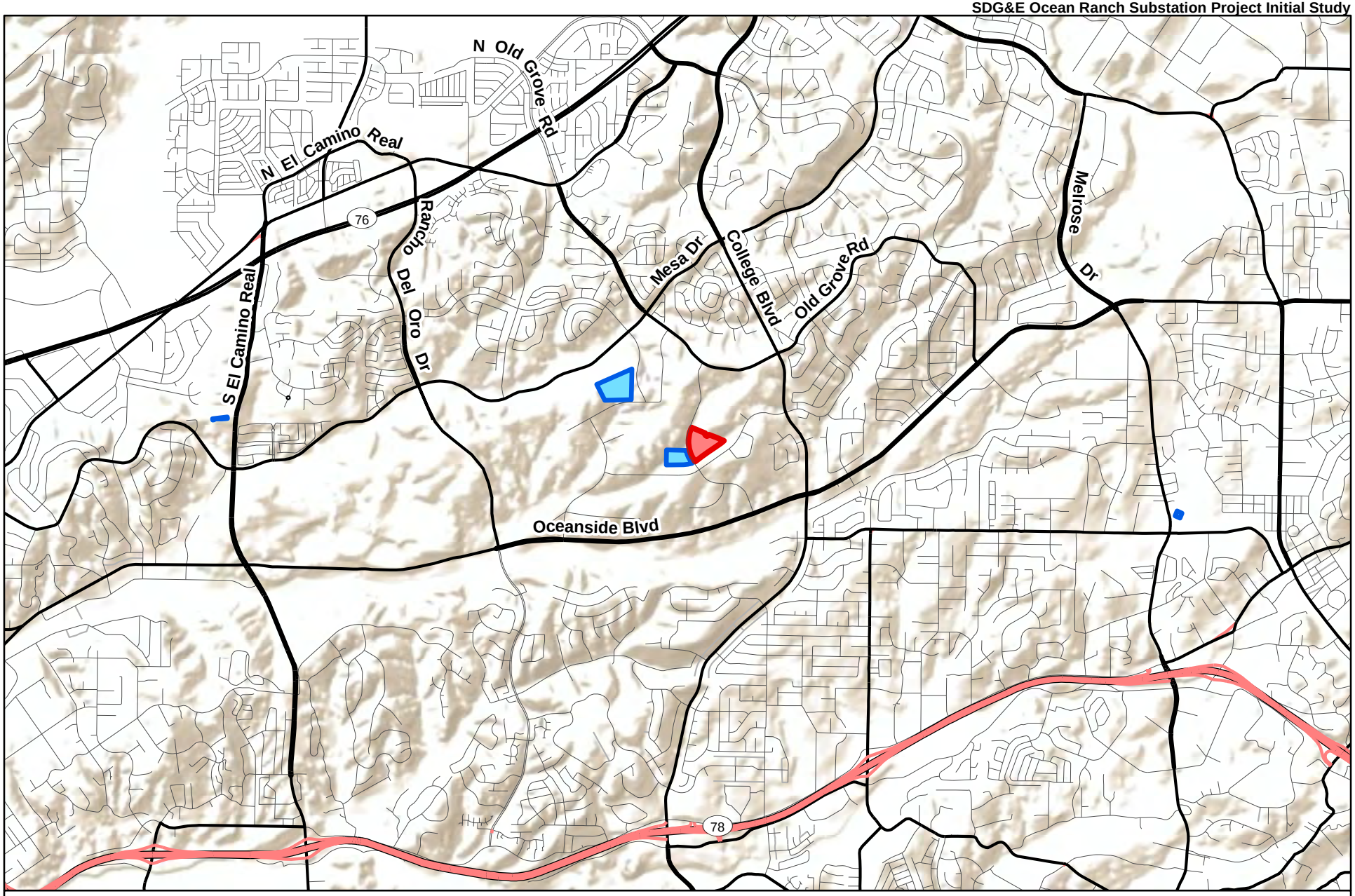



**Figure 5.16-1**

**Local Roadways**

# 5.17 Tribal Cultural Resources

## TRIBAL CULTURAL RESOURCES

| Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☒ | ☐ | ☐ |
| b. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☒ | ☐ | ☐ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.17.1 Setting

Tribal Cultural Resources (TCRs) are a defined class of resources under Assembly Bill 52 (AB 52). TCRs include sites, features, places, cultural landscapes, and sacred places or objects that have cultural value or significance to a Tribe. To qualify as a TCR, the resource must either: (1) be listed on, or be eligible for listing on, the California Register of Historical Resources or other local historic register; or (2) constitute a resource that the lead agency, at its discretion and supported by substantial evidence, determines should be treated as a TCR (PRC § 21074). AB 52 also establishes that, "California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources." Therefore, tribal representatives may be able to provide substantial evidence regarding the locations, types, and significance of TCRs located within their traditional and cultural affiliated geographic areas (AB 52 § 4; PRC § 21074(a)(2); PRC § 21080(e); PRC § 21080.3.1(a)). Thus, the identification and analysis of TCRs should involve consultation between the CEQA lead agency and interested tribal groups and/or tribal persons (AB 52 § 1(5); PRC § 21080.3.1(a)).

### Approach to Analysis of Tribal Cultural Resources

Information presented in this section was gathered through AB 52 consultation between the CPUC and California Native American Tribes that have cultural affiliations with the Proposed Project area and that have requested to consult on the Proposed Project. Supplementary information was gathered from the cultural resources literature and records search, cultural resources field survey, ethnographic summary, and pre-AB 52 tribal outreach that is described in detail in Section 5.5.

The Proposed Project's effects on TCRs were evaluated using the significance criteria set forth in Appendix G of the CEQA Guidelines and with consideration to AB 52 and the Governor's Office of Planning and Research "Draft Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA." The conclusions are summarized in the impact summary table above and discussed in more detail below.

There are no TCRs located within the Proposed Project area or within 0.25 miles of the Proposed Project area's boundary. Therefore, the analysis concludes that there will be no potential impacts to known TCRs. However, there is always the potential for impacts to cause an unexpected impact to buried TCRs that are

at present unknown and unrecorded; therefore, Mitigation Measure C-1 is recommended (see below for more details).

***Background Research***

A letter was sent to the Native American Heritage Commission (NAHC) on October 31, 2016, requesting an updated search of the Sacred Lands File and a current AB 52 Tribal Consultation List consisting of any tribal groups or persons who have expressed an interest in receiving notification about projects being undertaken or applications being reviewed by the CPUC. On November 10, 2016, the NAHC responded with a list of 24 tribal representatives identified as potentially having an interest in the CPUC's service area. The NAHC stated that a search of the Sacred Lands File revealed no known TCRs within the Proposed Project area and 0.25 miles surrounding the Proposed Project area's boundary.

***Project Notification***

AB 52 requires that within 14 days of the lead agency determining that a project application is complete, a formal notice and invitation to consult about the Proposed Project be sent to all tribal representatives who have requested in writing to be notified of projects that may have a significant effect on TCRs located within the Proposed Project area (PCR § 21080.3.1(d)).

On November 4, 2016, the CPUC mailed certified letters to representatives of nine (9) tribes that had previously submitted a written request to the CPUC to receive notification of proposed projects. These tribes included the Cabazon Band of Mission Indians, Colorado River Indian Tribes, Federated Indians of Graton Rancheria, Gabrieleño Band of Mission Indians – Kizh Nation, San Luis Rey Band of Mission Indians, San Manuel Band of Mission Indians, Temecula Band of Luiseño Mission Indians, Torres Martinez Desert Cahuilla Indians, and Twenty-nine Palms Band of Mission Indians. The letters included a brief description of the Proposed Project, information on how to contact the lead agency Project Manager, and an aerial map and an USGS topographic quadrangle showing the project components and lay-down areas. The letters noted that requests for consultation needed to be received within 30 days of the date of receipt of the notification letter.

One response was received from tribal contacts who requested to consult on the Proposed Project.

***AB 52 Native American Tribal Consultation***

AB 52 states that once California Native American tribes have received the project notification letter, the tribe then has 30 days to submit a written request to consult (PCR § 21080.3.1(d)). Upon receiving a Tribe's written request to consult, the lead agency then has 30 days to begin tribal consultation. Consultation must include discussion of specific topics or concerns identified by tribes. Any information shared between the Tribes and the lead agency representatives is protected under confidentiality laws and not subject to public disclosure (GC § 6254(r); GC § 6254.10) and can be disclosed only with the written approval of the Tribes who shared the information (PCR § 21082.3(c)(1-2)).

Consultation as defined in AB 52 consists of the good faith effort to seek, discuss, and carefully consider the views of others. Consultation between the lead agency and a consulting Tribe concludes when either of the following occurs: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists on a TCR; or (2) a consulting party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PCR § 21080.3.2(b)).

One tribe requested to consult on the Proposed Project. A teleconference meeting was held on January 5, 2016. The topics of conversation included a discussion of:

- Proposed project boundaries, construction areas, and staging areas;
- Location, age and depth of artificial fill;
- Depths of excavation into artificial fill and native soil;
- Presence or absence of TCRs
- Identification of tribal concerns about the proposed project, project area, or construction activities in relation to known cultural or tribal resources;
- Types of proposed mitigation measures;
- Plans for the treatment of human remains, if they should be encountered during construction activity;
- Establishing a tribal project review timeline; and
- Coordination of information exchanges in support of the tribe's review of the draft Tribal Cultural Resources chapter, and mitigation measures pertaining to cultural and tribal resources.

Zero TCRs were identified that may be impacted by the Proposed Project. Potential impacts include the inadvertent disturbance of presently unknown and unrecorded prehistoric cultural resources, or discovery of buried human remains during construction work.

In response to potential impacts identified during AB 52 consultation, Mitigation Measures C-1 and C-2 were developed to address these potential impacts as well as impacts to Cultural resources generally. These mitigation measures were circulated for tribal comment on January 10, 2017 and comments were received by CPUC on February 14, 2017. CPUC and the tribe were in agreement on the suggested revisions. This concluded the AB 52 consultation.

## Regulatory Background

This section includes a description of the tribal cultural resources regulatory framework.

## Federal

No federal regulations related to tribal cultural resources are applicable to the project. Section 106 of the National Historic Preservation Act does not apply because no federal agency discretionary action is required for the project, and no federal lands or monies are involved.

## State

### *California Environmental Quality Act*

CEQA requires that impacts to TCRs be identified and, if impacts will be significant, that mitigation measures be implemented to reduce those impacts to the extent feasible (PCR § 21081). In the protection and management of the cultural environment, both the statute and the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.) provide definitions and standards for management of TCRs.

The Public Resources Code section 21074 defines a Tribal Cultural Resource as "a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe." TCRs also include "non-unique archaeological resources" that may not be scientifically significant, but still hold sacred or cultural value to a consulting tribe.

A resource shall be considered significant if it is: (1) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PCR § 5020.1(k) (discussed in detail above); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in of PCR § 5024.1(c). In applying these

criteria, the lead agency must consider the significance of the resource to a California Native American tribe.

A project may have substantial adverse change in the significance of a TCR if:

- The adverse change is identified through consultation with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project (PCR § 21084.2).
- The resource is listed, or eligible for listing, in the California Register of Historical Resources or in a local register of historical resources, and it is demolished as described in detail above (State CEQA Guidelines section 15064.5 (b)).

The fact that a TCR is not listed in, or determined to be ineligible for listing in, the CRHR, is not included in a local register of historical resources, or is not identified in a historical resources survey does not preclude a lead agency from determining that the resource may be a historical resource. (Please refer to Section 5.5 for a detailed discussion of the term "historical resource" pursuant to Guideline 15064.5(a)).

Section 15064.5(b)(1) of the CEQA Guidelines explains that effect on historical resources (or TCRs) would be considered adverse if it involves physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. Adverse effects on historical resources may result in a project having a significant effect on the environment. Section 15064.5(c)(3) requires that TCRs receive treatment under PRC Section 21083.2, which requires that these resources be preserved in place or left in an undisturbed state. If these treatments are not possible, then mitigation for significant effects is required, as outlined in PRC Section 21082.2(c).

The statutes and guidelines cited above specify how TCRs are to be analyzed for projects subject to CEQA.

## 5.17.2 Environmental Impacts and Mitigation Measures

***Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:***

***(a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. There are no known TCRs that are listed in, or are known to be eligible for listing in, the California Register of Historical Resources or local register of historical resources within the Proposed Project or the 0.25-mile surrounding area. However, it is possible that previously unidentified TCRs that may be eligible for inclusion in the CRHR or local registers could be discovered and damaged, or destroyed, during ground disturbance, which would constitute a significant impact absent mitigation.

**Mitigation Measures.** Implementation of Mitigation Measures C-1 and C-2 would evaluate and protect unanticipated TCR discoveries, including historical and archaeological resources and human remains, thereby reducing this impact to less than significant.

**C-1** **Management of Unanticipated Discoveries of Historical Resources or Unique Archaeological Resources.** Unanticipated discovery protocols shall be communicated to project workers as part of the contractor education program. If previously unidentified cultural resources are identified during construction activities, construction work within 100 feet of the find shall be halted and directed away from the discovery until a Secretary of the Interior qualified archaeologist and tribal representative assesses the significance of the resource. The archaeologist, in consultation with the County, SHPO, any interested Tribes, and any other responsible public agency, shall make the necessary plans for recording and curating the find(s) and for the evaluation and mitigation of impacts if the finds are found to be eligible to the National Register of Historic Places or California Register of Historical Resources, or qualifies as a unique archaeological resource under CEQA Section 21083.2.

**C-2** **Appropriate Treatment of Human Remains.** Upon discovery of human remains, all work within 100 feet of the discovery area must cease immediately, the area must be secured, and the following actions taken:

- The land manager/owner of the site is to be called and informed of the discovery.
- The San Diego County Coroner's Office is to be called. The Coroner has two working days to examine the remains after notification (Health and Safety Code Section 7050.5(b). The Coroner will determine if the remains are archaeological/historic or of modern origin, and if there are any criminal or jurisdictional questions. The Coroner will make recommendations concerning the treatment and disposition of the remains to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.
- If the Coroner believes the remains to be those of a Native American, he/she shall contact the NAHC by telephone within 24 hours. The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the remains.
- The MLD has 48 hours to make recommendations to the land owner for treatment or disposition of the human remains. If the descendant does not make recommendations within 48 hours, the land owner shall re-inter the remains in an area of the property secure from further disturbance. If the land owner does not accept the descendant's recommendations, the owner or the descendant may request mediation by NAHC.

Per California Health and Safety Code, six or more human burials at one location constitutes a cemetery (Section 8100) and willful disturbance of human remains is a felony (Section 7052).

***(b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. There are no known TCRs identified by the consulting tribes during AB 52 Native American consultation or that were determined by the lead agency to qualify as a historical resource within the Proposed Project or a 0.25-mile surrounding area. However, it is possible that previously unidentified TCRs could be discovered and damaged, or destroyed, during ground disturbance, which would constitute a significant impact absent mitigation.

**Mitigation Measures.** Implementation of Mitigation Measures C-1 and C-2 (described above) would evaluate and protect unanticipated TCR discoveries, thereby reducing this impact to less than significant.

# 5.18 Utilities and Service Systems

| UTILITIES AND SERVICE SYSTEMS<br>Would the project: | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☒ | ☐ |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☒ | ☐ |
| e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ |
| g. Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☐ | ☒ |

Significance criteria established by CEQA Guidelines, Appendix G.

## 5.18.1 Setting

Utility and services system facilities associated with electricity, domestic (potable) water, stormwater, solid waste, communications, and natural gas are provided and maintained by a variety of local purveyors, including cities, counties, special districts, water agencies, and private companies. Utilities such as domestic water, wastewater and stormwater sewers, and natural gas are usually transmitted via underground pipelines or conduits. Electrical and telecommunication services can be installed underground or overhead on utility poles. Table 5.18-1 lists utility providers in the Oceanside area.

**Table 5.18-1. Utility Providers**

**Natural gas** – SDG&E
**Electricity** – SDG&E
**Water** – San Diego County Water Authority and Mission Basin
**Wastewater** – San Luis Rey Wastewater Treatment Plant and the La Salina Wastewater Treatment Plant
**Telephone** – AT&T, Cox Communications, and Time Warner Cable
**Solid Waste** – Waste Management of North County

Source: City of Oceanside, 2016.

### Utilities

The California Public Utilities Commission (CPUC) General Order 128, Rules for Construction of Underground Electric Supply and Communication Systems, specifies the construction materials, clearances and depths for the underground components of the proposed distribution system, and General Order 95,

Rules for Overhead Electric Line Construction Section 35, covers all aspects of design, construction, operation, and maintenance of electrical power lines and fire safety hazards. The Proposed Project facilities would be within SDG&E fee-owned property, franchise, or existing easements Existing utilities would be protected by clearances and depths that would meet requirements set forth through CPUC rules and through the City of Oceanside encroachment permit approval process.

### *Electricity and Gas*

Electricity and gas in the City of Oceanside are provided by SDG&E.

### *Water Supply*

The City of Oceanside has two direct sources of potable water: water purchased by San Diego County Water Authority (SDCWA) from the Metropolitan Water District (MWD) of Southern California and the Mission Groundwater Basin of Lower San Luis Rey River Valley (City of Oceanside, 2015a, as referenced in SDG&E, 2016).

SDCWA is a wholesale water agency that provides imported water to its 24 member agencies. The SDCWA, in turn, purchases the majority of its water from MWD, which is comprised of 26 cities and water agencies serving 18 million people across six counties. MWD imports water from two primary sources: the Colorado River via MWD's Colorado Aqueduct and northern California via the State Water Project. Water is delivered to southern California by way of MWD's approximately 242-mile-long aqueduct, which transports Colorado River water from Lake Havasu to MWD's service area. In addition, water from northern California is delivered to southern California through an approximately 444-mile-long aqueduct. The water is captured in reservoirs north of Sacramento and released through natural rivers and streams into the Sacramento–San Joaquin Delta. MWD then combines the Colorado River and State Water Project water at a facility in Riverside County. SDCWA supplies both treated and raw water imported to the City through five aqueduct connections. Treated water is delivered directly into the City's distribution system. Raw water is treated at the City's Robert A. Weese Filtration Plant, which can treat up to 25 million gallons of water per day, prior to delivery into the City's distribution system (City of Oceanside, 2010, as referenced in SDG&E, 2016).

In addition to water purchased from SDCWA, raw water is pumped from the Mission Groundwater Basin, which is then delivered to the Mission Basin Groundwater Purification Facility via City-operated well fields. The Mission Basin Groundwater Purification Facility supplies 15 percent of the City's water supply and can treat up to 6.4 million gallons per day of local brackish groundwater using a reverse osmosis treatment process to remove the salts contained within the groundwater in addition to a treatment to remove iron and magnesium (City of Oceanside, 2015a, as referenced in SDG&E, 2016). [SDG&E, 2016]

### *Wastewater/Sewerage*

All stormwater flow from the substation site is ultimately collected and conveyed by the storm drain system in Avenida del Oro. The Proposed Project area, located between Rocky Point Drive and Avenida del Oro at the southwestern end of Rocky Point Drive, has been previously graded with two catch basins, one on each parcel, that connect to the municipal storm drain system. Elevations in the Proposed Project area range from approximately 194 to 372 feet above mean sea level (msl) (Google, Inc., 2015, as referenced in SDG&E, 2016). The proposed Ocean Ranch Substation also would have two drainage basins that discharge to the municipal storm drain system.

The City of Oceanside's Wastewater Division collects, treats, and disposes of all of the City's sewage at the San Luis Rey Wastewater Treatment Plant and the La Salina Wastewater Treatment Plant. All sewage

is treated to levels set by the Environmental Protection Agency (EPA). The San Luis Rey plant serves areas east of Interstate 5 and the La Salina plant treats sewage from areas west of Interstate 5, downtown, and along the coast. Both plants discharge treated effluent through the Oceanside Ocean Outfall. Flows from Fallbrook Public Utilities District and Marine Corps Base Camp Pendleton are also discharged through the Oceanside Ocean Outfall. Wastewater Division staff are responsible for operating and maintaining over 450 miles of pipelines, 34 sewer lift stations, and an industrial waste inspection program (City of Oceanside, 2015b, as referenced in SDG&E, 2016). [SDG&E, 2016]

### *Cable and Telephone*

Telephone, wireless phone, video/cable, and internet services are available from AT&T for residents within the Proposed Project area. Cox Communications and Time Warner Cable also provide cable, broadband, and phone services (SDG&E, 2016).

### *Solid Waste*

Waste Management of North County provides contract trash services to the residential, multifamily, and commercial customers within city limits. Non-recyclable solid waste in the City of Oceanside is transported to the Palomar Transfer Station and ultimately disposed of at the El Sobrante Landfill. The El Sobrante Landfill is located at 10910 Dawson Canyon Road in Corona, California. The El Sobrante Landfill had 145.5 million cubic yards of capacity as of April 2009 and is expected to reach capacity by the year 2045 (CalRecycle, 2016). Table 5.18 2 lists the total and remaining capacities of solid waste processors currently serving the City of Oceanside from the most recently measured date of April 6, 2009.

**Table 5.18-2. Landfill Capacities**

| Landfill Name | Total Capacity (cu.yd.) | Remaining Capacity (cu.yd.) | Remaining Capacity (percent) | Maximum Throughput (tons/day) |
|---|---|---|---|---|
| El Sobrante Landfill | 184,930,000 | 145,530,000 | 78.7 | 16,054 |

Source: CalRecycle, 2016.

## Regulatory Background

This section includes a description of the utilities and public service systems regulatory framework.

## Federal

### *Clean Water Act Section 402: National Pollutant Discharge Elimination System*

Section 202 of the Clean Water Act (CWA) establishes the National Pollutant Discharge Elimination System (NPDES) permit program to regulate point source discharges of pollutants of Waters of the United States. Discharges or construction activities that disturb one or more acres, which includes the Proposed Project, are regulated under the NPDES stormwater program and are required to obtain coverage permit under a NPDES Construction General Permit. The Construction General Permit establishes limits and other requirements such as the implementation of the Stormwater Pollution Prevention Plan, which would further specify best management practices to avoid or eliminate pollution discharge into the nation's waters. The State Water Resources Control Board (SWRCB) issues both general and individual permits under this program. The SWRCB delegates much of its NPDES authority to nine regional water quality control boards. The Proposed Project's NPDES permits would be under jurisdiction of Region 9, the San Diego Regional Water Quality Control Board.

## State

### *California Integrated Waste Management Act of 1989*

Assembly Bill 939 codified the California Integrated Waste Management Act of 1989 in the Public Resources Code and established a hierarchy to help the California Integrated Waste Management Board (CIWMB) and local agencies implement three major priorities under the Integrated Waste Management Act: source reductions; recycling and composting; and environmentally safe transformation and land disposal. Waste diversion mandates are included under these priorities. The duties and responsibilities of the CIWMB have since been transferred to the California Department of Resources Recycling and Recovery (CalRecycle) after the abolishment of the CIWMB in 2010, but all other aspects of the Act remain unchanged.

The Act requires all local and county governments to adopt a waste reduction measure designed to manage and reduce the amount of solid waste sent to landfills. This Act established reduction goals of 25 percent by the year 1995 and 50 percent by the year 2000. Senate Bill 1016 (2007) streamlines the process of goal measurement related to Assembly Bill 939 by using a disposal-based indicator: the per capita disposal rate. The per capita disposal rate uses only two factors: the jurisdiction's population (employment can be considered in place of population in certain circumstances) and the jurisdiction's disposal as reported by disposal facilities. CalRecycle encourages reduction measures through the continued implementation of reduction measures, legislation, infrastructure, and support of local requirements for new developments to include areas for waste disposal and recycling on-site.

### *California Code of Regulations (Title 27)*

Title 27 (Environmental Protection) of the California Code of Regulations defines regulations and minimum standards for the treatment, storage, processing, and disposal of solid waste at disposal sites. The State Water Resources Control Board maintains and regulates compliance with Title 27 (Environmental Protection) of the California Code of Regulations by establishing waste and site classifications and waste management requirements for solid waste treatment, storage, or disposal in landfills, surface impoundments, waste piles, and land treatment units. The compliance of the Proposed Project would be enforced by the San Diego RWQCB Region 9 and the California Department of Resources Recycling and Recovery (CalRecycle) (formerly the California Integrated Waste Management Board). Compost facilities are regulated under CCR Title 14, Division 7, Chapter 3.1 Section 17850 through 17895, by CalRecycle (CalRecycle, 2012). Permit requests, Reports of Waste Discharge, and Reports and Disposal Site Information are submitted to the RWQCB and CalRecycle, and are used by the two agencies to review, permit, and monitor these facilities (County of San Diego, 2007).

## Local

As provided in CPUC General Order 131 D, the CPUC has exclusive jurisdiction over the siting, design, and construction of the Proposed Project, preempting local discretionary authority over the location and constructions of electrical utility facilities. Therefore, the Proposed Project is not subject to local discretionary utilities and services systems regulations. Nonetheless, as part of the environmental review process, consideration is given to relevant local plans and policies that pertain to utilities and services systems.

### *City of Oceanside General Plan-Land Use Element*

An objective for the City is to assure the long-term efficient economic and aesthetic provision of public utilities to the City and its residents and businesses. The City aims to provide sufficient buffering from utility corridors and surrounding land uses to protect public safety and welfare, and ensure the long-term use of utility corridors. The City also aims to assure the City's citizens are appropriately served with suffi-

cient energy in the long-term (City of Oceanside, 2002). The following policies generally relate to the Proposed Project with respect to utilities and service systems in the City of Oceanside (City of Oceanside, 2002):

**Utility Corridor Policies**

- Policy 2.721 A. The City shall require sufficient screening, fencing, noise attenuation, landscaping, open space setbacks, or other permanent mitigation or buffering measures between utility corridors and adjacent and surrounding land uses in order to minimize to the maximum extent possible negative impacts to adjacent surrounding uses from the particular utility corridor.
- Policy 2.721 B. The City shall encourage the coordination and combination of multiple utilities into one unified corridor or corridor network so that negative impacts associated with utility corridors can be more effectively and efficiently mitigated, overall corridor maintenance costs are decreased, less land is used in corridor right-of-ways, and the citizens of Oceanside will have a clearer understanding of the importance and scope of a utility corridor network.
- Policy 2.721 C. The City shall restrict any development, improvement, and/or use of a utility corridor to assure the long-term low cost maintenance of the utility or utility corridor.

**Water Supply Policies**

- Policy 2.722 A. The City of Oceanside, which buys water from the San Diego County Water Authority, is responsible for storage facilities and the distribution system.
- Policy 2.722 B. Water supply and distribution facilities shall be funded by assessment districts except in older portions of the City that already have service.
- Policy 2.722 C. New development in unserved areas shall be approved only where an assessment district is formed that will provide storage facilities and the distribution system prior to occupancy.
- Policy 2.722 D. The water supply and distribution system shall be designed for the logical service unit area to allow for development of the services unit area at the intensity proposed by the General Plan.

**Sewage Collection and Treatment Policies**

- Policy 2.723 A. The system should be designed for a logical service unit to allow for full development of the service area at the intensity proposed by the General Plan.

**Energy Policies**

- Policy 2.725 B. The City shall encourage the use of energy efficient design, structures, materials, and equipment in all land development or uses.
- Policy 2.725 C. The City shall encourage the use of long-term lower cost energy sources.
- Policy 2.725 D. The City shall require the undergrounding of energy transmission lines and distribution systems to new land developments or uses.

**Communication Systems Policies**

- Policy 2.726 A. The City shall encourage planning for the future communication system needs of individual land developments or uses.
- Policy 2.726 B. Communication facilities shall be required to conform visually with surrounding land uses and/or natural features.

- Policy 2.726 C. The City shall require the consolidation and joint-use of communication facilities and structures whenever possible.

***Pacific Coast Business Park, Industrial Master Development Plan***

The proposed Ocean Ranch Substation site is within the Pacific Coast Business Park, which is part of the industrially designated area in the central portion of the City of Oceanside encompassing 124.31 acres. The Pacific Coast Business Park is within the Rancho del Oro Specific Plan Area. This Plan provides updated regulations and design standards for the Pacific Coast Business Park property (City of Oceanside, 2005, as referenced in SDG&E, 2016). The following policies generally relate to the Proposed Project with respect to utilities and service systems in the City of Oceanside (City of Oceanside, 2005):

Utilities and Communication Devices

- *All electric, telephone, gas, and cable service lines to individual lots or sites shall be installed and maintained underground.*
- *Exterior onsite utilities, including but not limited to drainage systems, sewers, gas lines, water lines and electrical, telephone, and communications wires and equipment, shall be installed and maintained underground.*
- *Antennas and devices for transmission or reception of any type of signals shall be located so as to screen their view from public areas. All exposed devices require specific approval by the Pacific Coast Business Park Review Board.*
- *Electrical equipment shall be mounted on the interior of a building wherever practical. When interior mounting is not practical, electrical equipment shall be screened with walls, berms or landscape materials. Where exterior mounting is required, locating electrical equipment along the side or rear of a building is desirable.*
- *Private sewer components (manholes, clarifiers, etc.) shall not be located within project entry drives nor within landscape areas. The components should be located in the aisles of parking lots or service drives towards the rear of a site.*

### Applicant Proposed Measures

There are no APMs proposed with regard to Utilities and Service Systems.

## 5.18.2 Environmental Impacts and Mitigation Measures

***a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?***

*LESS THAN SIGNIFICANT*. The primary uses of water during construction will be for dust control, soil compaction, and cement mixing. Water used for dust control and soil compaction will be dispersed onsite and will either evaporate or be absorbed into the ground, while water used for cement mixing will become incorporated into the concrete mixture; therefore, no wastewater generation is anticipated. Operation and maintenance of the proposed project will also not generate wastewater since the substation will be unstaffed and will contain no sanitary facilities on site.

Dewatering during trenching for underground cable placement and during the construction of the project is possible, but not anticipated. In the event that dewatering is necessary, the water will be pumped out and treated and encountered groundwater will be tested to meet requirements set by the Regional Water

Quality Control Board (RWQCB). Further treatment of encountered groundwater will be performed if needed. The water will be discharged to land within the conditional allowable average limit, transported to a nearby sewer inlet, or disposed of at an approved SDG&E disposal site. The water would be treated on site and would not require treatment at a wastewater facility to meet RWQCB requirements. Thus, the proposed project will have less than significant impacts related to wastewater treatment requirements.

***b. Would the project require, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

*LESS THAN SIGNIFICANT*. The Proposed Project would generate minimal demand for water or wastewater treatment. Portable toilets would be provided for construction work crews and would be removed after construction is completed. These toilets will be maintained by a licensed sanitation contractor. The main uses of water on site during construction are for dust control, soil compaction, and cement mixing. Water used for dust control and soil compaction will be dispersed onsite and will either evaporate or be absorbed into the ground, while water used for cement mixing will become incorporated into the concrete mixture; therefore, no wastewater generation is anticipated. Upon completion of construction, the proposed project would not generate substantial demand for water or wastewater treatment because the substation would be an unstaffed, automated facility and would not have sanitation facilities located on site. The only demand for water would come from landscaping irrigation at the proposed substation, which would be supplied by the City of Oceanside and would result in a minor amount of water consumption. Existing wastewater and water treatment facilities are adequate to accommodate the demand generated by the Proposed Project. Thus, the project would have less than significant impact that would not increase the need for the construction or expansion of water or wastewater treatment facilities.

***c. Would the project require, or result in the construction of, new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

*LESS THAN SIGNIFICANT*. Construction of the Proposed Project would include grading and removal of existing vegetation from the proposed Ocean Ranch Substation site. Construction of the proposed project could temporarily accelerate sedimentation and reduce surface water quality by disturbing the immediate area of the substation. Stormwater drainage features, along with the construction best management practices (BMPs), would manage project-related stormwater without using offsite facilities. SDG&E will implement a Storm Water Pollution Prevention Plan (SWPPP) and a Spill Prevention, Control, and Countermeasure (SPCC) and adhere to its Water Quality Construction BMP Manual, all of which will minimize soil erosion and reduce drainage impacts. The proposed project site would be re-graded to make one large pad that is suitable for the substation equipment. As a result, the existing temporary desilting basin on the west pad will be re-graded and flow-through planter basins will be constructed. Similarly, the desilting basin on the east pad will be modified to serve as a permanent flowthrough planter basin. Runoff from the north-eastern corner of the site outside the limits of development will be collected by a series of catch basins and directed into the east basin. Because no new or expanded stormwater drainage facilities would be required for the project, this impact would be less than significant.

***d. Would the project have sufficient water supplies available to serve the Proposed Project from existing entitlements and resources, or would new or expanded entitlements be needed?***

*LESS THAN SIGNIFICANT.* Water would be required during construction for dust control, soil compaction, and concrete mixing and portable toilets would be provided for crew members. Tertiary-treated recycled water will be used to the extent feasible. However, if tertiary-treated recycled water is not available in

the required quantities at the time of project construction, potable water will be obtained from local water purveyors. The amount of water needed for dust control during construction would be minimal in comparison to available municipal water supplies, and water use for construction would be temporary. Upon completion of construction, the proposed project would require water only for landscaping irrigation at the proposed substation, which would be supplied by the City of Oceanside. Therefore, the proposed project would not be expected to exceed the existing water supplies available to serve the proposed project, and this impact would be less than significant.

***e. Would the project result in a determination by the wastewater treatment provider that serves or may serve the Proposed Project that it has adequate capacity to serve the Proposed Project's projected demand in addition to the provider's existing commitments?***

*LESS THAN SIGNIFICANT*. The proposed project would not generate wastewater during construction, operation, or maintenance. As discussed in item a above, there may potentially be wastewater created during project construction in the event that dewatering is needed, which is not anticipated. In such an event, the water would be treated and tested on site and would not require treatment by a separate wastewater treatment provider or facility. Disposal of water would be at an approved SDG&E disposal site. The water will be discharged to land within the conditional allowable average limit, transported to a nearby sewer inlet, or disposed of at an approved SDG&E disposal site. Any water potentially entering the municipal sewage system via a sewer inlet would be collected by the City of Oceanside's Wastewater Division and treated and disposed of at the San Luis Rey Wastewater Treatment Plant or the La Salina Wastewater Treatment Plant. The existing wastewater facilities would adequately accommodate the minor demand caused by project construction while serving existing commitments. Therefore, this impact would be less than significant.

***f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the Proposed Project's solid waste disposal needs?***

*LESS THAN SIGNIFICANT*. During construction, the Proposed Project will generate waste from refuse, spoils, trash, and packaging. Excess soil from the excavation of trenches may also be transported to a local recycling or appropriately permitted waste disposal facility if the soil is not re-used onsite or otherwise recycled. Construction-related solid waste would be transported to the Palomar Transfer Station. After consolidation, the waste would go to the El Sobrante Landfill in Corona. Minimal waste would be generated during the operation and maintenance of the substation, as it would be unstaffed with the exception of during routine monthly maintenance. The total solid waste generated by construction of the Proposed Project is anticipated to be minor compared to the capacity of existing landfills. Therefore, the impact of solid waste disposal on landfill capacity would be less than significant.

***g. Would the project comply with federal, state, and local statutes and regulations related to solid waste?***

*NO IMPACT*. The California Integrated Waste Management Act of 1989, which emphasizes resource conservation through the reduction, recycling, and reuse of solid waste guide solid waste management requires that localities conduct a Solid Waste Generation Study (SWGS) and develop a Source Reduction Recycling Element (SRRE). The proposed project would operate in accordance with these applicable Solid Waste Management Policy Plans by including recycling where feasible. As identified in item f above, the landfills serving the site would have sufficient capacity to accommodate project construction solid waste disposal needs, and project solid waste disposal would not require the need for new or expanded landfill facilities. Therefore, the proposed project would comply with federal, State, and local statutes and regulations related to solid waste disposal limits and landfill capacities. No impact would occur.

# 5.19 Corona and Induced Current Effects

## 5.19.1 Environmental Setting

### Corona

Corona is one of the phenomena associated with all energized electrical devices, including high-voltage transmission lines. The localized electric field near a conductor can be sufficiently concentrated to ionize air close to the conductors. This can result in a partial discharge of electrical energy called a corona discharge, or corona. The corona effect is the physical manifestation of discharged electrical energy into very small amounts of sound, radio noise, heat, and chemical reactions with air components. It is a phenomenon associated with all energized electrical devices but is especially common with high-voltage power lines.

The amount of corona produced by a power line is a function of several factors, including: line voltage; conductor diameter; conductor locations in relation to each other; condition of conductors and hardware; and local weather conditions including power line elevation above sea level. Corona typically becomes a design concern for power lines that are overhead at 230 kV and higher (i.e., transmission lines on poles or towers). It is less noticeable for lines that are operated at lower voltages (i.e., subtransmission and distribution-sized lines). The electric field gradient is greatest at the conductor surface. Larger-diameter conductors have lower electric field gradients at the conductor surface and, therefore, lower corona noise than smaller-diameter conductors. The corona effect would not be a design concern for underground portions of power lines, regardless of voltage level, because the energized conductors are fully enclosed in a semi-conducting layer within insulated cables that serve to equalize the electrical gradient at the surface of the components.

### Induced Currents

Electric currents can be induced in metallic objects located within the electric fields created by power lines. An electric current can flow when an object has an induced charge and a path to ground is present. The amount of induced current that can flow is important to evaluate from a safety perspective because of the potential for electrical shocks to people and the possibility of electric arcs that could form across small gaps between conductive surfaces. These arcs can have the secondary effect of igniting flammable materials in the vicinity of the arc. In addition, induced currents are evaluated for their potential to lead to corrosion of metallic objects from the discharge of the induced current to ground.

From a safety perspective, the National Electrical Safety Code (NESC) specifies that transmission lines be designed to limit short circuit current from vehicles or large objects near the line to no more than 5 milliampere (mA). The California Public Utilities Commission (CPUC) General Order 128, Rules for Construction of Underground Electric Supply and Communication Systems, specifies the construction materials, clearances and depths for the underground components of the proposed distribution system, and General Order 95, Rules for Overhead Electric Line Construction Section 35, covers all aspects of design, construction, operation, and maintenance of electrical power lines and fire safety hazards. The Public Utilities Code, CPUC General Orders, and the NESC also address shock hazards to the public by providing guidelines on minimum clearances to be maintained for practical safeguarding of persons during the installation, operation, or maintenance of overhead transmission lines and their associated equipment.

## 5.19.2 Environmental Impacts and Assessment

The CEQA Guidelines do not provide significance criteria for evaluating impacts from corona or induced current effects. Corona and induced current from high-voltage power lines can cause environmental impacts through:

**Commented [ab61]:** Could we include a slightly more summarized/shortened version as well? Similar to the checklist/endings of other chapters

**Commented [FG2R1]:** Not sure what you are looking for. This is not one of the normal items in Checklist. We don't make a conclusion on significance.

- Audible noise
- Radio and television interference
- Computer interference
- Disturbance of cardiac pacemakers
- Ignition of flammable materials
- Corrosion of buried metallic objects

The Proposed Project involves construction and operation of the new Ocean Ranch Substation with 69 kV power lines, 12 kV distribution lines, and telecommunications systems. No audible corona noise would occur with the new and modified underground 69 kV power lines because no new lengths of overhead line would occur with the Proposed Project. Existing overhead circuits operating at 69 kV typically cause noise at or below levels comparable to ambient baseline noise levels. With no new overhead high-voltage lines, there would be no impact from audible noise from the corona effect.

Although corona can generate high frequency energy that may interfere with broadcast signals or electronic equipment, this is generally not a problem for transmission or lower voltage power lines. The Institute of Electrical and Electronic Engineers (IEEE) has published a design guide (IEEE, 1971) that is used to limit conductor surface gradients so as to avoid corona levels that would cause electronic interference. Corona or gap discharges related to high frequency radio and television interference impacts are dependent upon several factors, including the strength of broadcast signals, and are anticipated to be very localized if they occur. Individual sources of adverse radio/television interference impacts can be located and corrected on the power lines. Conversely, magnetic field interference with electronic equipment such as computer monitors can be corrected through the use of software, shielding or changes at the monitor location. As a result, impacts from corona, radio/television interference, and magnetic field interference would be less than significant.

Induced currents and voltages on conducting objects near the proposed power lines would not pose a threat in the environment if the conducting objects are properly grounded. Project construction and operation would meet or exceed General Order 95 and General Order 128 standards, and work would be done in accordance with SDG&E's existing underground inspection and maintenance program and safety practices. Likewise, induced currents would not significantly increase the risk of fuel ignition in the area.

The electric fields associated with high-voltage transmission lines may be of sufficient magnitude to impact operation of a few older model pacemakers resulting in them reverting to an asynchronous pacing (IEEE, 1979). Substantial adverse effects would not occur with prolonged asynchronous pacing; periods of operation in this mode are commonly induced by cardiologists to check pacemaker performance. However, the electric field from the Proposed Project's 69 kV facilities would be shielded by being placed underground, which would eliminate any above ground electric field so that it would not impact operation of older model pacemakers. No mitigation measures would be required or recommended.

# 5.20 Mandatory Findings of Significance

| MANDATORY FINDINGS OF SIGNIFICANCE | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Does the 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? | ☐ | ☒ | ☐ | ☐ |
| b. Does the 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.) | ☐ | ☐ | ☒ | ☐ |
| c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☒ | ☐ | ☐ |

Significance criteria established by CEQA Guidelines, Appendix G.

***a. Does the 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?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.* The Proposed Project would be located on a previously filled and graded site supporting sparse vegetation. As described in Section 5.4, Biological Resources, no habitat for special-status species have been identified in the project study area. The project is not expected to result in impacts to habitats that support sensitive species. However, some species, such as burrowing owl, may locate in disturbed sites and some proposed staging yard sites have vegetation that may be used by special-status species. Implementation of the Applicant Proposed Measures BIO-1 through BIO-4 and Mitigation Measures B-1 (Biological Monitoring and Reporting) and B-2 (Worker Training), described in Section 5.4.2, would reduce these potential impacts to less than significant levels.

Similarly, Section 5.5, Cultural Resources, shows that the project would have a less than significant impact to important examples of the major periods of California history or prehistory. As described in Section 5.5, Cultural Resources, the Proposed Project could have an adverse effect on previously undiscovered cultural resources. With implementation of Mitigation Measure C-1 (Management of Unanticipated Discoveries of Historical Resources or Unique Archaeological Resources) the project would not eliminate important examples of major periods of California history or prehistory.

***b. Does the 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, effects of other current projects, and the effects of probable future projects.)***

*LESS THAN SIGNIFICANT*. CEQA defines a cumulative impact as an effect that is created as a result of the combination of the proposed project together with other projects (past, present, or future) causing

related impacts. Cumulative impacts of a project need to be evaluated when the project's incremental effect is cumulatively considerable and, therefore, potentially significant.

A list of cumulative projects used for this analysis is provided in Table 5.20-1. The list includes projects in the vicinity of the project area in the City of Oceanside in San Diego County. The projects were reviewed to identify whether the proposed project could contribute to cumulatively significant impacts when evaluated in combination with other projects. The projects listed are located a mile or less from the proposed substation site. Current and/or probable projects near staging yards for the proposed project were not analyzed for cumulative effects due to the minimal impacts from the loading and unloading activities that would occur should these sites be used by SDG&E and the unlikely event that these sites are used at all.

**Table 5.20-1. Planned and Current Projects in the Vicinity of the Proposed Project**

| Project Name | Address | Proximity to Substation Site (approx.) | Type of Development | Description | Size (approx.) | Status | Anticipated Construction Schedule |
|---|---|---|---|---|---|---|---|
| College Boulevard Improvement Project | Intersection of College Blvd. and Oceanside Blvd. | 0.5 miles | Nonresidential | 4-lane to a 6-lane expansion | — | P | Unknown |
| Inland Rail Trail Bikeway | Through the cities of Oceanside, Vista, San Marcos, and Escondido | 0.25 miles | Nonresidential | Part of the bikeway will pass near the project site | 21 miles | U | 2015–2018 |
| FedEx Distribution Center | 1400 Block Avenida del Oro | 0.03 miles | Nonresidential | Package distribution center | 38 acres | U | 2015–2017 |
| Da Vita Dialysis Medical Building | 4182 Oceanside Blvd. | 0.41 | Nonresidential | Medical office building | 0.24 acres | U | 2016–Unknown |
| Pacific Ridge | Northwest corner of College Blvd. and Old Grove Rd. | 0.35 | Residential | 317 residential units | 28 acres | U | 2016–Unknown |

Source: SDG&E 2016; City of Oceanside, 2016.
Status: P = The project is pending in the formal application review process; U = The project is under construction.

As discussed in preceding Sections 5.1 through 5.19, many of the potential impacts of the proposed project would occur during construction, with few lasting operational effects. Because the construction-related impacts of the project would be temporary and localized, they would only have the potential to combine with similar impacts of other projects if they occur at the same time and in close proximity to the proposed project site. The construction of the projects listed in Table 5.20-1 are likely to overlap with that of the proposed substation at some point during its construction. The cumulative temporary and localized impacts of the construction of the proposed project are considered by issue area below. In addition, long-term impacts from the proposed project have the potential to combine with impacts from the projects listed in Table 5.20-1. These impacts are also considered by issue area.

**Aesthetics.** With the incorporation of SDG&E's proposed Standard Operating Procedures for aesthetics (Section 5.1), such as the Conceptual Landscape Plan, perimeter wall, and visual screening of staging yards, construction and operation of the proposed project would not result in significant impacts to visual resources. The proposed substation would be screened from public views by project landscaping,

a perimeter wall, and existing vegetation. The perimeter wall would be designed to blend with the neighboring buildings and provide continuity with the existing landscape. Transmission and distribution lines associated with the project would be installed underground. The most visually prominent feature of the Proposed Project from offsite would be a monopole and microwave dish installed at the south end of the property. Given the nearby light industrial and commercial development, the project's appearance will generally be consistent with the existing setting. Additional lighting and glare from the proposed project combined with those from the projects listed in Table 5.20-1 would have the potential to impact aesthetics in the area. However, while the incremental change in visual conditions associated with the proposed project would contribute to a cumulative change in visual conditions, it represents only a relatively minor incremental change in cumulative conditions. Therefore, the project's visual effects are less than significant and are not considerable enough to represent a significant cumulative impact.

**Agriculture and Forestry Resources.** There is no agricultural activity at the site and it is not zoned for agricultural uses by the City of Oceanside, nor is there agricultural activity in the vicinity of the site. The Proposed Project site is not in an area designated as "good" or "fair" for farming and is zoned for Limited Industrial uses and Planned Development. In addition, the substation site is previously disturbed and graded. The project would not contribute to cumulative impacts to agriculture and forestry resources.

**Air Quality.** Air emissions would result from both construction and operation of the substation. Emissions during the construction phase would include criteria air pollutants that could contribute to existing or projected violations of the ambient air quality standards for ozone and PM10. Other pollutants resulting from construction activities are accounted for in emissions inventories for regional air quality maintenance plans and would not impede attainment or maintenance of ozone or carbon monoxide (CO) standards. Excavation, grading, and other construction-related activities could potentially expose sensitive receptors to construction-related emissions, including emissions of fugitive dust, DPM, and other toxic air contaminants, which would expose the receptors to increased health risk and hazards. These would occur only during construction. Compliance with San Diego Air Pollution Control District (SDAPCD) and implementation of SDG&E's Standard Operating Procedures discussed in Section 5.3, Air Quality, and Section 4.12.3 of the Project Description, would reduce air emissions of particulate matter from the project to a less-than-significant level and the proposed project would not have a significant cumulative impact during construction.

SDG&E states that operation and maintenance activities would not materially increase with the addition of the proposed facilities to SDG&E's system. Since the substation would be unmanned, there would be no vehicular emissions associated with regular commuting to and from the substation. The operation and maintenance emissions (e.g., limited vehicle use) would be less than the emissions during construction activities and also less than the significance thresholds. Concurrent construction of other projects in close proximity to the proposed project would result in increased local air quality impacts for the duration of simultaneous construction activities. However, simultaneous construction projects would also need to comply with SDAPCD rules and regulations regarding criteria pollutants. Any potential adverse cumulative air quality impacts would be short-term (lasting for the duration of construction) and would not be cumulatively considerable; therefore, the cumulative impact would be less than significant.

**Biological Resources.** The Proposed Project, including the substation site and staging yards, is within an urbanized area and adjacent to busy roadways. Due to the previous grading and site preparation activities that were conducted for the Pacific Coast Business Park, no habitat for special-status plant species remains on the proposed project site. Therefore, construction and operation and maintenance of the Proposed Project would have no impacts to special-status plants or their habitat. However, pockets of open space remain and may be used by wildlife for foraging and breeding habitat and dispersal routes.

These biological resources could be affected by noise, dust, ground disturbance, sedimentation, and potential spills of hazardous materials. Potential impacts from the proposed project would be less than significant with the implementation of APMs and Mitigation Measures B-1 and B-2 discussed in Section 5.4, Biological Resources. These measures include biological monitoring, reporting, and surveys. Due to the predominance of disturbed lands in the project area, the proposed project would not represent a significant contribution to cumulative impacts. Therefore, no contribution to cumulative impacts would occur. In addition, the Proposed Project, and those listed in Table 5.20-1, are located in the San Diego Multiple Habitat Conservation Program area. Each of these projects are therefore required to minimize any impacts to state and federally listed species and/or habitats through compliance with CEQA, the federal ESA, the CESA, and/or applicable local habitat conservation plans. Thus, any impacts to biological resources from these projects would be avoided and, as such, cumulatively considerable impacts to biological resources would be less than significant.

**Cultural and Paleontological Resources.** There are no known historical or unique archaeological resources identified within the Proposed Project area; however, previously unknown buried historical resources or human remains could be discovered and damaged, or destroyed, during ground disturbing work. Short-term construction activities and operation and maintenance activities would not significantly affect any unknown cultural resources or human remains with the implementation of Mitigation Measures C-1 and C-2, as discussed in Section 5.5, Cultural and Paleontological Resources. In addition, as part of SDG&E's Standard Operating Procedures, workers would receive training through an environmental and safety awareness program that includes education on paleontological resources. No cultural resources would be affected during project construction or during operation of the project, and no contribution to cumulative impacts would occur.

**Geology and Soils.** The project would not increase potential risks associated with seismic events or other geologic hazards. Short-term construction impacts to soils, including unstable soils, have the potential to occur; however, implementation of SDG&E's Standard Operating Procedures, Best Management Practices outlined in the SDG&E's Water Quality Construction BMP Manual, and final geotechnical recommendations would reduce the impacts to a less than significant level and the proposed project impacts are not considerable enough to represent a significant cumulative impact. Adherence to similar design and engineering standards, which are applicable to all of the projects listed in Table 5.20-1, ensure that their cumulative impacts to geology and soils would also be less than significant.

**Greenhouse Gas Emissions.** Greenhouse gas (GHG) emissions would result from the burning of fuel required to operate construction equipment and vehicle use during construction activities. Primary GHG emissions during construction are associated with $CO_2$ from the combustion of gasoline and diesel fuel in equipment and vehicles. $CH_4$ and $N_2O$ are also emitted from fuel combustion but at rates of less than 1 percent of the mass of $CO_2$ combustion emissions. Construction-related emissions would be distributed over 20 months. These estimated levels would not exceed the threshold level of 25,000 metric tons per year for annual mandatory reporting of GHGs. Any potential adverse GHG impacts would be short-term and not cumulatively considerable; therefore, GHG emissions during construction would have a less than significant cumulative impact.

GHG emissions from operation and maintenance would be minimal, as the substation and power lines would be unmanned and would require only infrequent maintenance. Potential leaks due to the use of sulfur hexafluoride ($SF_6$) as an insulating agent within the circuit breakers at the substation during operation and maintenance will be monitored and reduced through SDG&E's incorporation of their Standard Operating Procedures and would comply with California Air Resources Board (CARB) requirements on use and reporting. The small amount of emissions created during construction and operation and main-

tenance would result in a relatively minor incremental change in cumulative conditions and would not significantly contribute to cumulative impacts.

**Hazards and Hazardous Materials.** The use of hazardous materials for the project would be minimal during construction and operation. Hazardous materials would be stored and used in compliance with applicable regulations. The project would not result in an increase in usage of hazardous materials. Impacts from routine use, transportation, disposal, and accidental spillage of hazardous materials would be reduced to a less than significant level with implementation of SDG&E's Standard Operating Procedures and Mitigation Measure T-1 discussed in Section 5.8, Hazards and Hazardous Materials; no contribution to cumulative impacts would occur.

**Hydrology and Water Quality.** The project would not substantially change existing drainage patterns at the site, which was previously filled and graded. The Proposed Project would require minimal water for dust control during construction and minimal use of water for irrigation of landscape vegetation during operation. The existing drainage pattern on the site would be altered internally by regrading and construction of new planter basins at the location of existing detention basins. There would be altered drainage paths to the new basins, but this would have no adverse effect on overall drainage patterns. Dewatering during trenching for underground cable placement and during the construction of the project is possible, but not anticipated. In the event that dewatering is necessary, the water would be pumped out and treated and encountered groundwater would be tested to meet requirements set by the Regional Water Quality Control Board (RWQCB). With the implementation of the measures discussed in Section 5.9, Hydrology and Water Quality, such as SDG&E's Water Quality Construction BMP Manual and their Storm Water Pollution Prevention Plan (SWPP), the construction and operation of the substation would not adversely impact hydrology or water quality in the project area or contribute to a significant cumulative impact.

**Land Use.** The Proposed Project is consistent with local zoning. Currently, the site is located on disturbed land, which consists of nonnative vegetation and soils characterized by physical disturbance. The current land use classification for the proposed Ocean Ranch Substation and all four staging yards is undeveloped, disturbed land. The surrounding land uses in the project area and adjacent areas include light industrial and commercial. In addition, the proposed project, as well as the projects listed in Table 5.20-1, are required to minimize any impacts to state and federally listed species and/or habitats through compliance with CEQA, the federal ESA, the CESA, and/or applicable local habitat conservation plans. The project would, therefore, not conflict with applicable land use policies and regulations and would not contribute to cumulative impacts to land use.

**Mineral Resources.** No commercial mineral resources are known to exist within the project area nor within the vicinity of the substation site. Therefore, the proposed project would not result in the loss of availability of a known mineral resource. The project would not contribute to potential cumulative impacts that may result in the loss of mineral resources.

**Noise.** The proposed project is not expected to contribute to a long-term cumulative impact on ambient noise levels in the project area. Noise from construction activities would be audible to nearby businesses, but most construction would be limited to daytime hours and would be short-term. Any required nighttime work would be of extremely short duration. Impacts from noise to nearby sensitive receptors (e.g., schools, residences) would be less than significant through compliance with applicable noise codes and the implementation of Mitigation Measures N-1 through N-4. It is assumed that the projects listed in Table 5.20-1 would also be constructed during daytime construction timeframes. Besides the FedEx Distribution Center, which is expected to be completed before construction of the proposed project is set to begin, none of the projects listed in Table 5.20-1 are located in the immediate

vicinity of the proposed project or have sufficiently varied construction schedules as to make combined construction noise unlikely. These projects are therefore not likely to combine with noise generated from the construction of the proposed project to create significant adverse effects since noise reduces rapidly with distance.

Operational noise levels of the substation would be within allowable limits. Routine inspection and maintenance of the proposed project would be accomplished through periodic visits to the substation site and would not normally involve a large crew. The project would result in a less than significant noise impact during construction and operations and will not contribute to a significant cumulative impact.

**Population and Housing.** The proposed project would not result in impacts to population and housing. During its construction, the substation would provide short-term jobs for a small workforce. Construction workers would be existing local SDG&E staff or contracted workers from the region. These jobs are not anticipated to result in workers relocating to the area. The project would not displace any existing housing or people. The proposed project, combined with those from the projects listed in Table 5.20-1, will have the potential to increase the population in the area due to increased job or housing opportunities. The Proposed Project itself can facilitate future planned growth by ensuring reliable electricity to the area served by the substation. While the development of these properties may induce some population growth, this has already been accounted for through the General Plan for the City of Oceanside. The substation is proposed to increase system reliability and to serve planned growth in the area. The incremental change in visual conditions associated with the proposed project represents only a relatively minor incremental change in cumulative conditions. Therefore, the project's population and housing impacts would be less than significant and are not considerable enough to represent a significant cumulative impact.

**Public Services.** The Proposed Project would not require the cessation or interruption of fire or police protection services, schools, access to public parks, or other public facilities; nor would it required the construction of new public service facilities. Following construction, operation of the substation could result in instances requiring fire protection or police protection services. The completion of the projects listed in Table 5.20-1, in particular the proposed the residential development, may have the potential to also increase the demand for public services and public facilities, including schools, parks, and fire and police protection. However, impacts from the proposed project on public services would be incremental and would not contribute to a cumulatively significant impact.

**Recreation.** Although some workers may use nearby park facilities during project construction, increased use would be minimal and temporary and would not contribute substantially to the physical deterioration of existing facilities. The projects from Table 5.20-1 also have the potential to add users to park facilities, but the increased use would also be minimal and, in most cases, temporary. The project would have less than significant effects on recreation and would not contribute to cumulative effects associated with other projects.

**Transportation and Traffic.** Construction of the proposed project would have the potential for temporary impacts to traffic volumes, level-of-service standards, road hazards, and emergency access. Use of local roads for transport of construction equipment and construction personnel would increase traffic slightly but would be temporary and short-term, and would not exceed existing capacities. The underground power line duct bank installation would require temporary lane closures. Impacts due to traffic and temporary lane closures as a result of the construction of the proposed project would be reduced to a less than significant level with implementation of SDG&E's Standard Operating Procedures and Mitigation Measure T-1, Construction Traffic Control Plan, discussed in Section 5.16, Transportation and Traffic. Impacts from the Proposed Project, combined with construction of the projects listed in Table 5.20-1,

would have the potential to cumulatively impact transportation and traffic in the surrounding area; however, the construction schedules of the projects listed in Table 5.20-1 and that of the proposed project are varied, with the construction of the FedEx Distribution Center, which is closest to the proposed substation site, expected to be completed by the time the proposed project would begin construction. In addition, it is not anticipated that the planned and current projects in the proposed project's vicinity will require lane closures simultaneously. Adherence to the measures discussed in Section 5.16 will ensure that the proposed project's cumulative impacts transportation and traffic will be incremental, short-term, and less than significant.

**Tribal Cultural Resources.** There are no known Tribal Cultural Resources (TCRs) identified during AB 52 Native American consultation or that are listed in, or are known to be eligible for listing in, the California Register of Historical Resources (CRHR) or local register of historical resources within the Proposed Project or the 0.25-mile surrounding area. However, it is possible that previously unidentified TCRs that may be eligible for inclusion in the CRHR or local registers could be discovered and damaged, or destroyed, during ground disturbance, which would constitute a significant impact absent mitigation. Mitigation Measures C-1 and C-2, discussed in sections 5.5, Cultural and Paleontological Resources, and 5.17, Tribal Cultural Resources, would evaluate and protect unanticipated TCR discoveries. Adherence to the mitigation measures would ensure that no tribal cultural resources would be affected during project construction or during operation of the project, and no contribution to cumulative impacts would occur.

**Utilities and Service Systems.** The construction of the Proposed Project would temporarily require a minimal water supply and would potentially generate wastewater that would be appropriately treated. Construction would require the disposal of a less than significant amount of all types of waste. No expanded facilities or services would be needed for the project, and use and disposal of all water and waste products would comply with all applicable laws and regulations. Since the substation would be an unstaffed, automated facility and would not have sanitation facilities located on site, impacts to utilities and service systems during operation and maintenance would be mostly limited to water use for landscape irrigation at the site that would result in a minor amount of water consumption. Therefore, a less than significant contribution to cumulative impacts to utilities and service systems would occur.

**Corona and Induced Current Effects.** No other planned or current project in the vicinity of the proposed project, besides the proposed project, will result in corona or induced current effects due to the nature of the purpose and design of those projects. The proposed project will not contribute to a cumulative impact to corona and induced current effects.

***c. Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?***

*LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED*. The Proposed Project would not substantially adversely affect human beings directly or indirectly. The Initial Study identified no environmental effects that would cause substantial adverse effects on human beings. Adverse effects would be mitigated by implementation of APMs and mitigation measures and in most instances would be related to short-term construction impacts. There are no residences or schools adjacent to or in close proximity to the project; the nearest schools are 0.25 miles distant and the nearest residences are 0.3 miles distant. Nearby businesses could be affected during construction by impacts related to air quality, hazardous materials, and noise. These potential impacts would be reduced to a less than significant level with the implementation of the APMs and mitigation measures included in this Initial Study.