ORANGE COUNTY SANITATION DISTRICT

We protect public health and the environment by providing effective wastewater collection, treatment, and recycling.

Notice of Preparation

Date: August 8, 2011

To: Responsible and Trustee Agencies and Interested Parties

Subject: Notice of Preparation (NOP) of an Environmental Impact Report for the Outfall Land Section and Ocean Outfall Booster Pump Station Piping Rehabilitation

Review Period: August 8 – September 8, 2011

The Orange County Sanitation District (Sanitation District) is the lead agency under the California Environmental Quality Act (CEQA) for the preparation of an Environmental Impact Report (EIR) for the proposed Outfall Land Section and Ocean Outfall Booster Pump Station (OOBS) Piping Rehabilitation (proposed Project). The proposed Project is located within the southeast corner of Sanitation District's Treatment Plant No. 2 (Plant 2) at 22212 Brookhurst Street, Huntington Beach. Additionally, there are two offsite locations: one site is in a vegetated area, along the western edge of Orange County bike path, between the south side of Plant 2 and Pacific Coast Highway (PCH), and the other site is on the south side of PCH, between the Huntington Beach Least Tern Preserve and the Santa Ana River, within Huntington State Beach.

Over the years, the Sanitation District has conducted several studies on the condition of its outfall systems and performed necessary repairs. To date the outfall system has only required minimal maintenance. However, a recent engineering report revealed that the steel bulkhead walls on the east and west sides of the Beach Box may be experiencing severe corrosion and may be structurally deficient. The engineering report recommended that the Beach Box be rehabilitated as soon as possible to avoid any potential risk of Beach Box failure. The recommended rehabilitation of the Beach Box is a key element of the proposed Project. Additionally, the Sanitation District outfall facilities are approximately forty years old and other repairs and internal / external inspections on the Long Outfall System are also needed at this time.

The proposed Project will consist of inspection, condition assessment, and rehabilitation of corroded components of the land section of the existing 120-inch diameter, primary five-mile outfall (Long Outfall) system extending from Surge Tower No. 2 (Surge Tower 2) within Plant 2 to the Beach Box located on Huntington State Beach. Specifically, the proposed Project includes five project elements that comprise the Long Outfall System rehabilitation: (1) rehabilitation of Surge Tower 2, (2) rehabilitation of the land Long Outfall, (3) abandonment of the Long Outfall metering ports and vaults, (4) replacement

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of the existing effluent flow meter on the Long Outfall and (5) rehabilitation of the Beach Box.

The EIR will evaluate two basic alternatives for rehabilitation the Long Outfall System.

Alternative 1 includes all five project elements and adds the installation of a temporary bypass structure immediately downstream of the Beach Box. The purpose of this structure is to allow the rehabilitation of the Beach Box without diverting treated effluent into the Short Outfall to discharge to the ocean. The Bypass structure would consist of two 60-inch (5-foot) overhead pipes which would be connected to the Short and Long Outfalls land sections.

Alternative 2 includes all five project elements and the use of the Short Outfall System to minimize the duration of the project construction activities. This Alternative would divert flow from the Long Outfall upstream of Surge Tower 2 to the 1-mile Short Outfall for discharge to the ocean for the duration of the inspection and rehabilitation activities.

The EIR will evaluate the potential for the discharge of treated effluent from the Short Outfall to affect shoreline water quality. The EIR will evaluate whether discharges to the Short Outfall will result in the need to close beaches any time during the four-to-six weeks of discharge.

During construction if wet weather conditions result in flows that exceed the Short Outfall capacity, excess flows would be discharged to the Santa Ana River through the existing emergency discharge weirs located at Plant 2.

Alternatives 1 and 2 would employ one of three construction options Carbon Fiber Wrap, Fiberglas Pipe Insert, and Steel Pipe Insert to repair beach box.

The Sanitation District is soliciting the views of interested persons and agencies as to the scope and content of the environmental information to be studied in the EIR. In accordance with CEQA, agencies are requested to review the project description provided in this NOP and provide comments on environmental issues related to the statutory responsibilities of the agency. The EIR will address written comments submitted during this initial review period and will evaluate potential impacts of the proposed project.

In accordance with the time limits mandated by CEQA, comments on the NOP must be received by the Sanitation District no later than 30 days after receipt of this notice. The Sanitation District requests that comments be received no later than **September 8, 2011.** Please send your comments to: Jim Burror at the address shown below. Please include a return address and contact name with your comments.

The NOP is available for public viewing at the Sanitation District's website at www.ocsd.com. To access, go to "Notice of Preparation - Rehabilitation of Land Section of Long Outfall System". Copies of the NOP are also available for public review at the following locations:

Orange County Sanitation District, Administrative Office Bldg., Engineering Department

Huntington Beach Central Library – 7111 Talbert Avenue, Huntington Beach, CA

Huntington Beach Banning Library – 9281 Banning Avenue, Huntington Beach, CA

PUBLIC SCOPING MEETING: A public scoping meeting will be held to receive public comments on the proposed Project. The scoping meeting will be open to the public on:

DATE:	Thursday, **August 25, 2011**
TIME:	6:30 p.m.
LOCATION:	Orange County Sanitation District Administrative Office Building – Board Room, at the address listed below

Written comments on the NOP can be sent to the Sanitation District at:

Address: Orange County Sanitation District
10844 Ellis Avenue
Fountain Valley, CA 92708

Or via e-mail at:

Email: jburror@ocsd.com

Introduction

The Notice of Preparation (NOP) has been prepared to notify agencies and interested parties pursuant to CEQA requirements that the Sanitation District, as the lead agency is beginning the preparation of an Environmental Impact Report (EIR) for the Outfall Land Section and Ocean Outfall Booster Pump Station Piping Rehabilitation (Project). The Sanitation District is proposing to rehabilitate its outfall system within its Treatment Plant 2 (Plant 2) in Huntington Beach and its Beach Junction Box (Beach Box), located at Huntington State Beach.

In 1999, the District prepared a Strategic Plan that identified projects needed to maintain and upgrade existing facilities to accommodate wastewater collection, treatment, and discharge requirements within its service area through 2020. The Sanitation District certified the Program Environmental Impact Report (PEIR) for the Strategic Plan in October 1999. The PEIR assessed the potential effects of the Strategic Plan on the local and regional environment, providing a program-level analysis for long-term planning.

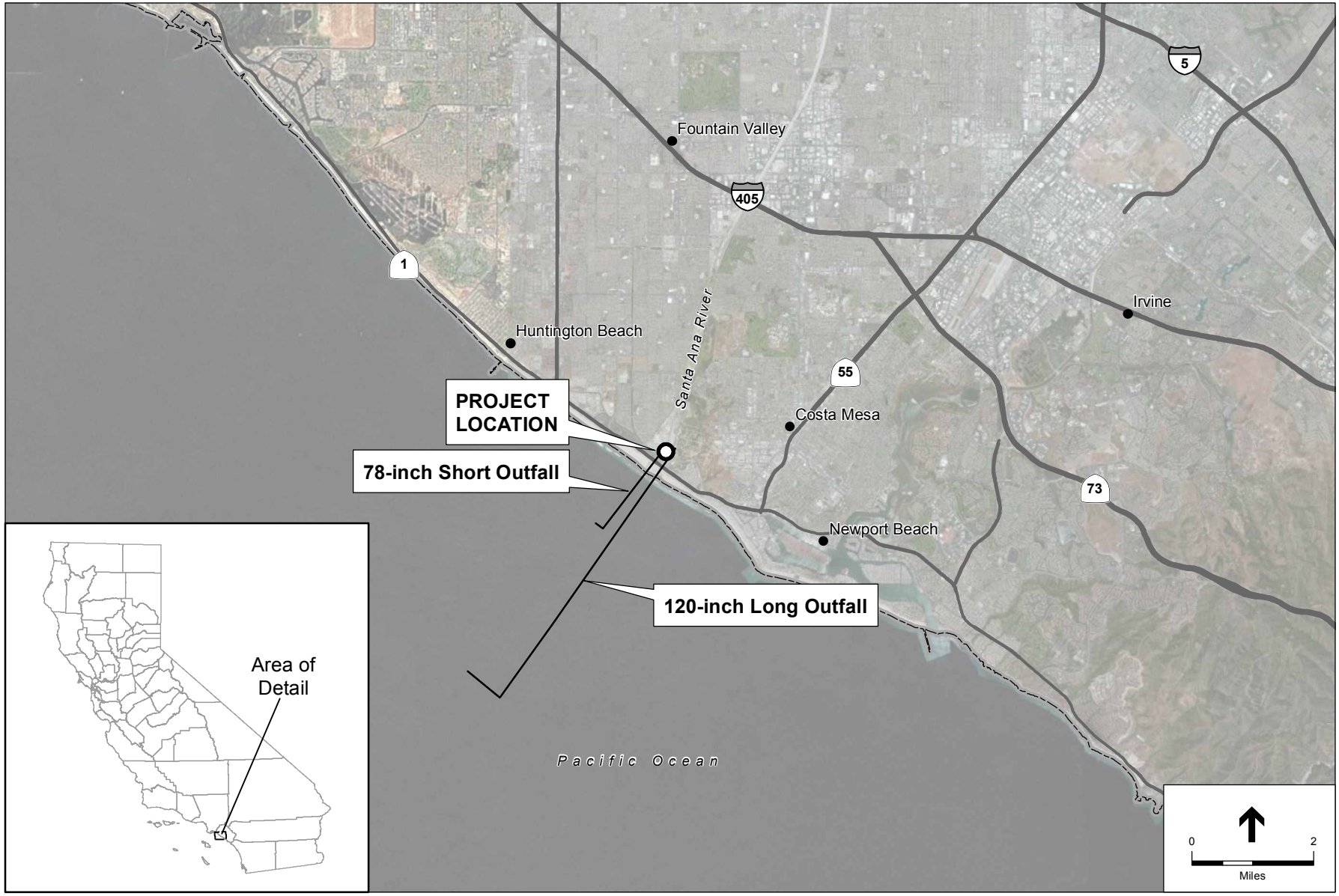
The proposed Project was not evaluated in the 1999 PEIR. Therefore, the Sanitation District is preparing an EIR to assess the Project. The EIR will incorporate by reference information from the 1999 PEIR, utilizing and referencing the analysis in the PEIR where appropriate, and augmenting that analysis to assess potential impacts of the proposed Project.

Project Background

Sanitation District is the third largest wastewater agency west of the Mississippi River serving a population of more than 2.6 million people. The Sanitation District is responsible for collection, treatment, recycle and disposal of treated wastewater generated in central and northwestern Orange County. The Sanitation District treats approximately 210 million gallons (mgd) of wastewater each day through two connected treatment plants located adjacent to the Santa Ana River (SAR), Reclamation Plant No. 1 in Fountain Valley and Treatment Plant No. 2 (Plant 2) in Huntington Beach. The combined treated effluent is discharged to the Pacific Ocean through a 120-inch diameter, primary, five-mile outfall (Long Outfall). **Figure 1** shows a schematic identifies the location of Plant 2 and the ocean outfall locations.

The Sanitation District maintains a smaller 78-inch diameter emergency 1-mile, short outfall (Short Outfall) that has been out of service since the Long Outfall was installed in 1971. The Sanitation District is permitted to discharge treated effluent to the Short Outfall during peak wet weather events and emergencies. The Sanitation District operates two outfall pump stations, the Ocean Outfall Booster Station (OOBS) and the Effluent Pump Station Annex (EPSA), located within Plant 2.

Of the average daily flow of 210 mgd the Sanitation District receives each day, an approximate net flow of 60 mgd is conveyed to the Groundwater Replenishment (GWR)



SOURCE: Bing Maps; ESA, 2011.

Outfall Land Section and OOBS Piping Rehabilitation. 211261

Figure 1

Regional Location Map

System for advanced treatment and recycling. The remaining average daily flow of 150 mgd is discharged through the Long Outfall system at Plant 2 to the Pacific Ocean on a regular basis.

Purpose and Need

Over the years, the Sanitation District has conducted several studies on the condition of its outfall systems and performed necessary repairs. To date the outfall system has only required minimal maintenance. However a recent engineering report revealed that the steel bulkhead walls on the east and west sides of the Beach Box may be experiencing severe corrosion and may be structurally deficient. The engineering report recommended that the Beach Box be rehabilitated as soon as possible to avoid any potential risk of Beach Box failure. Bulkheads separating the Long Outfall and the Short Outfall compartments and another at the east end of the Long Outfall compartment require that the Long Outfall compartment be taken out of service for access, proper inspection, and rehabilitation. Until this can be done, it will be difficult to assess the condition of these bulkheads or conduct the necessary rehabilitation. The recommended rehabilitation of the Beach Box is a key element of the proposed Project. Additionally, the Sanitation District outfall facilities are approximately forty years old and other repair and internal / external inspections on the Long Outfall System are also needed at this time.

Project Location

The Project site is located primarily within Plant 2 in the City of Huntington Beach, bounded by Hamilton Avenue to the north, Brookhurst Street to the west; Brookhurst Street runs adjacent to the property in a northwest to southeast manner. To the east is the Santa Ana River and to the south Pacific Coast Highway (PCH) and the Pacific Ocean. To the west and east lie residential neighborhoods.

Additionally, there are two offsite locations, one site in a vegetated area, along the western edge of the Orange County bike path, between the south side of Plant 2 and PCH, and the other site on the south side of PCH, between the Huntington Beach Least Tern Preserve and the Santa Ana River, within Huntington State Beach.

Project Description

The proposed Project will consist of inspection, condition assessment, and rehabilitation of corroded components of the land section of the existing 120-inch diameter, primary five-mile outfall (Long Outfall) system extending from Surge Tower No. 2 (Surge Tower 2) within the Sanitation District's Plant 2 to the Beach Box located on Huntington State Beach. Specifically, the proposed Project includes five project elements that comprise the Long Outfall System rehabilitation: (1) rehabilitation of Surge Tower 2, (2) rehabilitation of the land section of the Long Outfall, (3) abandonment of the Long Outfall metering ports and vaults, (4) replacement of the existing effluent flow meter on the Long Outfall and (5) rehabilitation of the Beach Box.

In order to accomplish this, it is necessary to take the Long Outfall System out of service. Two ways in which this could be accomplished are: 1) treated effluent flows from the Long Outfall could be temporarily diverted upstream of the Surge Tower 2 to the land section of the one-mile short outfall (Short Outfall) around the isolated project area and reconnect by constructing aboveground pipelines (a bypass) from the Short Outfall to the Long Outfall and continue to discharge treated effluent to the ocean, without use of the Short Outfall; or 2) divert flows from the Long Outfall upstream of Surge Tower 2 into the Short Outfall to discharge treated effluent to the ocean, without use the Long Outfall.

The EIR will evaluate the potential for the discharge of effluent from the Short Outfall to affect shoreline water quality. The EIR will evaluate whether discharges to the Short Outfall will result in the need to close beaches for any period of time during the four-to-six week construction period.

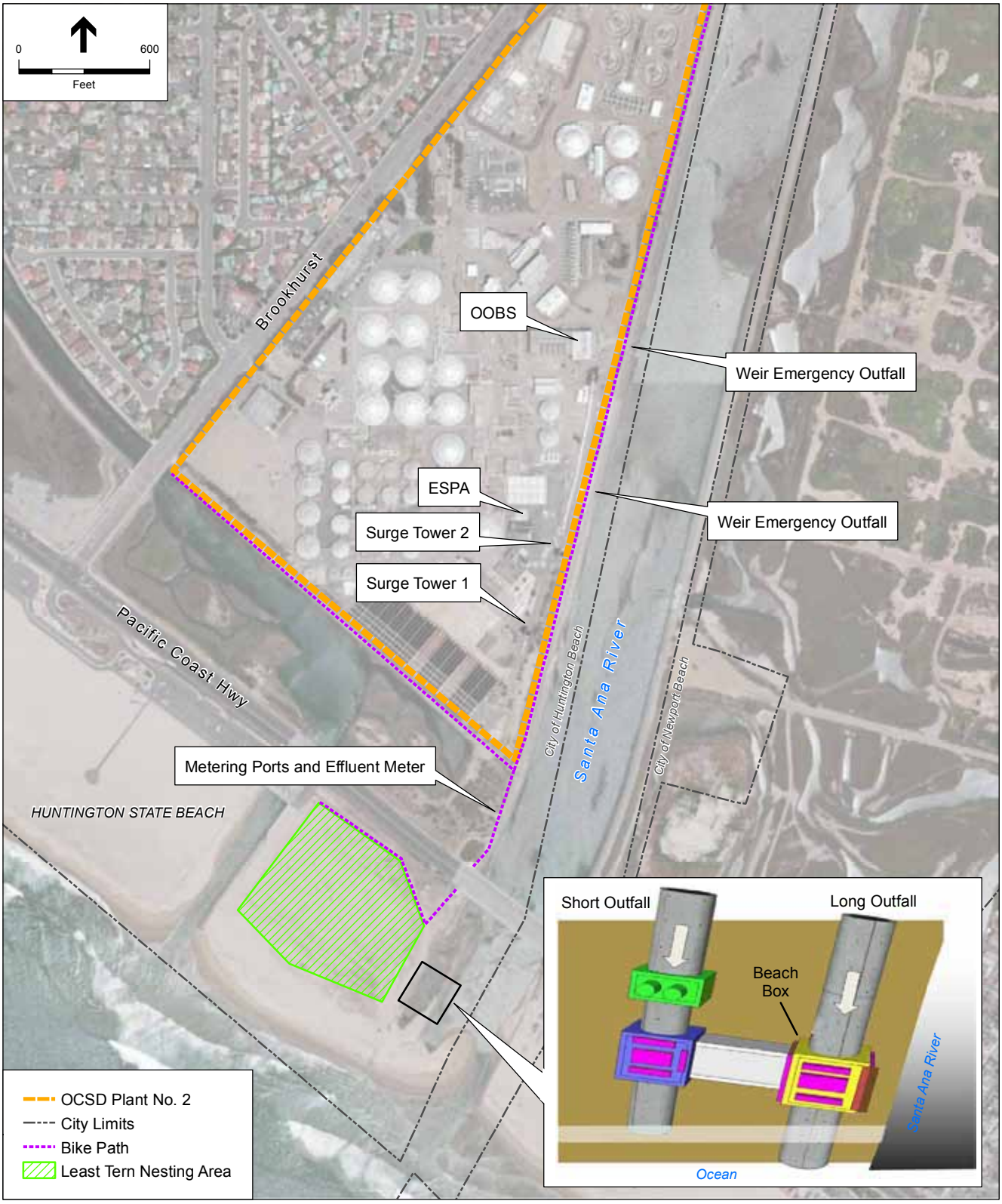
During construction if wet weather conditions result in flows that exceed the Short Outfall capacity, excess flows would be discharged to the Santa Ana River through the existing emergency discharge weirs located at Plant 2.

The two Alternatives considered for diverting flows are: Alternative 1, Bypass with no discharge to the Short Outfall and Alternative 2, Non-Bypass with discharge to the Short Outfall. Alternatives 1 and 2 would also employ one of three construction options: Carbon Fiber Wrap, Fiberglass Pipe Insert, and Steel Pipe Insert to repair the Beach Box. The EIR will evaluate the five project elements identified above that are applicable to Alternatives 1 and 2. The five project elements are further explained below. **Figure 2** shows the location of the project elements. **Figure 3** provides an additional view of the project element locations.

Surge Tower No. 2

Surge Tower No. 2 is located adjacent to the Santa Ana River within the Plant 2 boundaries downstream of Sanitation District (OOBS). Surge Tower 2 is 84.5 feet high and 26 feet in diameter, providing a tidal surge storage capacity of 318,000 gallons. The lower portion of Surge Tower 2 is made of concrete while the upper portion is made of steel. This structure is open to the atmosphere at the top. Treated effluent is pumped from one of the two existing ocean outfall pump stations, OOBS or EPSA, through Surge Tower 2 into the Long Outfall.

During a recent inspection of the Surge Tower 2, corrosion was observed along the upper edge of the steel portion of the Surge Tower 2. In order to protect this asset from further corrosion exterior and interior steel surfaces of the Surge Tower 2 will be blasted and recoated. In addition, the stairs and stair supports on the outside of Surge Tower 2 will be repaired. The stair treads leading to the top of the Surge Tower 2 will also be upgraded to meet current industry standards. During this process, electrical, instrumentation and low glare type lighting upgrades will also be performed.

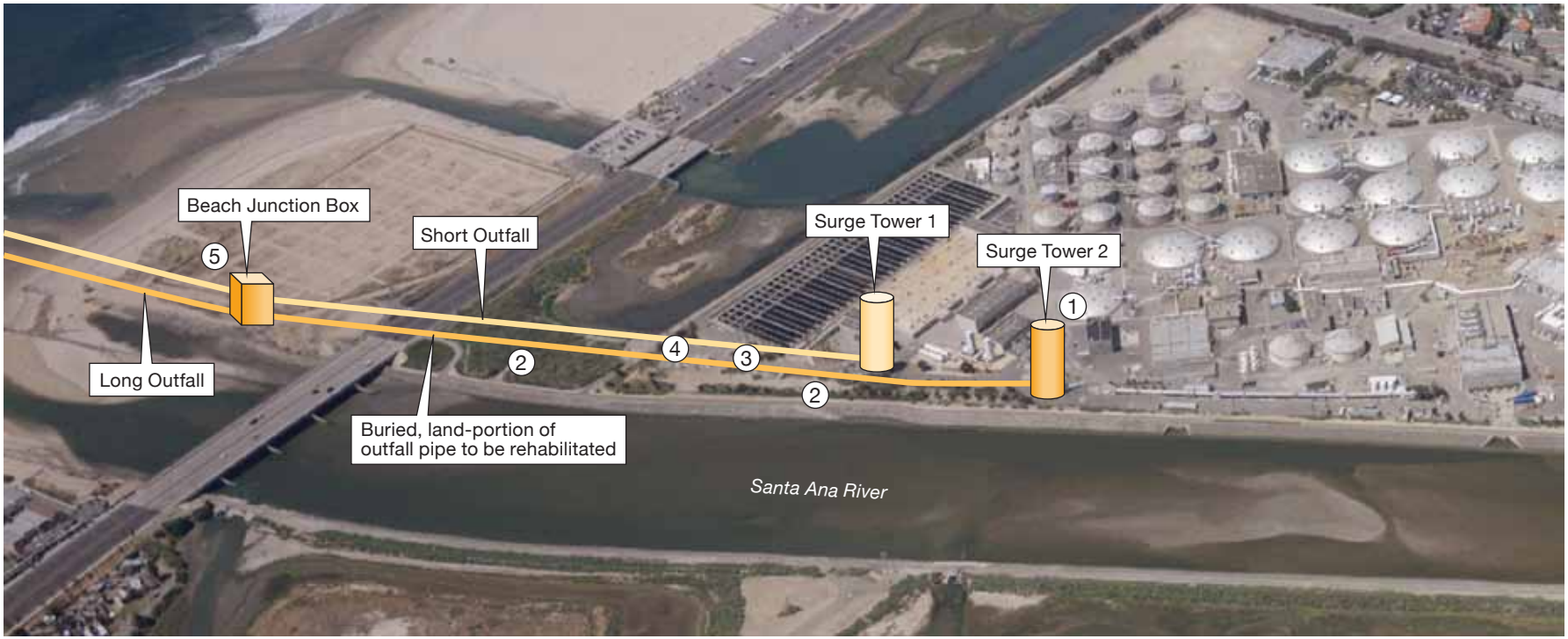


SOURCE: Bing Maps; ESA, 2011.

Outfall Land Section and OOBS Piping Rehabilitation. 211261

Figure 2

Location of Proposed Project Components



Scope

1. Coat inside / outside of Surge Tower 2
2. Long Outfall Repairs (including rehab of pipe risers)
3. Metering ports/vaults
4. Replace Effluent Meter
5. Inspect and repair Beach Junction Box (Beach Box)

SOURCE: Orange County Sanitation District, 2011.

Outfall Land Section and OOBS Piping Rehabilitation . 211261

Figure 3
Project Components

Long Outfall

The land section of the Long Outfall is approximately 1,900 feet long and 120-inches in diameter, and constructed of reinforced concrete pipe (RCP). There are three steel risers on the land section of the Long Outfall; two 24-inch diameter and one 42-inch diameter. The risers are welded to an internal steel cage in the Long Outfall. At ground level, these risers connect to the effluent sampler and two air vacuum release structures. The effluent sampler and one of the air vacuum release structures are located within the Plant 2 boundaries. A second air vacuum release structure is located outside of Plant 2 boundaries in a vegetated area, along the western edge of the Orange County bike path, between the southside of Plant 2 and PCH.

Corrosion was observed at the weld joints of these risers, which will require structural strengthening of riser connections. The proposed repairs entail structurally lining connection points of risers to the steel cage of the Long Outfall

Long Outfall Metering Ports/Vaults

The outfall meter ports are located within two meter vaults that straddle the Long Outfall within Plant 2 boundaries. These vaults/ports are obsolete and are expected to be abandoned in-place under the proposed Project.

The abandonment of the meter ports include: Removing the existing flow meter transducer probes and sealing interior surfaces. The abandonment of the metering vaults includes sealing the vaults with steel plates and lightweight cellular concrete. This requires taking out of service the land section of the Long Outfall

New Effluent Meter

An ultrasonic flow meter is located on the Long Outfall within Plant 2 boundaries. It is used to measure the effluent flow as required by the Sanitation District's NPDES permit. The current metering technology is obsolete and replacement parts for repairs are not available. The Sanitation District is currently evaluating metering technologies which may simplify repair and maintenance requirements. The new meter will be installed in the same location as the existing effluent meter. This requires taking out of service the land section of the Long Outfall.

Beach Box

The Beach Box consists of two compartments: the Long Outfall compartment and the Short Outfall compartment (see Figure 2). The Long Outfall compartment is associated with the Long Outfall and includes both concrete and steel bulkhead sections. The Short Outfall compartment is attached to the Short Outfall and only has concrete sections. The original intent of the Beach Box was to provide an accessible location to isolate the Long Outfall and block the tidal flow of the Long Outfall System prior to manned entry for inspection, maintenance and rehabilitation. The proposed Project involves the rehabilitation of the Long Outfall compartment.

The Long Outfall compartment of the Beach Box consists of three levels: ground, intermediate and bottom. At ground level, a concrete cover has been placed over the Beach Box to prevent intruders from entering the Beach Box. At the intermediate level, there is a concrete deck that has three openings covered by steel frames and covers. The largest cover provides access to the outfall at the bottom. The Long Outfall enters and exits the Beach Box at the bottom level. The deck and metal covers at the intermediate level are under pressure from the effluent discharge.

Alternative 1, Bypass - No use of the Short Outfall

In order to accomplish the repairs identified above, the land section of the Long Outfall will need to be taken out of service for the duration of construction. Two alternatives have been developed to provide access to the Long Outfall for the construction activities. Alternative 1 includes the five project elements describe herein and adds the installation of a temporary bypass structure immediately downstream of the Beach Box. The purpose of this structure is to allow the rehabilitation of the Beach Box including the land section of the Long Outfall without diverting treated effluent into the Short Outfall to discharge to the ocean. The Short Outfall is the Sanitation District's 1-mile pipeline for use under peak wet-weather flow events and other special conditions, as approved by the Regional Water Quality Control Board. The Bypass structure would consist of two 60-inch (5-foot diameter) aboveground pipes that would connect the land section of the Short Outfall with the land section of the Long Outfall. The Bypass pipes would be connected using a concrete drill to cut a hole in the existing pressurized pipe to make a new connection without service interruption or effluent leakage, a procedure known as "hot-tapping". The overhead 60-inch pipes would be connected to pipe flanges on the Long and the Short Outfalls. Line stops (or isolation gates) would be installed upstream of the bypass structure on the Long Outfall and downstream of the bypass structure on the Short Outfall.

After construction is completed, the temporary aboveground bypass piping would be removed. The aboveground bypass structure would be temporary in nature and would be removed upon completion of construction.

Alternative 1 would employ one of three construction Options A, B, or C, identified below to repair the Beach Box.

- Option A - Carbon Fiber Wrap

  This Option includes structurally lining the bottom level of the Long Outfall compartment of the Beach Box with a Carbon Fiber Reinforced Polymer (CFRP) Liner. Walls, ceiling, and floor of the bottom level would be lined with this material. The underside of the concrete deck and interior concrete surfaces at the bottom level would be repaired as needed prior to installing the liner. The frames and plates around the openings on the intermediate level and the opening covers would be

replaced. Concrete repairs to the walls from the deck to the ground level would also be made, as required.

- Option B Fiberglas Pipe Insert

This involves removing most of the deck on the intermediate level so that two sections of fiberglass pipe may be lowered into the bottom level of the Beach Box. Each section, which is smaller in diameter than the existing Long Outfall, would be pushed up into the Long Outfall, upstream and downstream of the Beach Box. A 54-inch diameter riser with an access cover would be lowered into the Beach Box and connected to the two sections of fiberglass pipe. The riser would provide access to the Long Outfall. Fiberglass closure couplings would be used to connect the fiberglass pipe to the existing Long Outfall. After the pipes are set in place, the space above the pipes would be filled with a reinforced concrete material up to ground level.

- Option C Steel Pipe Insert

This Option includes removing the covers from the intermediate level and inserting sections of steel pipe through the largest opening in the deck into the bottom level. The pipe sections would then be welded together in place. A 36-inch riser and access cover would be lowered into the bottom level and connected to the steel pipe sections. The riser will provide access to the Long Outfall. The pipes and riser would be wrapped with the CRFP material as well as the connection points between the steel pipe and the Long Outfall. The annular space surrounding the steel insert would be filled with grout. The existing concrete cover would be modified to accommodate the 36-inch riser and would be bolted back onto the frame at the top of the Beach Box. A coupling would be welded between the riser and the access cover to seal the interior of the Beach Box from the environment.

During construction if wet weather conditions resulted in flows that exceeded the Bypass capacity, excess flows would be discharged through the Short Outfall to the ocean. This potential discharge will be evaluated in the EIR.

Alternative 2, Non Bypass – Use of the Short Outfall

Alternative 2 – Includes all five project elements identified above and use of the Short Outfall System to minimize the duration of the proposed Project construction activities. The Short Outfall is the Sanitation District's one-mile pipeline for use under peak flow events and other special conditions, as approved by the Regional Water Quality Control Board. This Alternative would divert flow from the Long Outfall upstream of Surge Tower 2 to the Short Outfall for discharge of treated effluent to the ocean for the duration of the rehabilitation activities -

This Alternative considers the same three construction options as Alternative 1 for repairing the Beach Box: Carbon Fiber Reinforced Polymer (CFRP) wrap, fiberglass insert, or steel insert.

During construction, additional repairs, such as meter replacement, Surge Tower 2 repairs, etc. would also take place on the Long Outfall System.

When the work is complete, the plug downstream of the Beach Box would be removed and flow will be diverted back to the Long Outfall.

During construction if wet weather conditions result in flows that exceed the Short Outfall capacity, excess flows would be discharged to the Santa Ana River through the existing emergency discharge weirs located at Treatment Plant No. 2. The EIR will evaluate the potential for the discharge of treated effluent from the Short Outfall to affect shoreline water quality. The EIR will evaluate whether discharges to the Short Outfall will result in the need to close beaches any time during the four-to-six weeks of discharge.

No Project Alternative

The EIR will evaluate the No Project Alternative. Under this Alternative, routine maintenance is anticipated to continue for the existing Long Outfall System. No rehabilitation or repairs would be implemented. The risk of potential failure of the discharge system would increase. A catastrophic failure of the system could result in effluent spills on the treatment plant site and at Huntington State Beach.

Construction Methods and Schedule

Construction of the proposed Project will vary depending on the Alternative:

- Alternative 1 Bypass, total construction duration approximately 5-6 months with no discharge to the Short Outfall;

- Alternative 2 Non-Bypass, total construction duration of 4-6 months with a period of between four to six weeks of discharge to the Short Outfall

Construction methods would vary depending on the Alternative, but could include activities such as excavation and backfill activities, sheet piling, dewatering, abrasive blasting, coating, cement pouring, framing and construction of bypass structure. The EIR will provide detailed descriptions of construction methods to be employed for each Alternative.

Potential Environmental Effects

The EIR will assess the physical changes to the environment that would likely result from construction and operation of the Project, including direct, indirect and cumulative impacts. Potential impacts of the Project are summarized below. The EIR will identify

mitigation measures, as necessary, to minimize potentially significant impacts of the proposed project. The EIR also will include an analysis of project alternatives as required by CEQA.

Aesthetics

The Project would have aesthetic and visual impacts associated with construction on the Huntington State Beach. An analysis and description of existing visual conditions within the project area will be conducted to evaluate if the project would substantially degrade the existing visual character of the project area. Alternative 1 would require 5-6 months of construction on the beach that would install temporary large industrial bypass pipelines visible from all directions. Under Alternative 2, construction activities would likely be 24 hours a day, seven days a week to minimize use of the Short Outfall, The EIR will evaluate impacts from nighttime light and glare. The EIR will also evaluate the potential effects to public view corridors resulting from the Project and determine whether it would substantially alter the character of the site or create substantial new sources of light and glare. Mitigation measures will be developed as necessary to reduce the level of impact where possible

Air Quality and Greenhouse Gas (GHG) Emissions

The Project would generate air emissions during project construction. Construction emissions sources include equipment exhaust, earth movement, construction workers' commute, and material hauling. The EIR will estimate construction-related emissions and long-term operational emissions. The EIR will compare project emissions with the South Coast Air Quality Management District (SCAQMD) thresholds of significance and will also evaluate the Project's consistency with the regional air quality attainment plans. Mitigation measures will be developed as necessary to reduce the level of impact where possible

Construction-related and operational Greenhouse Gas Emissions (GHGs) for the Project would be quantified and analyzed in terms of CO_2 equivalents (CO_2e) to account for varying warming potential of gases. The EIR will analyze and compare to regional thresholds of significance. The EIR will also evaluate and determine whether the project would interfere with implementation of the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32 [AB32]), which sets Statewide goals to reduce GHGs to 1990 levels by 2020 Mitigation measures will be developed, as necessary, to reduce impact to a less than significance level.

Biological Resources

The Project would include construction on the Huntington State Beach that could affect biological resources including rare plants, the least tern and snowy plover. Limiting construction to the non-nesting season as proposed would substantially reduce any effect to these species. The EIR will include a list of threatened and endangered and other sensitive species with potential to occur within, or adjacent to, the project area

through the California Department of Fish and Game (CDFG) and the California Natural Diversity Database (CNDDB). The EIR will evaluate the potential impacts to sensitive species and habitats on the Huntington State Beach and mitigation measures will be developed to reduce the level of significant impact where possible.

Cultural Resources and Paleontological Resources

The minimal excavation required for this Project could uncover previously unknown archaeological or paleontological resources. The EIR will assess potential project impacts to archeological, historical, and paleontological resources. Mitigation measures will be developed as necessary to minimize impacts where possible

Geology, Soils and Seismicity

The Project would be located in a seismically active region. The construction of Project components could be subject to potential seismic hazards including ground shaking. The EIR will evaluate Project-related geologic impacts and develop mitigation measures as necessary to reduce potential effects from the proposed project. Mitigation measures will be developed, as necessary, to reduce the level of impact where possible

Hazards and Hazardous Materials

The EIR will summarize known hazardous waste contamination sites in the project area and will list potentially hazardous materials used and stored during construction and operation of the Project. The EIR will include mitigation measures for safe handling and disposal of hazardous materials and contaminated soils. The EIR also will address the potential for soil contamination and groundwater contamination and develop mitigation measures to prevent contamination, as necessary.

Hydrology and Water Quality

The Project site is located in close proximity to the Santa Ana River and to the Pacific Ocean. Excavation and construction activities would affect storm water quality if sediment or spills run off the project construction site. The EIR will describe storm water runoff control requirements and provide mitigation, as necessary, to meet construction and operational storm water runoff quality requirements. The EIR will also evaluate potential water quality impacts of discharging to the Santa Ana River during peak wet weather events. Groundwater dewatering may be necessary under Alternative 1. The EIR will evaluate impacts associated with groundwater dewatering activities. Mitigation measures will be developed, as necessary, to reduce the level of impact where possible.

Land Use

The EIR will identify current land uses and sensitive receptors in the project vicinity. Local General Plans, airport land use plans, and habitat conservation plans will be identified and summarized if applicable. The Coastal Element will also be evaluated and summarized. The Coastal Element includes a land use plan and specific policies

associated to coastal-related issues and proposed development within a jurisdiction's Coastal Zone boundary as required by the Local Coastal Programs and Coastal Act. The EIR will evaluate allowable activities within State Department of Parks and Recreation (State Parks) and project consistency with the existing land use and zoning designations. Mitigation measures will be developed as necessary to reduce the level of impact where possible

Marine Environment

The EIR will evaluate possible adverse impacts to marine life and ocean water quality during the discharge of treated effluent. The EIR will evaluate results of a particle transport model that will estimate the likelihood of the discharge plume reaching the shoreline under various ocean current scenarios. He EIR will evaluate the potential for the discharge of treated effluent from the Short Outfall under Alternative 2 to affect shoreline water quality. The EIR will evaluate whether discharges to the Short Outfall will result in the need to close beaches any time during the four to six week discharge period. The EIR will also evaluate potential impacts to ocean water quality from potential discharge to the Santa Ana River during wet weather events that may occur during the construction period under Alternative 2. The EIR will develop mitigation measures as necessary to minimize any potential significant impacts.

Noise and Vibration

Construction and operation of the Project would generate noise during construction activities that could affect nearby residences and other sensitive receptors in the Project vicinity. Under Alternative 2, construction activities will likely be 24 hours a day seven days a week to minimize use of the Short Outfall. The EIR will evaluate peak noise and vibration levels generated by construction equipment and activities on the beach. The EIR will evaluate state and local noise policies, regulations, and standards and determine the Project's ability to comply with existing noise standards and policies. Mitigation measures will be developed as necessary to reduce the level of impact where possible.

Recreation

The Project site is located on the Huntington State Beach. The EIR will discuss potential impacts to recreational activities, including the potential to affect beach access, bike path and beach parking, and identify significance thresholds for impacts to recreational facilities. The EIR will identify mitigation measures to reduce the effects of the proposed Project to recreation facilities and activities in the area.

Traffic and Transportation

Construction of the Project could affect parking at Huntington State Beach and would temporarily close or detour existing bike path(s) in the project vicinity. The EIR will characterize roadways and bike paths and analyze potential project-related impacts. The

EIR will assess potential construction traffic impacts to local roadways. The EIR will develop mitigation measures as necessary to minimize any potential significant impacts.

Utilities and Service Systems

The proposed Project would require that the Long Outfall be out of commission during construction of Alternative 2, requiring the Short Outfall to accommodate full discharge volumes for a period of four to six weeks. The EIR will evaluate impacts to public services and utilities while using the Short Outfall during construction. The EIR will develop mitigation measures, as necessary, to minimize any potential effects.