San Juan Creek Ocean Outfall Junction Structure Rehabilitation

Initial Study and Mitigated Negative Declaration

Prepared by:

South Orange County Wastewater Authority

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SEPTEMBER 2015

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1 INTRODUCTION

The South Orange County Wastewater Authority (SOCWA) is a Joint Powers Authority with ten member agencies. Based out of Dana Point, California, SOCWA operates three treatment plants and two ocean outfalls.

SOCWA's San Juan Creek Ocean Outfall discharges treated wastewater, known as effluent, from four upstream water reclamation plants:

- City of San Clemente Water Reclamation Plant
- SOCWA J.B. Latham Treatment Plant
- SMWD/MNWD Plant 3A
- Santa Margarita Water District Chiquita Water Reclamation Plant

The land and marine sections of the outfall were constructed in 1979. Both outfall sections were constructed with 57-inch reinforced concrete pipe (RCP). The outfall extends approximately 10,550 feet into the Pacific Ocean. The Junction Structure is located in Doheny State Beach near the outlet of the San Juan Creek to the Pacific Ocean. Typically, the structure is buried beneath the sand at the State Beach, though sometimes it is uncovered and visible to beachgoers. **Exhibit 1** and **2** present the regional location and project vicinity, respectively. The Junction Structure is a 10 foot diameter reinforced concrete structure that forms the interface between the land and marine sections of the outfall. The original construction included a reinforced concrete top with a four-foot square, bolted steel access hatch to allowed access into the outfall. In the early 1990's, the top was modified to increase the maximum internal hydrostatic pressure. This modification project also eliminated the hatch, rendering the Junction Structure inaccessible for internal inspections of the outfall. The Junction Structure currently serves no functional purpose.

In 2006, SOCWA retained Carollo Engineers to evaluate the hydraulic capacity of the San Juan Creek Ocean Outfall. Part of this evaluation included an analysis of the pressure rating of the system. The analysis found structural weakness that could compromise the Junction Structure and possibly result in the spill or unregulated discharge of treated effluent within the San Juan Creek land and ocean outfall. A subsequent finite element analysis of the Junction Structure confirmed the weakness of the structure at the connection points for the 57-inch diameter pipe. Carollo Engineers designed a structural reinforcement to the exterior of the existing structure. Installation of the structure would require excavation to a point 20 feet below sea level. This would require isolation and dewatering of the area around the structure.

To eliminate the need for excavation outside of the Junction Structure and minimize the impact on Doheny State Beach activities, SOCWA retained Black and Veatch to develop and evaluate alternatives for rehabilitating the San Juan Creek Outfall Junction Structure. Black and Veatch recommended Alternative 1B-5: Installing an internal stainless steel (SS) pipe liner through the Junction Structure with external pipe seals on both ends. Important aspects of the project included maximizing construction safety and minimizing disruption to the State Beach.

Black and Veatch retained Dudek to complete Environmental Services for the project. These Environmental Services include obtaining the necessary permits and approval to conduct the project as well as completing a Biological Resources Letter Report and a Cultural Resources Inventory Study to support the project's CEQA Mitigated Negative Declaration.

1.1 California Environmental Quality Act Compliance

As a local public agency, the South Orange County Wastewater Authority must comply with the California Environmental Quality Act (CEQA, *California Public Resources Code* §21000, et seq.) when undertaking projects that may either cause a direct or indirect effect on the environment. This Initial Study and Mitigated Negative Declaration were prepared in accordance with CEQA and the CEQA Guidelines (*California Code of Regulations* §15000, et seq.).

Following the requirements of CEQA, the Initial Study checklist form and explanation discussion format was completed to evaluate the project's impact on the environment. The explanations identifying environmental effects or lack thereof contain evidence such as facts, documents, or technical studies to support its findings. Any supporting documents referenced in the Initial Study are included in Section 4: References and Preparers.

1.2 Project Planning Setting

The San Juan Creek Ocean Outfall Rehabilitation Project Initial Study and Mitigated Negative Declaration were completed by SOCWA staff with support from Dudek and Black & Veatch.

1.3 Public Review Process

From September 21, 2015 to October 21, 2015, the public, interested parties and all affected agencies are invited to review the Mitigated Negative Declaration and Initial Study, and submit written comments. Written comments should be received prior to, or be submitted verbally during the Public Hearing on November 5, 2015 at the SOCWA Dana Point Administrative Office. Written comments or questions can be submitted to the contact person listed in the Initial Study Checklist.

2 SUMMARY OF FINDINGS

The following environmental factors will not be impacted by the project: Aesthetics, Agriculture and Forestry Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation and Traffic, and Utilities and Service Systems.

2.1 Environmental Factors Potentially Affected

Though the following environmental factors could be potentially affected by the project, there will be no significant effect on the environment due to the adoption of mitigation measures: Air Quality, Biological Resources, Greenhouse Gas Emissions and Noise.

2.2 Environmental Determination

After careful consideration of state law and CEQA procedures, SOCWA has determined that the San Juan Creek Ocean Outfall Junction Structure Rehabilitation Project will file a Mitigated Negative Declaration (MND) and will not need to prepare an Environmental Impact Report (EIR). This determination is based on the findings that though the environmental factors listed in Section 2.1 could be potentially affected by the project, the adoption of mitigation measures will prevent any significant effects from occurring.

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3 INITIAL STUDY CHECKLIST

A. Project title:

San Juan Creek Ocean Outfall Junction Structure Rehabilitation

B. Lead agency name and address:

South Orange County Wastewater Authority
34156 Del Obispo Street
Dana Point, CA 92629

C. Contact person and phone number:

Janie Chen, Environmental Compliance Analyst, (949) 234-5409

D. Project location:

The project proposes to rehabilitate the existing South Orange County Wastewater Authority (SOCWA) San Juan Creek Ocean Outfall Junction Structure. All proposed improvements are located within the Junction Structure. The structure is located at Doheny State Beach in Orange County, California, adjacent to San Juan Creek and approximately 200 feet from the Doheny State Beach Campground. The project will be completed in two phases, Phase I and Phase II, with a construction work area of 1.5 acres and approximately 3.0 acres respectively. The work areas consist of the main construction work site surrounding the Junction Structure, a number of reserved campsites, and access roads at the Doheny State Beach Campground.

The project is located on the U.S. Geological Survey (USGS), 7.5 minute map, Dana Point quadrangle: Section 23; Township 8 South; Range 8 West; latitude 33°27'43.00"N; and longitude 117°40'56.62"W. A map of each work area can be found in **Appendix A: Narrative Outline.**

E. Project sponsor's name and address:

South Orange County Wastewater Authority
34156 Del Obispo Street
Dana Point, CA 92629

F. General plan designation:

The project site is located at Doheny State Beach, an 86-acre State Recreation Unit of the California Department of Parks and Recreation. Per the Doheny State Beach General Plan & Draft Environmental Impact Report (2003), Doheny State Beach is classified as a State Beach pursuant to Section 5019.56(c) of the California Public Resources Code (PRC).

G. Zoning:

Recreation (REC)

H. Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):

The proposed Project consists of the inspection, assessment, and rehabilitation of the Junction Structure. Located at Doheny State Beach, adjacent to San Juan Creek and approximately 200 feet from the Doheny State Beach Campground, the Junction Structure is a reinforced concrete structure, approximately 10 feet inside diameter by 26 feet tall. The top of the Junction Structure is 15 feet in diameter and has a top elevation of approximately 6.5 feet above MSL. The typical elevation of the beach in the vicinity of the structure is approximately 10 feet above MSL. Temporary excavation of beach sand will therefore be necessary to gain access to the structure for performance of its rehabilitation.

Because the outfall is open to the ocean, it is not feasible to dewater the structure during rehabilitation. The proposed rehabilitation will be completed by divers. To improve worker safety, SOCWA and its member agencies will retain effluent upstream rather than discharge it to the outfall. This flow sequestration can only be performed during low flow periods during early morning hours, and due to storage availability, only for limited periods of time (approximately 4 to 5 hours), after which time the retained flows need to be released to the outfall. Furthermore, these flow sequestrations can only be accomplished once per week. As a result, the rehabilitation project will be carried out in phases with multiple steps over a period of several weeks.

Finally, the sequestrations can only be accomplished during times of year when overall flows into the collection system are lowest. These low flow periods occur typically in the Spring and Fall, after and prior to the rainy season, respectively.

Due to its location on Doheny State Beach, construction work is not allowed between Memorial Day and Labor Day. To accommodate all of these constraints, the Project will be completed in two phases and during Spring or Fall. Phase 1 will consist of an assessment of the condition of the structure, and taking of measurements to allow for custom fabrication of the stainless steel pipe inserts. Phase 2 will be the rehabilitation itself. During the time between phases, the contractor will fabricate the piping and obtain other rehabilitation materials.

Please see the San Juan Creek Ocean Outfall Junction Structure Rehabilitation Narrative Outline (henceforth, Project Narrative) in **Appendix A: Narrative Outline.**

I. Surrounding land uses and setting (Briefly describe the project's surroundings):

The San Juan Creek Ocean Outfall Junction Structure is located in Doheny State Beach, a popular beach used for camping, surfing, and outdoor recreation. The land surrounding the Junction Structure, as well as nearby San Juan Creek, is designated as a State Beach pursuant to Section 5019.56(c) of the California PRC. According to the California PRC, State Beaches are "areas with frontage on the ocean or bays designed to provide swimming, boating, fishing, and other beach-oriented recreational activities." Doheny State Beach is bound by Pacific Coast Highway and Coast Highway to the northeast, Del Obispo Street and Dana Point Harbor to the west, and the Pacific Ocean to the south. The land surrounding Doheny State Beach is primarily used for residential and commercial development. SOCWA's administrative office and J.B. Latham Treatment Plant are located approximately 0.5 miles northwest of the Junction Structure project site.

J. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

California State Parks, California Coastal Commission, Regional Water Quality Control Board, California Dept. of Fish and Wildlife, Army Corps of Engineers, California Coastal Commission, Regional Water Quality Control Board, California Dept. of Fish and Wildlife.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology and Soils
☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☐ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☐ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☐ Transportation and Traffic	☐ Utilities and Service Systems	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Janie Chen — 9/21/2015

Signature — Date

Signature — Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and

   b) The mitigation measure identified, if any, to reduce the impact to less than significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
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?	☐	☐	☒	☐

3.1 Aesthetics

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

Less Than Significant Impact. Doheny State Beach is bound to the northeast by Pacific Coast Highway and Coast Highway, a City designated scenic highway and landscape corridor, respectively. **Exhibit 3** presents views of the Junction Structure work area from various viewpoints on these two highways. **Exhibits 3a-e** demonstrate that very little of the work area is visible from these two routes. **Exhibit 3f** shows the current view of the Junction Structure work area from the northern Doheny Beach day use area. On the other hand, **Exhibit 3g** indicates that the project will have a temporary impact on the scenic vista of the Pacific Ocean for visitors within the Doheny Beach Campground due to the installation of fencing and sound reducing barriers around the work area perimeter as well as the staging of construction equipment within the campground. However, this impact will only last the duration of the condition assessment and separate construction process, approximately six weeks each. Construction activities will not occur between Memorial Day and Labor Day, thus avoiding any aesthetic impacts during the summer months when coastal visits are at their highest.

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

Less than Significant Impact. Some of Doheny State Beach is visible from Pacific Coast Highway and Coast Highway, which run along its northeast border. Pacific Coast Highway is designated as a Scenic Highway corridor and Coast Highway is designated as a Landscape Corridor in the Dana Point General Plan, though neither highway is officially designated as a California State Scenic Highway. Furthermore, the completed project is contained within the Junction Structure and does not entail damaging any trees, rock outcroppings or historic buildings. Therefore, seeing as how the project is not located within a state scenic highway nor does it damage scenic resources, impacts would be less than significant.

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

Less Than Significant Impact. While the visual character or quality of the site and its surroundings may be temporarily impacted during construction due to the installation of temporary sound barriers and fencing, there will be no long-lasting or substantial degradation of the area's aesthetics. Rehabilitation of the Junction Structure will be contained below ground and the above ground surroundings will be returned to its natural state.

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 Impact. Some construction will take place at night and require the brief use of construction lighting. The nearest campsite to project site is Campsite #45, which is located approximately 215 feet from the Junction Structure and will not be significantly impacted by the lighting. The completed project is contained below ground and within the Junction Structure, and will not create a new source of substantial light or glare.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES – 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:				
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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

3.2 Agriculture and Forestry Resources

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. According to the California Department of Conservation Farmland Mapping and Monitoring Program, the Junction Structure Rehabilitation Project site is considered Urban and Built-Up Land and will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses.

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

No Impact. The project is located within Doheny State Beach, an area zoned for recreational use, and will not have any impact on land surrounding the state beach. Therefore the project will not conflict with existing zoning for agricultural use, or 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 project site is not zoned for forest land or timberland uses and therefore will not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

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

No Impact. There is no forest land in the project vicinity and therefore the project will not result in the loss of forest land or 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. Project impacts are localized within the state beach and will not involve other changes in the existing environment that could result in conversion of Farmland or forest land.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – 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:				
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?	☐	☐	☒	☐

3.3 Air Quality

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The federal Clean Air Act requires each state not meeting the National Ambient Air Quality Standards (NAAQS) for criteria air pollutants—including ozone, particulate matter (PM_{10} and $PM_{2.5}$), carbon monoxide, lead, nitrogen dioxide, and sulfur dioxide—to develop a State Implementation Plan (SIP) to reach attainment. To better manage air pollution and resources of the State on a regional basis, the State of California was divided into 15 Air Basins. The Junction Structure Rehabilitation Project site is located in the South Coast Air Basin (SCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties.

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency responsible for controlling emissions from stationary sources of air pollution within the SCAB. To do so, SCAQMD develops an Air Quality Management Plan (AQMP) to bring the SCAB into attainment with federal air quality standards. Emission projections and control strategies found in

the AQMP are developed based on current levels of emissions, local general and development plans, and zoning. The most recent 2012 AQMP demonstrates a comprehensive control strategy for attainment of the federal 24-hour PM2.5 standard by 2014 as well as the 8-hour ozone standard by 2023.

Ozone is not directly emitted into the atmosphere. Rather, it is formed in the atmosphere when ozone precursor gases—Oxides of Nitrogen (NO_x) and volatile organic compounds (VOCs)—chemically react in the presence of sunlight. For attainment of the 8-hour ozone standard, it is vital to control emissions of these ozone precursor gases.

Achieving attainment and implementing the AQMP is a difficult challenge due to a number of constraints. First, the SCAQMD covers an area of approximately 10,743 square miles with a topography and climate that is conducive to high air pollution. Secondly, the SCAB has experienced significant population growth that is expectedly to continue through 2023 and beyond. Though air quality has improved over the years due to the implementation of pollution controls, increases in population make continued emission reductions more difficult.

The project is located in Doheny State Beach, an area zoned for recreation. Because the completed rehabilitation is contained within the Junction Structure and will not make any permanent changes to the surrounding beach, the project will not change this zoning designation. The project also will not generate additional development in the area through the creation of new jobs or new residences. Therefore, the project will not conflict with local or regional plans nor obstruct implementation of the SCAQMD 2012 AQMP. See **Appendix B: CalEEMod Report** for a complete report of the project's projected emissions.

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

Less than Significant Impact. The California Emissions Estimator Model (CalEEMod 2013.2.2.), a statewide land use emissions computer model, was used to evaluate the project's potential impacts to air quality and quantify projected emissions generated by the construction process. Emissions from long-term operations were not calculated because the completed rehabilitation project will not involve routine daily operational activities that would generate any air pollutants following completion of construction. Construction emissions were calculated based on the major emission-generating equipment that would be used in the rehabilitation project.

To assist CEQA practitioners in evaluating the significance of air quality impacts from projects with daily emissions, SCAQMD provides a table of Air Quality Significance Thresholds. Thresholds of significance for construction impacts consider emissions in terms of pounds per day. A summary of the results from the CalEEMod are in the table below.

Table 3-1: Construction Emissions and Thresholds

Pollutant	Project CalEEMod Result (lbs/day)	Construction Threshold of Significance for South Coast Basin (lbs/day)	Exceeds Threshold?
Carbon Monoxide (CO)	25.21	550	No
Oxides of Nitrogen (NO_x)	35.09	100	No
Coarse Particulate Matter (PM_{10})	2.99	150	No
Fine Particulate Matter ($PM_{2.5}$)	2.18	55	No
Volatile Organic Compounds (VOCs)	3.6	75	No
Sulfates (SO_x)	0.04	150	No

As indicated by Table 3-1, construction emissions will be well below the SCAQMD construction thresholds of significance. Therefore the project will not contribute to an air quality violation.

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)?

Less than Significant Impact. The Junction Structure is located within the South Coast Air Basin, overseen by the South Coast Air Quality Management District. The air basin is designated 'non-attainment' status for ozone and particulates (PM10 and PM2.5) by the State (California Air Resources Board (CARB)) and U.S. EPA. Projects that emit these pollutants or their precursors (e.g., VOC and NO_x for ozone) potentially contribute to poor air quality. As indicated by Table 3-1, air pollutant emissions will be well below the SCAQMD construction thresholds of significance throughout the construction process. After completion, the rehabilitated Junction

Structure is not anticipated to releasing any long-term, operational emissions. Therefore the project will not result in a cumulatively considerable net increase of any criteria pollutants.

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

Less Than Significant Impact. According to the U.S. EPA, sensitive receptors are "areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides and other pollutants" (U.S. EPA). Such individuals with the greatest sensitivity to air pollution include children, the elderly, and the acutely and chronically ill. The Junction Structure construction site is located within Doheny State Park, an area with possible sensitive receptors. Campground users will be located within 1000 feet of the construction site and could be exposed to toxic diesel PM emissions from construction equipment—such as a bulldozer, rough terrain crane, wheel-loader, portable electric generators and industrial saws.

Use of diesel construction equipment will be brief. According to the San Juan Creek Ocean Outfall Junction Structure Rehabilitation Project Proposed Construction Sequence, diesel equipment will only be used for approximately 10 days during the condition assessment and 14 days during the construction. In order to further reduce any toxic diesel PM or fugitive dust impacts, diesel idling for this equipment will not be permitted.

Localized Significance Thresholds (LSTs) were developed in response to Governing Board's Environmental Justice Enhancement Initiative I-4 and are applicable to the following criteria pollutants: oxides of nitrogen (NOX), carbon monoxide (CO), and particulate matter (PM10 and PM2.5). Use of LSTs to evaluate ambient air quality on a local level is voluntary.

LST mass rate look-up tables are available for 25, 50, 100, 200 and 500 meter source-receptor distances, and one-, two-, and five-acre sites. According to **Appendix A: Narrative Outline**, the nearest sensitive receptor to the project construction site is Campsite #45, located approximately 65.6 meters (215 feet) from the Junction Structure construction site. Though the project work area is approximately 1.5 acres during Phase I and approximately three acres during Phase II, construction equipment use will be contained within the 0.05 acre (2250 sq. ft.) construction site. The project work area is located within the Capistrano Valley Source Receptor Area (SRA 21). Therefore, the LST thresholds used to determine air quality impacts on nearby sensitive receptors are based on a one acre construction site located in SRA 21 and a 50 meter source-receptor distance.

Table 3-2: Construction Emissions and Localized Significance Thresholds

LST 1.0 acres/ 50 meters	Pounds per Day			
	CO	NO_2	PM_{10}	$PM_{2.5}$
Capistrano Valley	833	93	11	4
Average Max On-Site Emissions	8.70	13.7	1.36	0.86

As seen in Table 3-2 above, LSTs for the nearest sensitive receptor were compared to the maximum daily onsite construction activities. All emissions are below the LST thresholds for construction.

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

Less Than Significant Impact. The project aims to install a pipe liner within the Junction Structure. The Junction Structure serves as the interface between the land and marine sections of the San Juan Creek outfall. Treated wastewater effluent flows through the Junction Structure as it is discharged to the Pacific Ocean. Visitors at Doheney State Beach are unable to detect any odors associated with the Junction Structure because the structure is enclosed. Furthermore, having gone through significant treatment, this wastewater effluent has only a slight odor or no odor at all.

At the beginning of the construction process, the Junction Structure will be excavated and an opening will be cut into the concrete roof slab to access the inside of the structure. A watertight cover will be installed over the opening to keep the Junction Structure enclosed. There will be approximately six instances during construction in which the watertight cover will be removed to conduct work within the Junction Structure for approximately 4-5 hours at a time. During this time, treatment plants upstream will retain their effluent flows onsite. No effluent will be discharged through the Junction Structure. Therefore, even though the Junction Structure will be open and uncovered, little to no odor will be detectable by visitors at Doheny State Beach.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
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?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

3.4 Biological Resources

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 Impact with Mitigation Incorporated. A biological resources letter report was prepared by Dudek to evaluate the existing biological conditions of a 6.00-acre project study area containing the Junction Structure Rehabilitation project site (Dudek, 2015a, Appendix C). The letter serves as an update to a 2007 biological resource evaluation of the same project study area. The report analyzed the potential impact of the Junction Structure project on the area's biological resources as well as outlines mitigation measures (MMs) to reduce identified and potential significant impacts to a level that is less than significant in accordance with the California Environmental Quality Act (CEQA), Clean Water Act (CWA), Migratory Bird Treaty Act (MBTA), and California Fish and Game Code. The study included a review of pertinent biological resource regulations, field survey, mapping of vegetation communities and land cover within the project study area, an evaluation of jurisdictional waters of the U.S., and an evaluation of the potential for special-status species to occur in the project site.

No special-status plants were detected in the project study area during the 2007 and 2014 site surveys. Due to the lack of suitable substrate and tidal influences, the potential for special-status plants to occur on site is low and therefore no significant direct or indirect impacts to special-status plants are anticipated.

All raptor species are considered special-status and may use the site for foraging. However, though the trees within the campground were documented as having a high potential to support nesting raptors, there is no suitable habitat for them in the impact footprint. Therefore, there are no expected direct impacts on nesting raptors.

Out of eight special-status wildlife species considered to have a moderate or high potential to occur in the project study area, only two species—the western snowy plover and California least tern—have potential to occur in the impact footprint. Seeing as how the work is scheduled to occur during the combined breeding season for these species (April to Mid-September), the project could have potential significant direct impacts to ground-nesting individuals. Construction-related noise could also have potential significant non-direct impacts on breeding wildlife. The project will engage the mitigation measures listed below to ensure that no significant impacts occur.

Mitigation Measure I: To avoid direct impacts to the western snowy plover and California least tern, a qualified biologist shall conduct a pre-construction survey for these species within 72 hours prior to any construction-related activities occurring in the project footprint during the combined breeding season for these species (March 15- September 15).

a. If no nesting western snowy plover or California least terns are found to be present within areas up to 500 feet of the proposed project footprint, then project construction may proceed without restrictions.

b. If nesting western snowy plover or California least terns are found on site or in off-site bordering areas, construction within 500 feet shall not commence until temporary noise barrier(s) are in place between the construction area and occupied habitat. The location of the noise barrier(s) shall be determined by the biologist and acoustician. Construction noise levels shall be monitored at the edge of occupied habitat with the noise barrier(s) in place. Other measures shall be implemented, as necessary, to reduce noise levels to below 60 dB(A), or to the ambient noise level if it already exceeds 60 db(A) at the edge of the occupied habitat.

c. Construction noise shall be monitored by SOCWA at least twice weekly to verify that noise at the edge of the occupied habitat is maintained below 60 dB(A), or to the ambient noise level if it already exceeds 60 db(A). If this requirement cannot be met, other measures shall be implemented as necessary, to reduce noise levels to below 60 dB(A), or to the ambient noise level if it already exceeds 60 db(A). Such measures

may include, but are not limited to, modifying the placement of construction equipment and limitations on the simultaneous use of equipment.

Mitigation Measure II: To avoid indirect impacts to breeding songbirds, shorebirds and raptors due to construction-related noise, a one-time biological survey for nesting bird species, including raptors, shall be conducted within 72 hours prior to construction to identify any active nesting if construction activities occur during the combined bird breeding season (i.e., February 15–August 31 for most bird species; and January 1–August 31 for raptors). If occupied nests are present within 500 feet of the construction area, a buffer shall be established between the work site and active nest so that nesting activities are not interrupted. The buffer shall be delineated in the field by installing temporary fencing and shall remain intact throughout the maintenance work or until the nest is no longer active. The buffer width will be determined by the Project Biologist and will take into consideration species sensitivity and localized conditions (e.g., width and type of screening vegetation between the nest and proposed activity, terrain, existing level of human activity within the buffer, and in the surrounding area).

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, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation Incorporated. State and federal law regulates impacts to waters of the U.S./State, including wetlands. SOCWA will be required to obtain a Section 404 Nationwide Permit from the USACE, Section 401 Water Quality Certification from the RWQCB, a Section 1602 Lake and Streambed Alteration Agreement from CDFW, and a Coastal Development Permit (CDP) from the CCC prior to construction.

The Dudek biological resources letter report (Dudek, 2015a) indicates that approximately 2.43 acres of jurisdictional waters of the U.S. and State, including wetlands, occur within the project study area. Rehabilitation of the junction structure and equipment access to the work site will result in temporary direct impacts to 0.04 acre open water, 0.48 acre sandy beach habitat, and 0.0012 acre urban/developed land. These temporary direct impacts are considered significant and will be mitigated so that no permanent impacts are proposed.

Adjacent riparian habitats may experience short-term, indirect impacts such as dust, increased human presence and changes in water runoff. Typical construction Best Management Practices (BMPs) and a Storm Water Management Plan (SWMP) will limit these impacts. Therefore, short-term indirect impacts to off site, adjacent special-status vegetation communities are considered less than significant.

Mitigation Measure III: SOCWA shall ensure that temporary disturbance areas shall be restored to pre-construction contours and conditions at a 1:1 ratio.

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.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact with Mitigation Incorporated. Per response 3.4-b, the Junction Structure Rehabilitation Project will result in temporary direct impacts to open water associated with San Juan Creek, sandy beach associated with the Pacific Ocean shoreline, and urban/developed land. Impacts to urban/developed land are not significant and do not warrant habitat mitigation. While no impacts to wetlands as defined by Section 404 of the federal Clean Water Act will occur due to project implementation, direct, temporary impacts to non-wetland waters of the U.S. subject to regulation by the USACE, RWQCB, CDFW, and CCC including 0.04 acre open water and 0.48 acre sandy beach, will occur due to project implementation. Non-wetland waters are regulated under Section 404 of the federal Clean Water Act and Section 10 of the Rivers and Harbors Act. Impacts to these resources would be mitigated to a level that is less than significant with the incorporation of Mitigation Measure III listed above in Section 3.4-b.

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 native wildlife nursery sites?

Less Than Significant Impact. According to the Dudek biological resources letter report (Dudek, 2015a), the surrounding areas to the east and west of the project site contain mixed commercial/residential development and beach and areas to the north contain mixed commercial/residential development and heavily used roadways—none of which are conducive to wildlife movement or migration. The floodplain of San Juan Creek, located west of the project site, potentially serves as a local and regional wildlife corridor between upstream and downstream area. However, the Junction Structure Rehabilitation project will not permanently nor significantly impact this floodplain or its use as a wildlife corridor. Any project impacts on the area will be temporary and less than significant.

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

No Impact. The marine resources at Doheny State Park are protected by the Doheny Beach State Marine Conservation Area. However, the Junction Structure Rehabilitation Project is contained within the designated work area and will not impact any marine resources within Doheny State Beach. There are no other local policies or ordinances regarding biological resource protection that pertain to the project site.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. Established in 1991, the Natural Communities Conservation Plan aims to provide long-term, regional protection of natural vegetation and wildlife while allowing compatible development and growth. Part of the City of Dana Point is located within the Southern Subregion of the Central Coastal NCCP. However, the boundaries for the Central Coast NCCP fall directly to the west of Doheny State Beach. The project site is not located within the Southern Subregion of the Central Coastal NCCP nor the Southern Subregion's habitat reserve and therefore would not conflict with any of its policies or ordinances.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
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?	☐	☐	☐	☒

3.5 Cultural Resources

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less Than Significant Impact. A Phase I cultural resources inventory was conducted by Dudek for the San Juan Creek Ocean Outfall Junction Structure Rehabilitation Project (Dudek, 2015b, Appendix D). The inventory included a South Central Coastal Information Center (SCCIC) records search for cultural resources recorded within the area of potential effects (APE), a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search and subsequent correspondence with tribal representatives for the presence of any Native American cultural resources, as well as an intensive pedestrian survey of the APE for any further cultural resources. All three searches indicate that there are no cultural resources within, or immediately surround, the APE. It also suggests that there is no potential for the discovery of cultural resources because the beach sand located within the APE was deposited subsequent to the initial installation of the Junction Structure and is not suitable to support the presence of intact cultural deposits.

Mitigation Measure IV: Though no cultural mitigation is required, if subsurface cultural resources are encountered during construction activities, work in the immediate vicinity will be stopped and SOCWA contacted. A qualified archaeologist will be retained to evaluate the archaeological discovery for its eligibility for Local and State listing. As appropriate, reports of the discovery will be made to the Native American Heritage Commission. If human remains are found, action will be taken according to Section 15064.5(e) of CEQA and the County Coroner will be notified.

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

No Impact. The project will not cause a substantial adverse change in the significance of any archaeological resources for reasons stated in response 3.5-a.

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

No Impact. The California Department of Parks and Recreation Doheny State Beach General Plan & Draft Environmental Impact Report indicates that there are no unique paleontological resources or site or unique geologic features within the project site.

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

No Impact. Please see response 3.5-a.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS – Would the project:				
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 ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit 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 Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

3.6 Geology and Soils

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. According to the State of California Department of Conservation's Regional Geologic Hazards and Mapping Program, Doheny State Beach and the City of Dana Point are located in a State of California Earthquake Fault Zone. There are no known active seismic faults within the project site. Therefore, the project will not expose people or structures to any potential substantial adverse effects resulting from rupture of a known earthquake fault.

ii) Strong seismic ground shaking?

While seismic ground shaking could happen in the project site, the project itself will not expose people or structures to potential adverse effects because the Junction Structure is primarily located beneath the sand on Doheny State Beach.

iii) Seismic-related ground failure, including liquefaction?

No Impact. The State of California Seismic Hazard Zones map (CDMG, 2001) identifies Doheny State Beach as located within a liquefaction hazard zone. However, seeing as how the Junction Structure is located below ground, the project itself will not expose people or structures to potential substantial adverse effects from liquefaction.

iv) Landslides?

No Impact. The Junction Structure project site is located on a flat terrain in Doheny State Beach. Furthermore, according to the State of California Seismic Hazard Zones Map, the project site is not located within a landslide hazard zone. Therefore, there is no potential for landslide hazards at the project site.

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

No Impact. The temporary work activities include excavation of soil to the top of the Junction Structure. This work activity will need to be coordinated with a low-tide event or events to help take advantage of the lower tide levels at the excavation area. The storage area for excavated material or beach sand is considered minimal due to limited required excavation anticipated to the top of the Junction Structure. Following construction, the existing stockpiled material will be used to backfill the excavation. No soil or sand will be exported out of the construction site.

c) Would the project be located on a geologic unit 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?

No Impact. The finished rehabilitation project is contained completely within the existing Junction Structure. Though the Junction Structure project site is located on sand, the rehabilitation project will not cause the surrounding sand to become unstable and result in landslides, lateral spreading, subsidence, liquefaction or collapse.

During the construction process, excavation of sand from the top of the Junction Structure is required to gain access to the Junction Structure. Appropriate safety measures will be required to prevent collapse of excavated sand and to ensure the safety of divers within the structure as well as construction crew members within the work area. Such safety measures will be determined by the contractor.

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?

No Impact. The project site is located within Doheny State Beach, where the soil onsite is predominately sand. There is no expansive soil in the project site that could create risks to life or property.

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

No Impact. The project description does not involve septic tanks or alternative waste water disposal systems.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

3.7 Greenhouse Gas Emissions

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

Less Than Significant Impact. In response to increasing emissions of greenhouse gases (GHG) and its impact on global climate change, the Governor of California passed AB 32, California's Global Warming Solutions Act of 2006. The Act requires CARB to implement the following:

- a statewide GHG emissions cap for 2020 based on 1990 emission;
- mandatory reporting rules for significant sources of GHGs;
- early action measures to reduce GHG;
- a scoping plan indicating how emission reductions will be achieved via regulations, market mechanisms, and other actions;
- and any other regulations needed to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gases.

AB 32 required that the State Board approve a statewide GHG emissions limit, based on the statewide GHG inventory in 1990, to be achieved by 2020. As of right now, no statewide threshold has been established. On December 5, 2008, the SCAQMD Governing Board adopted an interim GHG significance threshold of 10,000 MT/year CO_2e to apply toward industrial projects where AQMD is the lead agency. CO_2e, the CO_2 equivalent for a gas, is derived by multiplying the mass of the gas by the associated global warming potential. The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established and proposed three tiers of compliance that may lead to a determination that impacts are less than significant. The most recent working group meeting on September 28, 2010 (SCAQMD 2010), proposed two options lead agencies can select from to screen thresholds of significance for GHG emissions in residential and commercial projects, and proposes to expand the industrial threshold to other lead agency industrial projects. Option 1 proposes a threshold of 3,000 MT CO_2e per year for all residential and commercial projects and Option 2 proposes a threshold value by land use type where the numeric threshold is 3,500 MT CO_2e per year for residential projects, 1,400 MT CO_2e per year for commercial projects, and 3,000 MT CO_2e per year for mixed-use projects (SCAQMD 2010).

The California Air Pollution Control Officers Association (CAPCOA) published a white paper in January 2008 evaluating and addressing GHG emissions from projects subject to CEQA. The CAPCOA CEQA and Climate Change “white paper” is intended as a resource and not a guidance document. A significance threshold of 900 MT CO_2e per year was the lowest non-zero threshold evaluated in the white paper; this threshold would apply to industrial, residential, and commercial projects. SOCWA has decided to evaluate the Junction Structure Rehabilitation Project’s GHG emissions against a GHG significance threshold of 900 MT CO_2e.

CalEEMod 2013.2.2 was used to quantify the project’s projected greenhouse gas (GHG) emissions generated by the construction process. GHG emissions—carbon dioxide, methane, and nitrous oxide—were calculated based on the type of equipment to be used during construction. The principle source of greenhouse gas emissions will be diesel-powered construction equipment and other combustion sources (generators and vehicles) emitting carbon dioxide. The project’s annualized construction emission in terms of CO_2e units, which include emissions of carbon dioxide, methane and nitrous oxide, is 281.84 MT/year. For a complete report of the project’s projected GHG emissions, please see **Appendix B: CalEEMod Report**.

Table 3-3: Estimated Annual Construction GHG Emissions

Greenhouse Gas	Emissions (MT/yr)
Carbon Dioxide (CO2)	280.09
Methane (CH4)	0.08
Nitrous Oxide (N2O)	0
CO2eq	281.84
CO2eq - CAPCOA Lowest Non-Zero Threshold	900

As shown in Table 3-3, project-generated annual GHG emissions are anticipated to be well below the annual threshold value of 900 MT CO_2e evaluated by CAPCOA. While the CAPCOA threshold has not been adopted by CARB, SCAQMD, or other air quality agencies, it is the lowest non-zero GHG significance threshold that has been evaluated in California. The Junction Structure Rehabilitation Project annualized construction emissions will have minimal impact on the environment.

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

No Impact. In 2011, the City of Dana Point developed an Energy Efficiency and Conservation Plan to identify goals and measures to reduce energy consumption and promote resource conservation within Dana Point. Part of the plan focuses on encouraging sustainable construction through green building practices. However, the two green building regulations—Part 11 of CALGreen and Part 6 of the California Energy Code—to be applied toward Dana Point development only pertain to residential and non-residential building and are not applicable to the Junction Structure Rehabilitation Project. The City of Dana Point does not have any other climate change policies or programs.

Orange County and SCAQMD also do not have a GHG reduction plan or climate action plan for the SCAB. Therefore, the project will not conflict with any applicable greenhouse gas reduction plans, policies or regulations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 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?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two 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?	☐	☐	☐	☒

3.8 Hazards and Hazardous Materials

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 Impact. The project will require the temporary transport, use, and disposal of hazardous materials during the rehabilitation construction process. These could include fuels for machinery and vehicles, new and use motor oils, cleaning solvents, and storage containers and applicators containing such materials. Transport will occur in accordance with procedures established by the Department of Transportation. Accident prevention and containment are the responsibility of the construction contractors. However, provisions to properly manage hazardous substances and wastes are included in SOCWA's construction specifications. SOCWA also monitors all contractors for compliance with regulations applicable to hazardous materials and wastes. In adhering to SOCWA's construction specifications and pertinent regulations regarding

hazard materials and waste, the rehabilitation project will not create a permanent or significant hazard to the public or the environment.

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?

No Impact. Rather than create a significant detrimental impact through the release of hazardous materials, the project actually aims to prevent such a hazard from occurring. As the interface between the land and marine sections of the San Juan Creek Ocean Outfall, the Junction Structure's structural integrity is vital for the safe discharge of treated wastewater effluent. While the Junction Structure serves no functional purpose, deterioration of the structure could result in effluent leaking or spilling into the Doheny State Beach area. The project aims to strengthen the Junction Structure and prevent any structural failure from occurring. Therefore, the project is vital for *preventing* the release of treated effluent into the environment and any subsequent hazards to the public or the environment.

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?

No Impact. The closest school to the proposed project is the Capo Beach Christian School, approximately 0.40 miles northeast of the project site. Since the closest school is greater than one-quarter mile away from the project site, no project impact would exist.

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 Department of Toxic Substances Control (DTSC) ENVIROSTOR database indicates that the project site is not located on any hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore the project will not 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 two 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 closest airport to the proposed project is John Wayne Airport, located approximately 18 miles to the northwest. Therefore the project is not located within an airport land use plan and will 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 closest airport to the proposed project is John Wayne Airport, located approximately 18 miles to the northwest. Therefore the project is not located within an airport land use plan and will 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?

No Impact. Doheny State Beach employs park rangers and lifeguard staff for emergencies and follows the Dana Point Emergency Plan, a framework for responding to major emergencies, such as tsunamis, flooding, or earthquakes. The project would not impair tsunami evacuation routes nor interfere with the AlertOC Public Notification System used to issue emergency messages to residents. Therefore, the project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

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 project site is not located within or adjacent to a wildland area. Therefore the project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) 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 (e.g., 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, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 which 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 flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which 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) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

3.9 Hydrology and Water Quality

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

No Impact. The purpose of the project is to improve the structural integrity of the existing Junction Structure and the SOCWA San Juan Creek Ocean Outfall. The outfall operates within the water quality standards and waste discharge requirements of NPDES Permit Order No. R9-2012-0012. The rehabilitation project will not cause the outfall to violate any NPDES permit requirements.

Because the outfall is open to the ocean, it is not feasible to dewater the structure during rehabilitation. The proposed rehabilitation will be completed by divers working on the inside of the structure. To improve worker safety, SOCWA and its member agencies will retain effluent upstream at its treatment plants rather than discharge it to the outfall. This flow sequestration can only be performed during low flow periods during early morning hours, and due to storage availability, only for limited periods of time (approximately 4 to 5 hours), after which time the retained flows need to be released to the outfall. According to the construction schedule, flow sequestration will occur approximately six times—twice during Phase I and four times during Phase II. SOCWA and its member agencies will ensure that the treatment plants retaining flow will do so following NPDES Permit requirements and standards.

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 that would not support existing land uses or planned uses for which permits have been granted)?

No Impact. The project will not affect groundwater recharge or aquifers. No portion of the project is within a Sole Source Aquifer area.

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?

No Impact. All aspects of the project are contained within the Junction Structure and will not substantially alter the existing drainage pattern of the area in a manner that would result in substantial erosion or siltation. Furthermore, the project will not alter the course of the adjacent San Juan Creek.

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 which would result in flooding on- or off-site?

No Impact. Rehabilitation of the Ocean Outfall Junction Structure is contained within the structure and will not alter existing drainage patterns or the course of a stream or river, especially that of the nearby San Juan Creek. According to the Project Narrative, the project will not create additional impervious surfaces and thereby will not create or contribute to an increase in runoff.

e) Would the project 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?

No Impact. The project description indicates that construction will remain within the Junction Structure and will not create features that will create or contribute runoff water. Therefore the project will have no impact on the capacity of existing or planned stormwater drainage systems.

f) Would the project otherwise substantially degrade water quality?

Less Than Significant Impact. The Dudek biological resources letter report (Dudek, 2015a) indicates that the project could potentially change the velocity of runoff in the project area and temporarily affect shoreline habitats associated with the Pacific Ocean and San Juan Creek, including erosion and sedimentation. To minimize these effects, the project will require contractors to develop and utilize a Storm Water Management Plan (SWMP) or similar report to

meet National Pollution Discharge Elimination System (NPDES) regulations. Therefore, impacts to water quality of nearby waterbodies will be considered less than significant.

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

No Impact. The project's intent is to rehabilitate the San Juan Creek Ocean Outfall Junction Structure and does not involve constructing housing of any kind. Therefore, the project would not place housing within a 100-year flood hazard area.

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. The project site is located within an area designated by FEMA as Zone AE, a special flood hazard area "subject to inundation by the one-percent-annual-chance flood event." Though the project site is located within a 100-year flood hazard area, the project does not include placing structures which would impede or redirect flood flows in the vicinity.

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 project is contained within the Junction Structure and would not expose people or structures to any significant risk involving flooding.

j) Inundation by seiche, tsunami, or mudflow?

Less Than Significant Impact. The project site is located within a sand beach with little to no threat of mudflow. There are no enclosed bodies of water located nearby; therefore there would be no risk for seiche. The project site is located within a tsunami hazard zone, though tsunamis are rare and a tsunami evacuation route is nearby. Therefore, the project impact would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING – Would the project:				
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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

3.10 Land Use and Planning

a) Would the project physically divide an established community?

No Impact. The project site is contained within the San Juan Creek Ocean Outfall Junction Structure and its surrounding staging area within Doheny State Park. The project 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. According to the City of Dana Point Zoning Map and General Plan Land Use Map, the Doheny State Beach is considered Recreation (REC) space. The project is contained within the San Juan Creek Ocean Outfall Junction Structure and will not create any changes to land use within or around the project site. The surrounding Doheny Beach area will remain a recreational state beach. Therefore the project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.

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

No Impact. Please see response 3.4-f. Though there are ongoing efforts in the San Juan Creek watershed to develop a Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), currently there are no designated NCCP/HCP areas in Doheny State Beach. Parts of the City of Dana Point are part of the Southern Subregion of the Central Coastal NCCP. However, Doheny State Beach and the project site fall right outside the NCCP border. Therefore, the project will not conflict with any NCCP/HCP plans.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES – Would the project:				
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?	☐	☐	☐	☒

3.11 Mineral Resources

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. According to the City of Dana Point's General Plan Conservation/Open Space Element, there are no mineral resources identified within the City of Dana Point. Therefore the project would not result in the loss of availability of a known mineral resource.

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. According to the City of Dana Point's General Plan Conservation/Open Space Element, there are no mineral resources identified within the City of Dana Point. Therefore the project would not result in the loss of availability of a known mineral resource.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE – Would the project result in:				
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?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two 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?	☐	☐	☐	☒

3.12 Noise

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?

Less Than Significant Impact with Mitigation Incorporated. A Construction Noise Assessment was conducted by Landrum & Brown on behalf of SOCWA (Landrum & Brown, 2015, Appendix E). According to the assessment memo, the Doheny State Park General Plan does not have any specific noise standards that would apply to the project. Instead, the noise levels generated by the Junction Structure Rehabilitation Project must meet the City of Dana Point's Noise Ordinance limit stated in the city's General Plan. Due to the fact that some of the rehabilitation project will occur at night, the project must meet the more stringent nighttime Noise Ordinance limit of 50 dBA L50.

As part of the construction process, a large number of campsites near the work area will be reserved and not available for public use (Appendix A). This serves to improve visitor safety, minimize construction traffic within the campground, and reduce noise impacts on nearby campsites. A 15 foot high temporary noise barrier is also planned at the north and east boundaries of the work area. The nearest campsite that could be impacted by construction noise is Campsite #45, which is located approximately 215 feet from the Junction Structure.

Noise measurements for the Construction Noise Assessment were conducted between 2:15 AM and 3:15 AM on May 3, 2015 near Campsite #45 to determine ambient noise levels. Predicted noise levels at the project site for the equipment planned for use were obtained from the Roadway Construction Noise Model (RCNM Version 1.1) developed by the Federal Highway Administration (FHWA). Using a combination of empirical data, acoustical propagation formulas and equipment usage factors, the program predicts construction noise levels for each piece of equipment to be used. A sum of these noise levels determines the total Leq noise levels expected to impact park users at Campsite #45.

If the project proceeded with the planned 10-foot high temporary barriers, calculations show that noise levels are project to be approximately 53.7 dBA during several construction periods. This would exceed the City's Nighttime L50 Noise Ordinance Limit of 50 dBA. The project will engage the mitigation measure listed below to ensure that impacts are mitigated to below a level of significance.

> **Mitigation Measure V:** SOCWA shall ensure that the temporary noise barrier height shall be 15 feet, thereby reducing the maximum L50 noise level at the nearest location for the loudest phase of work to be approximately 48.7 dBA. The temporary noise barrier shall provide a noise reduction rating of at least STC-25 and shall be designed with a minimum of openings or gaps. The noise barrier shall be inspected at regular intervals to ensure it is in good condition. SOCWA shall include wall height information on construction drawings and specifications.

b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. As part of the project, the Contractor will create an opening to access the interior of the Junction Structure by cutting through the concrete roof slab with a heaving duty cutting saw, jack hammer, torches, or other tools that can cut through concrete and rebar. Though this activity may create groundborne vibration or noise levels, it will be temporary and conducted within a few hours. The Construction Noise Assessment (Landrum & Brown) states that utilizing a 15 foot temporary sound barrier (Mitigation Measure V) will be sufficient for minimizing sound impacts during the loudest phase of work to below the City's Nighttime L50 Noise Ordinance Limit.

c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. Rehabilitation to the Junction Structure will be contained below ground and will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

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 Impact with Mitigation Incorporated. Please see response to 3.12-a.

e) ***Would the project be located within an airport land use plan or, where such a plan has not been adopted, within two 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 project site is not located within an airport land use plan. The closest airport, John Wayne Airport, is located more than two miles away. Therefore the project would not expose people residing or working in the project area to excessive noise levels.

f) ***Would the project be within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?***

No Impact. The project site is not located within the vicinity of a private airstrip. The closest airport, John Wayne Airport, is located more than two miles away. Therefore the project would not expose people residing or working in the project area to excessive noise levels.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING – Would the project:				
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?	☐	☐	☐	☒

3.13 Population and Housing

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)?***

No Impact. The project is intended to rehabilitate the existing San Juan Creek Ocean Outfall Junction Structure and will not construct new homes, businesses or infrastructure. This rehabilitation will not induce substantial population growth in an area, either directly or indirectly.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project is contained within the San Juan Creek Ocean Outfall Junction Structure and would not displace substantial numbers of existing housing or necessitate the construction of replacement housing elsewhere.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The project is contained within the San Juan Creek Ocean Outfall Junction Structure and would not displace substantial numbers of people or necessitate the construction of replacement housing elsewhere.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) 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:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

3.14 Public Services

a) 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:

Fire protection?

No Impact. The City of Dana Point Fire Department provides fire protection and emergency response services to the project area. The proposed project serves to rehabilitate the existing San Juan Creek Ocean Outfall Junction Structure and would not require new or additional fire protection.

Police protection?

No Impact. The Doheny State Beach Peace Officers (Rangers/Lifeguards) and City of Dana Point Police Department provide law enforcement services to the project area. The proposed project serves to rehabilitate the existing San Juan Creek Ocean Outfall Junction Structure and would not require new or additional police protection.

Schools?

No Impact. The proposed project serves to rehabilitate the existing San Juan Creek Ocean Outfall Junction Structure and would not add residential housing. Therefore the project will not increase the residential population of the area or require additional school facilities.

Parks?

No Impact. The proposed project serves to rehabilitate the existing San Juan Creek Ocean Outfall Junction Structure and would not add increase the number of visitors to Doheny State Beach or otherwise require any additional park or recreational space.

Other public facilities?

No Impact. The proposed project serves to rehabilitate the existing San Juan Creek Ocean Outfall Junction Structure and would not add residential housing. Therefore the project will not increase the residential population of the area or require additional public facilities, such as hospitals or libraries.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION				
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?	☐	☐	☐	☒

3.15 Recreation

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?

Less Than Significant Impact. Located in the City of Dana Point, California, Doheny State Beach is one of the state's most popular state beaches and attracts almost one million visitors per year to its 62 acres of scenic oceanfront. The state beach is divided in two halves by the mouth of San Juan Creek in the Pacific Ocean. The northern end has a day use surfing beach as well as a five-acre lawn with recreational facilities. The southern end, where the Junction Structure is located, has a campground with 122 developed family campsites.

Open year round, the state beach's peak season falls between Memorial Day and Labor Day, though the campground is nearly fully occupied throughout the year. Park use also peaks during holidays, weekends, and special events.

During construction for the Junction Structure Rehabilitation Project, the construction work area for Phase I and Phase II will be approximately 1.5 acres and 3.0 acres. These work areas will comprise of:

- Phase 1 Work Area includes Campsite No. 27 thru 43 (18 campsites total) to be reserved for ingress and egress to the work site, temporary contractor parking and staging, and a buffer around the work site.
- Phase 2 Work Area includes all campsites west of the existing pedestrian walkway that runs South from the restroom and showers near Campsite No. 13 to Campsite No. 43 (30 campsites total) including camp host to be reserved for ingress and egress to the work site, temporary contractor parking and staging, and a buffer around the work site.
- A 150 feet by 150 feet construction area in the vicinity of the Junction Structure (Phase 1 and Phase 2).

For a map of the Phase I and II work areas, please see **Appendix A: Narrative Outline.**

Campsites, restrooms, and recreational facilities reserved for the construction work area will not be accessible for beach visitors and will limit the number of campers during construction. In order to minimize the project's temporary effect on Doheny State Beach and its visitors, construction will not take place between Memorial Day and Labor Day weekend. The construction schedule will also attempt to avoid major holidays and events at the State Beach, including Easter, Spring Break, and the annual Blues Festival. For the safety of the public, access to the beach located within the construction work area will be temporarily restricted to construction personnel. Once the project is complete, recreation at Doheny State Beach will resume normal operation.

The proposed project will only rehabilitate the existing San Juan Creek Ocean Outfall Junction Structure and will not permanently increase the use of existing neighborhood and regional parks, including Doheny State Beach. Therefore the project will not cause substantial or accelerated physical deterioration of these recreational facilities.

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 will only rehabilitate the existing San Juan Creek Ocean Outfall Junction Structure and does not include recreational facilities nor require the construction or expansion of recreational facilities.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC – Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards 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?	☐	☐	☐	☒

3.16 Transportation and Traffic

a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. Completed rehabilitation of the Junction Structure will have some effect on the circulation system of Dana Point or within Doheny State Park. During the construction process, the west side of the Doheny State Beach Campground will be used as a contractor staging and parking area. Part of the road that forms the western section of the campground will be blocked off during both Phase I and Phase II of construction, though less of the road will be used during Phase I. Please see **Appendix A: Narrative Outline** for work area maps of the two construction phases.

During Phase I, campsites 1-25, 45-59, 120 and 122 will use the same road to enter and exit their campsite. During Phase II, campsites 1-12, 45-59, 120 and 122 will use the same road to enter and exit their campsite. If traffic congestion occurs within the campground, traffic flagmen will be utilized to maintain the steady flow of traffic on campground roads. However, there will still be access to the available campgrounds and the work area will not block any emergency exits. Emergency exits will remain open at all times.

During the construction process of the Junction Structure Rehabilitation Project, there will be a very small increase in vehicle trips by construction workers, with an average of about 7 vehicles per day. The existing road from the south end of the Coast Highway bridge to the South Day Use Area is only approximately 24 feet wide and shared by motorists, bicyclists, and pedestrians. Construction and crew vehicles will exercise extreme caution while operating on park roads, abide by park speed limits and parked within the campsites reserved for the duration of the project in order to minimize impact on visitor traffic within the park. Traffic flagmen will be utilized during the transportation and movement of large construction vehicles or equipment throughout the campground.

Table 3-4: Estimated vehicle trips over a five week construction period, with five work days per week

Equipment	Vehicle Trips (One trip indicates to or from the construction site)
75-Ton Rough Terrain Crane	2
Wheel-Loader with Back Hoe	2
Dive Team Van & Flatbed Trailer	4
Truck Trailer (Equipment Delivery)	50
Mechanics Truck with Jib Crane	50
Portable Electric Generators	2
Portable Construction Lighting	2
Crew Vehicles (~5 vehicles)	250
Total	362

b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

No Impact. The Orange County Congestion Management Program lists two Dana Point intersections that must maintain a specific Level of Service Standard; however the project site is not located at either of these two intersections. The project will not conflict with the Orange County Congestion Management Program.

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 closest airport, John Wayne Airport, is approximately 18 miles away from the project site. Therefore, the project will have no effect on air traffic, as it is not located within the vicinity of an airport or under a flight path.

d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The project will not modify the design or configuration of any roadways or access driveways.

e) Would the project result in inadequate emergency access?

No Impact. The project site is not located within any emergency access routes. Trucks, materials, and machinery associated with the project will remain within the proposed staging area and/or designated parking area. Neither the staging area nor the designated parking area are located within any emergency access routes and will not impede emergency procedures.

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 Impact. The project is confined to the Junction Structure located within the southern half of Doheny State Beach and will have no effect on public transit, bicycle, or pedestrian facilities. However, construction vehicles associated with the project will share park roads with bicyclists and pedestrians within the park. Vehicle trips made within the park will be kept to a minimum and will abide by park speed limits. The project will not conflict with adopted policies, plans, or programs regarding alternative transportation contained within the Doheny State Beach General Plan or the City of Dana Point General Plan.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:				
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 storm water 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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

3.17 Utilities and Service Systems

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. Wastewater effluent discharged through the San Juan Creek Ocean Outfall is treated at the SOCWA J.B. Latham Treatment Plant, the City of San Clemente Water Reclamation Plant, the Moulton Niguel Water District Plant 3A, the Santa Margarita Water District Chiquita Water Reclamation Plant, as well as the City of San Juan Capsitrano Desalter. Proposed rehabilitation of the Junction Structure will not impact operations at these facilities in a manner that will exceed the wastewater treatment requirements of the Region 8 or Region 9 Water Quality Control Boards.

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?

No Impact. The project proposes rehabilitating the San Juan Creek Ocean Outfall Junction Structure, an existing wastewater treatment facility, but does not result in the construction of new facilities or expansion of existing facilities.

c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The project only includes rehabilitation of the Junction Structure and will not require construction of any new storm water drainage facilities or expansion of existing facilities.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. The completed rehabilitation project does not require any water supplies and therefore will not increase demands for water supply. Water required for the construction process will be minimal and will be supplied by a source determined by the contractor.

e) Would the project 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?

No Impact. The nature of the project is to rehabilitate an existing Junction Structure on the San Juan Creek Ocean Outfall. Neither the project nor the structure require any wastewater treatment service and therefore will not increase the demand for wastewater treatment.

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

No Impact. While the construction process will produce some solid waste, the completed rehabilitation project will not generate any solid waste material. Minor solid waste produced in the construction process will be properly disposed at the Prima Deshecha Landfill in San Juan Capistrano.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. Please see response 3.17-g. The project will comply with federal, state, and local statutes and regulations in its disposal of the minor solid waste produced during the construction process. All waste will be disposed off-site and outside of Doheny State Beach.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
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?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☐	☒
c) 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)?	☐	☐	☒	☐
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

3.18 Mandatory Findings of Significance

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 Impact. Per Section 3.4 Biological Resources as well as the Dudek biological resources letter report (Dudek, 2015a), the project does not have the potential to degrade the environmental quality of Doheny State Beach, negatively impact fish, wildlife or plant populations, or eliminate cultural remnants of California's history or prehistory. Rehabilitation of the Junction Structure is contained within the structure and will not permanently affect the surrounding area—any construction impacts will be temporary.

b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?

No Impact. The goal of the Junction Structure Rehabilitation Project is to prevent future failure of the San Juan Creek Ocean Outfall if outfall flow rates were to exceed 60 MGD. The project does not sacrifice long-term environmental goals to achieve short-term environmental goals or vice versa.

c) 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)?

Less Than Significant Impact. The project has no substantial impacts that would be cumulatively considerable in combination with other projects. There are no existing effects from past projects at the Junction Structure nor are there any current projects in the area. Rehabilitation of the Junction Structure is meant to prevent any probable future work on the Junction Structure.

d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

No Impact. The proposed San Juan Creek Junction Structure Rehabilitation project will not adversely affect human beings. Rehabilitation is contained within the Junction Structure below ground and inaccessible by the general public. As discussed above, the project will have no significant, long-term adverse effects.

4 REFERENCES AND PREPARERS

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4.2 List of Preparers

Janie Chen, Environmental Compliance Analyst (South Orange County Wastewater Authority)

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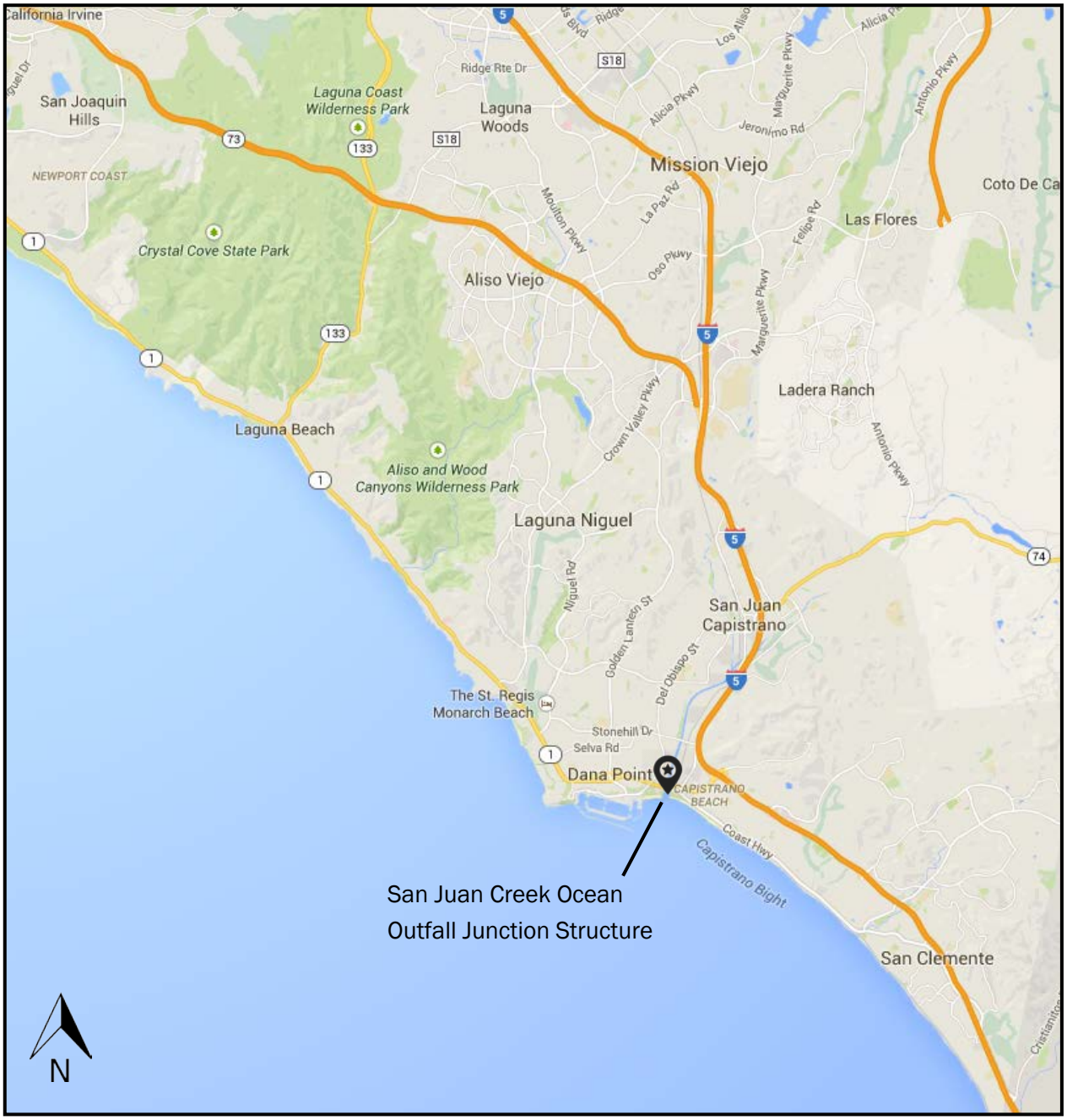


Source: Google Maps 2015

Exhibit 1

Regional Location

Source: Google Earth 2011

Exhibit 2

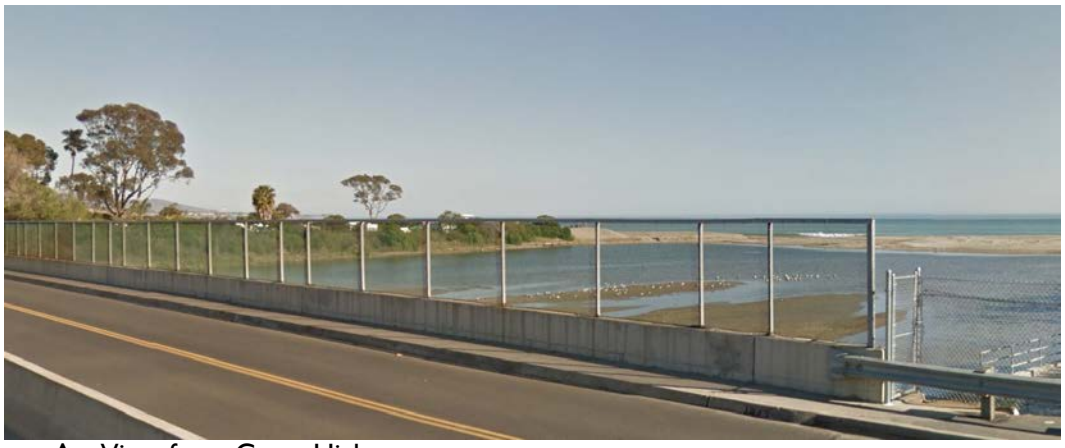
Project Vicinity

Key Map

Source: Google Earth 2011

Exhibit 3

Views of the Project Site



A. View from Coast Highway

B. View from Coast Highway

C. View from Coast Highway

D. View from Pacific Coast Highway

E. View from Pacific Coast Highway

F. View from Doheny State Beach – North End

G. Views from Doheny State Beach Campground