CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

Established in 1938

JENNIFER LUCCHESI, *Executive Officer*
(916) 574-1800 *Fax* **(916) 574-1810**
California Relay Service TDD Phone **1-800-735-2929**
from Voice Phone **1-800-735-2922**

***Contact Phone:* (916) 574-1890**
***Contact FAX:* (916) 574-1885**

November 18, 2016

NOTICE OF PREPARATION OF A SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC SCOPING MEETING

File Ref: SCH No. 2001051092

NOTICE IS HEREBY GIVEN that the California State Lands Commission (CSLC) will prepare a Supplement to an Environmental Impact Report (Supplemental EIR) pursuant to the California Environmental Quality Act (CEQA; Pub. Resources Code § 21000 et seq.) and State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), and that CSLC staff will conduct a public scoping meeting in the city of Huntington Beach, for the project listed below.*

Project Title:	**Seawater Desalination Project at Huntington Beach: Outfall/Intake Modifications and General Lease — Industrial Use (PRC 1980.1) Amendment**
Proponent:	Poseidon Resources (Surfside) LLC (Poseidon)
Project Location:	Tide and submerged lands offshore of Huntington Beach State Park, city of Huntington Beach, Orange County
Public Meeting Information:	**Wednesday, December 14, 2016** **Exhibits: 3 to 7 p.m. Public comments received: 4 to 7 p.m.** Huntington Beach Central Library, Talbert Room 7111 Talbert Ave., Huntington Beach, CA 92648

The CSLC staff has prepared this Notice of Preparation (NOP) in order to obtain agency and the public's views, in writing and at the public meeting, as to the scope and content of the environmental analysis, including the significant environmental issues, range of alternatives, and mitigation measures that should be included in the Supplemental EIR. This Notice is also available online at www.slc.ca.gov (under the "Information" tab and "CEQA Updates" link).

Written comments must be received or postmarked by Wednesday, December 21, 2016. (State CEQA Guidelines, § 15103 requires that responses to a NOP must be provided within 30 days after receipt of notice.) Please send your comments at the earliest possible date to:

Cy R. Oggins	**E-mail**: CEQA.comments@slc.ca.gov
California State Lands Commission	**FAX**: (916) 574-1885
100 Howe Avenue, Suite 100-South	**Phone**: (916) 574-1880
Sacramento, CA 95825	

* The Supplemental EIR will be prepared pursuant to State CEQA Guidelines section 15163. The scoping meeting will be held pursuant to Public Resources Code section 21083.9, subdivision (a)(2) and State CEQA Guidelines sections 15082, subdivision (c), and 15083.

PROJECT SUMMARY AND PURPOSE OF CEQA REVIEW

Poseidon has applied to the CSLC to amend Lease No. PRC 1980.1, which was approved by the CSLC in 2010 (Calendar Item 62, October 29, 2010) in connection with the offshore outfall and intake pipelines associated with the AES Huntington Beach Generating Station and Poseidon's proposed Huntington Beach Seawater Desalination Project located at 21730 Newland Street, Huntington Beach. The purpose of this Supplemental EIR is to address environmental issues associated with proposed modifications to the outfall and intake lines. See Attachment A to this NOP for background information and the Project description.

PUBLIC SCOPING MEETING

The scoping meeting noticed above will begin at 4 p.m. with a brief presentation on the proposed Lease Amendment. CSLC staff will then receive comments on potential significant environmental issues, alternatives, and mitigation measures to include in the Supplemental EIR. Staff will close the meeting at 7 p.m. (written comments will be accepted until the end of the comment period on December 21). Depending on the number of speakers, a 3-minute time limit on oral comments may be imposed. No action on the Lease Amendment will be taken at the scoping meeting. Exhibits and information will be available for review outside the Talbert Room from 3 p.m. to 7 p.m. for those who wish to learn more about the proposed Project.

IMPORTANT NOTES TO COMMENTERS

1. If you submit written comments, you are encouraged to submit electronic copies by email to CEQA.comments@slc.ca.gov and write **"Huntington Beach Desalination Outfall/Intake Lease Amendment NOP Comments"** in the subject line of your email. If written comments are faxed, please also mail a copy to ensure receipt of a readable copy.

2. Before including your mailing or email address, telephone number, or other personal identifying information in your comment, please be aware that the entire comment—including personal identifying information—may become publicly available, including in the Supplemental EIR and posted on the Internet. The CSLC will make available for inspection, in their entirety, all comments submitted by organizations, businesses, or individuals identifying themselves as representatives of organizations or businesses.

3. If you represent a public agency, please provide the name, email address, and telephone number for the contact person in your agency for this Supplemental EIR.

4. If you require a sign language interpreter or other reasonable accommodation to conduct business with CSLC staff at the scoping meeting for a disability, as defined by the Federal Americans with Disabilities Act and California Fair Employment and Housing Act, please contact the CSLC staff person listed in this NOP at least 48 hours in advance of the meeting to arrange for such accommodation.

5. Please contact the staff person listed in this NOP by telephone at (916) 574-1880 or by email at cy.oggins@slc.ca.gov if you have any questions.

Signature: _____ Date: November 18, 2016

Cy R. Oggins, Chief
Division of Environmental Planning and Management

ATTACHMENT A: PROJECT DESCRIPTION
Huntington Beach Desalination Plant Outfall/Intake Modifications and General Lease — Industrial Use (PRC 1980.1) Amendment

1.0 PROJECT LOCATION AND BACKGROUND

In 2010, the City of Huntington Beach (City), as lead agency under the California Environmental Quality Act (CEQA), certified a Final Subsequent Environmental Impact Report (Subsequent EIR; State Clearinghouse No. 2001051092) that evaluated the environmental impacts of and alternatives to the construction and operation (both co-located and long-term, stand-alone) by Poseidon Resource Corporation of the Seawater Desalination Project at Huntington Beach (HB Desalination Plant). This proposed 50-million-gallon-per-day (MGD) desalination plant is located at 21730 Newland Street in Huntington Beach, Orange County, adjacent to the AES Huntington Beach Generating Station (HBGS). Offshore components of the once-through cooling (OTC) system associated with the upland HBGS are a 14-foot-diameter seawater intake pipeline extending approximately 1,650 feet offshore and a 14-foot-diameter discharge (outfall) pipeline extending about 1,500 feet offshore (Figures 1 and 2).

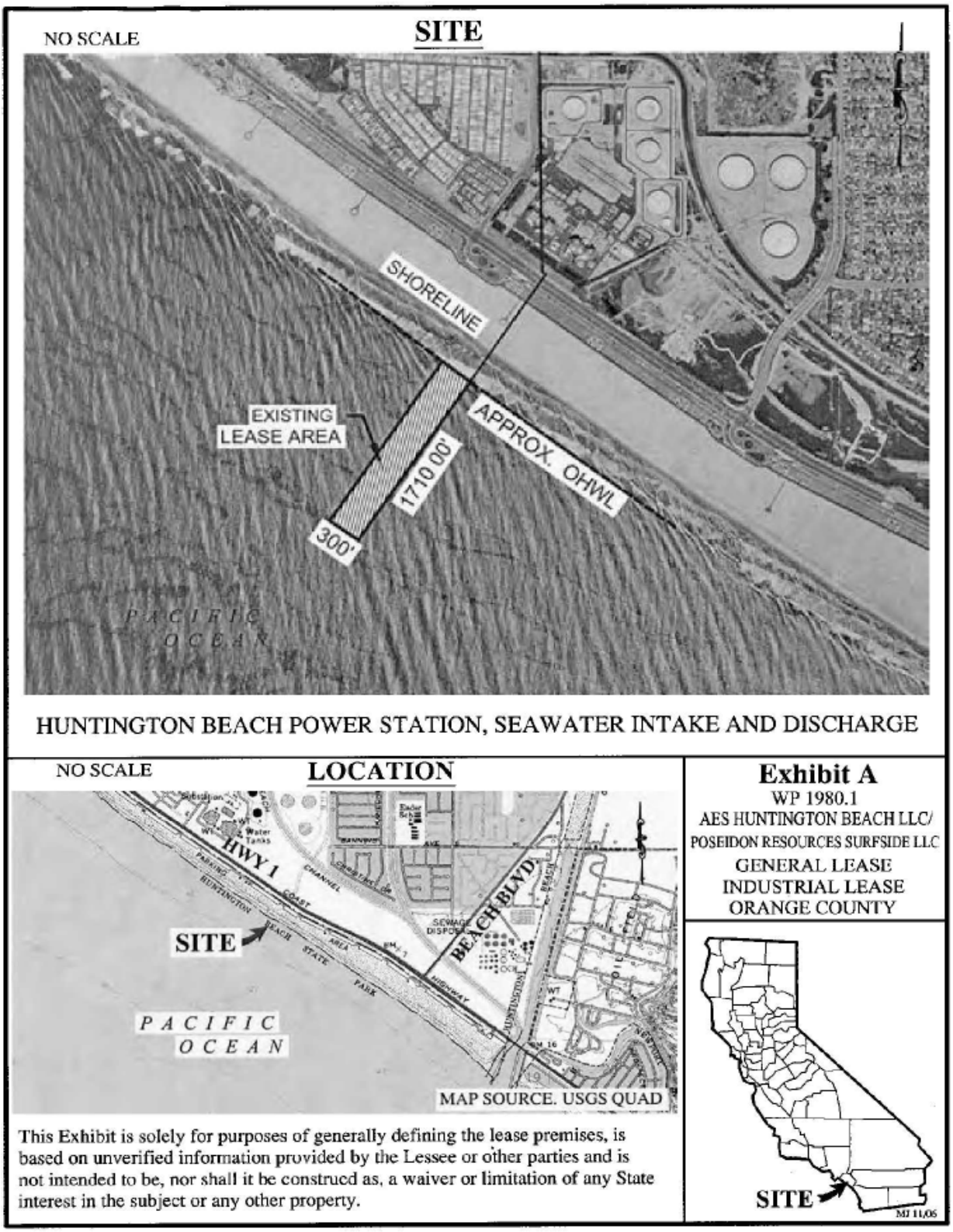
The existing HBGS intake and outfall pipelines lie offshore of Huntington Beach State Park on approximately 11.78 acres of tide and submerged (sovereign) land under the jurisdiction of the California State Lands Commission (CSLC). In October 2010, the CSLC approved an amendment to CSLC Lease No. PRC 1980.1, a General Lease — Industrial Use issued to AES Huntington Beach LLC, to include Poseidon Resources (Surfside) LLC (Poseidon) as a Co-Lessee (Calendar Item 62, October 29, 2010) that was fully executed on July 26, 2011. The Lease amendment, similar to the City's Project approval, included operation of the Huntington Beach Desalination Plant under co-located and stand-alone scenarios.

- Co-located. The HB Desalination Plant would use seawater withdrawn from the ocean by HBGS for OTC, purify it using reverse osmosis (RO) technology, blend and dilute brine-concentrated seawater with remaining HBGS cooling water, and discharge the combined flow to the ocean via the offshore HBGS outfall.
- Stand-alone. If AES ends OTC at HBGS (scheduled to occur by December 31, 2020), Poseidon would withdraw seawater and discharge brine-concentrated seawater through the existing intake and outfall without HBGS OTC flows. The CSLC's lease also requires that AES's lease obligations be assigned to Poseidon.

In July 2016, Poseidon applied to the CSLC to amend Lease No. PRC 1980.1 to modify the existing intake and outfall structures within the Lease area (the Project). Poseidon's application proposed two "technology enhancements" to the Lease area:

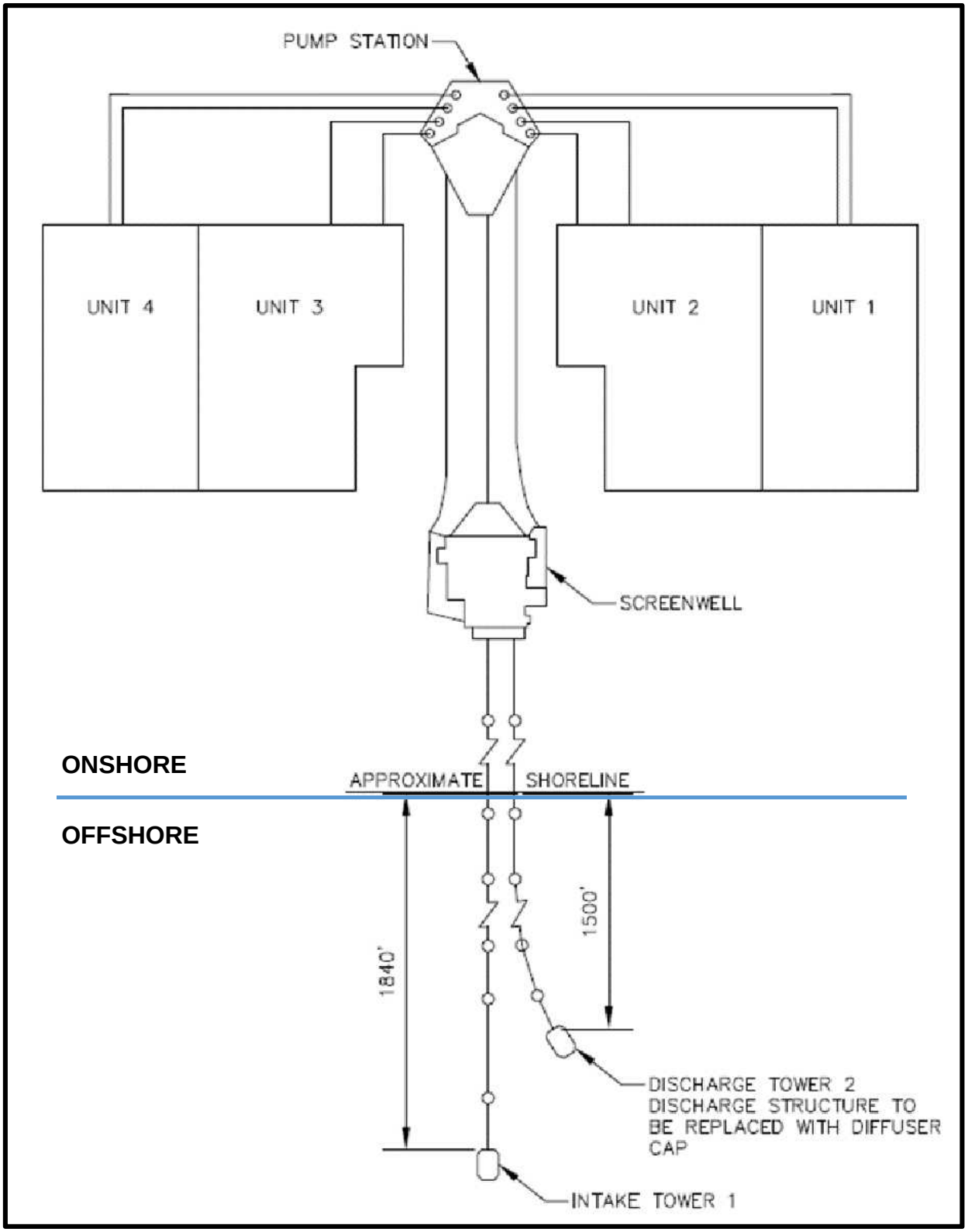
- Modification of the offshore terminus of the seawater intake line with 1-millimeter (mm) wedgewire screens with a through-screen velocity 0.5 feet/second or less to reduce potential entrainment and minimize impingement (Figure 3);
- Modification of the offshore terminus of the seawater discharge line by addition of a multiport seawater diffuser (Figure 4).

Figure 1. Project Location



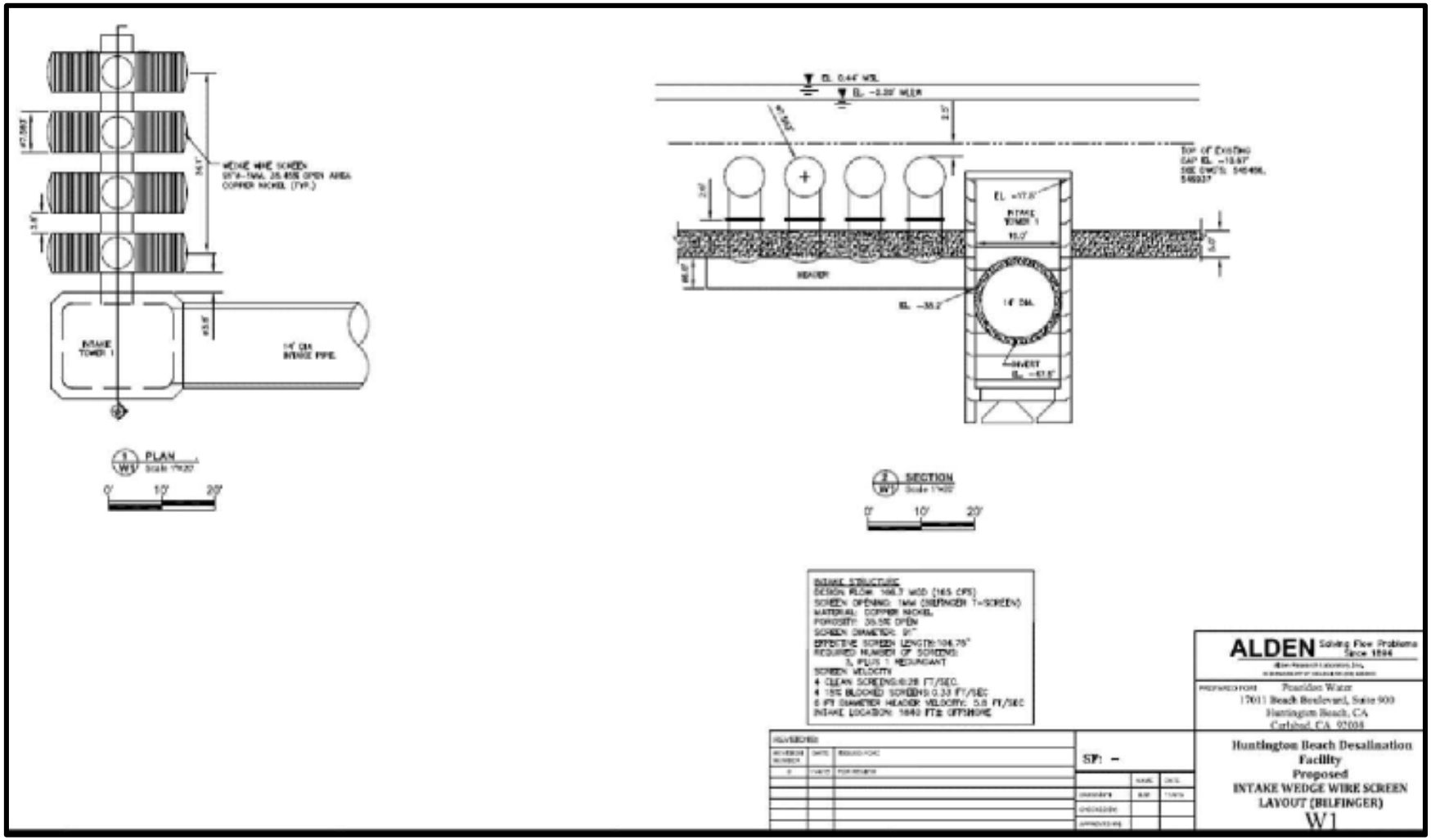
Source: CSLC (2010). (Note: OHWL = Ordinary High Water Line.)

Figure 2. General Schematic of the Layout of the HGBS Intake/Outfall Towers



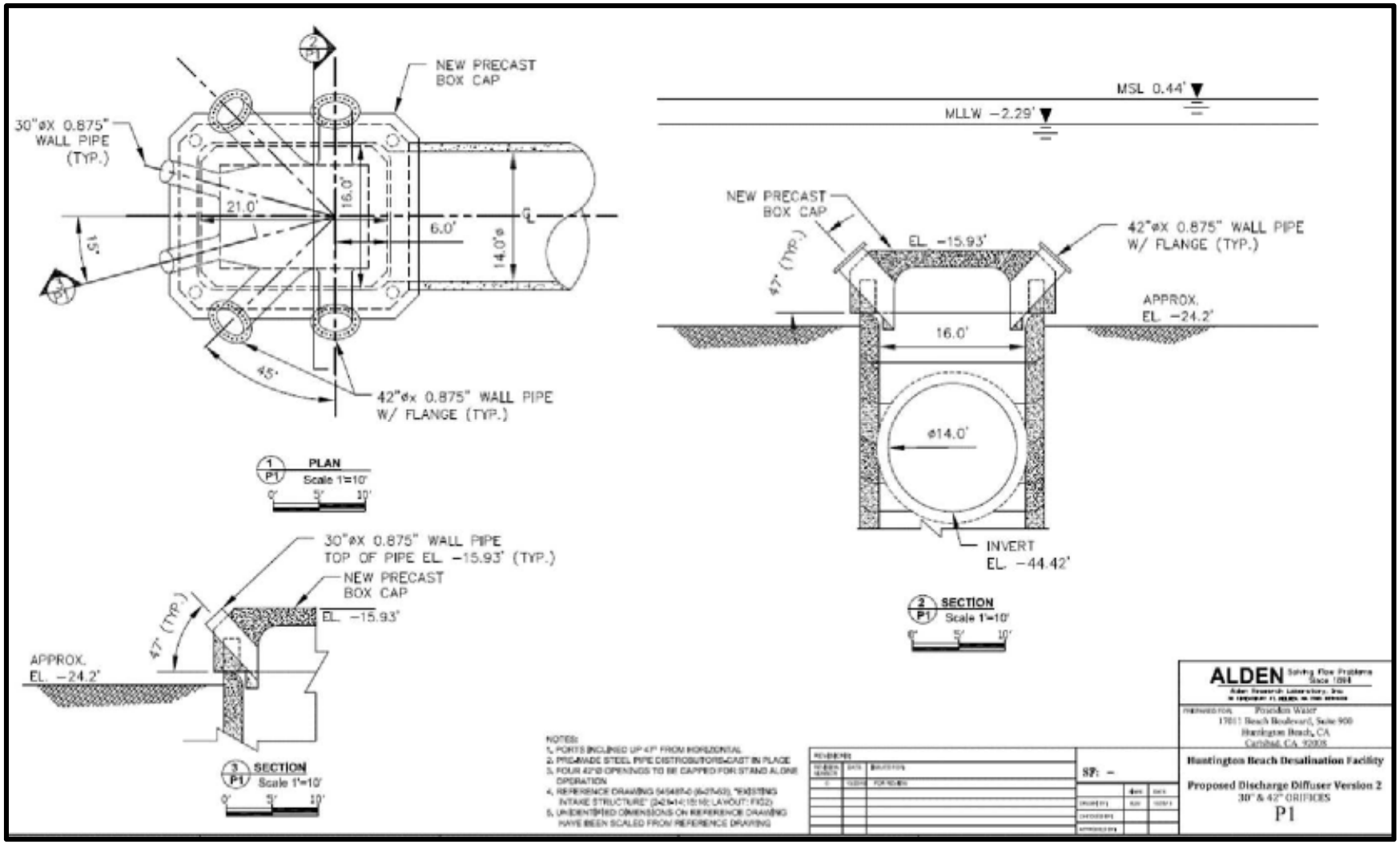
Source: Poseidon (2016)

Figure 3. Conceptual Plan and Section Views of Proposed 1-mm Offshore Wedgewire Screens



Source: Poseidon (2016)

Figure 4. Conceptual Design of Proposed Diffuser to be Added to Top of HBGS Discharge Tower



Source: Poseidon (2016)

According to Poseidon, these modifications are designed to enhance marine life protection and comply with requirements of the State Water Resources Control Board (SWRCB) Amendment to the Water Quality Control Plan for the Ocean Waters of California (Ocean Plan) Addressing Desalination Facility Intakes, Brine Discharges, and the Incorporation of Other Non-substantive Changes (Desalination Amendment). (The proposed modifications would be in addition to Poseidon's stated intent to reduce the HB Desalination Plant's long-term, stand-alone operation source-water requirements to an average annual volume of approximately 106.7 MGD [30 percent less source water than the 152 MGD evaluated in the City's 2010 Subsequent EIR]).

Table 1 summarizes key events that have occurred since 2010, when the City certified the Subsequent EIR and approved the HB Desalination Plant and the CSLC amended Lease No. PRC 1980.1 authorizing use of the HBGS intake and outfall for desalination.

Table 1. Key Events since the CSLC's 2010 Lease Amendment Approval

February 2012	The Santa Ana Regional Water Quality Control Board (RWQCB) approved Order No. R8-2012-0007, National Pollutant Discharge Elimination System (NPDES) Permit No. CA8000403, which permits the HB Desalination Plant's use of the HBGS existing seawater intake and discharge facilities. This NPDES Permit expires in February 2017.
May 2015	The SWRCB's 2015 adopted Desalination Amendment affirmed the RWQCBs' authority to determine, on a project- and site-specific basis, compliance of desalination plants with California Water Code section 13142.5, subdivision (b), which requires projects to use the best available site, design, technology and mitigation measures feasible to minimize the intake and mortality of all forms of marine life. The Desalination Amendment establishes subsurface intake as a preferred seawater desalination intake technology where feasible. If a subsurface intake is not feasible, surface water intakes must be equipped with screens with 1 mm or smaller screen slots and designed to achieve through-screen velocities of 0.5 feet/second or less. For discharges of RO concentrate from seawater desalination facilities, the Desalination Amendment establishes the following preferred technologies: (1) commingling with treated municipal wastewater, and (2) multiport brine diffuser.
September 2015	Poseidon submitted Coastal Development Permit Application No. 9-15-1731 to the California Coastal Commission (CCC) to build and operate the HP Desalination Plant.
November 2015	An Independent Scientific Technical Advisory Panel (ISTAP), convened by CCC staff and Poseidon at the direction of the CCC in November 2013, released a final report that concluded that subsurface intake technologies at the HB Desalination Plant site location were infeasible.
March and June 2016	In March, Poseidon applied to the Santa Ana RWQCB for a determination that the HB Desalination Plant's amended project description complies with the Desalination Amendment and Water Code section 13142.5, subdivision (b). In June, Poseidon submitted an application to the RWQCB to amend and renew NPDES Permit No. CA8000403.
July 2016	Poseidon submitted an application to the CSLC to amend Lease No. PRC 1980.1 (discussed above).

October 2016	The CSLC, CCC, and Santa Ana RWQCB staffs signed an Interagency Agreement that sets forth a "process and sequence of their respective agency's action on the Poseidon Project, which each deem to be consistent with their respective statutory and regulatory permitting authority."

2.0 PROJECT DESCRIPTION

The following summarizes proposed facility modifications to the intake and outfall pipelines for both co-located and stand-alone operations.

2.1 Co-Located Operations

Pursuant to the SWRCB (2010) adopted statewide policy on the use of coastal and estuarine waters for power plant cooling (OTC Policy), the HBGS is scheduled to discontinue OTC by December 31, 2020. During any co-located operations, the HB Desalination Plant would obtain its source water from the effluent stream of the HBGS.

In order to comply with the Desalination Amendment receiving water limits of approximately 35.5 parts per thousand (ppt) at the Brine Mixing Zone of 328 feet, approximately 296 MGD of wastewater is required from the HBGS to meet Project intake and discharge needs. Since HBGS does not always discharge 296 MGD of wastewater, Poseidon proposes to add a multiport diffuser to the existing discharge tower to meet the Desalination Amendment receiving water salinity limits. Characteristics of the diffuser are as follows.

- The diffuser would have six fixed ports: four 42-inch-diameter and two 30-inch-diameter. The number and diameter were selected to produce an initial discharge velocity of about 10 feet/second for either co-located or stand-alone operation.
- The horizontal angles between the 42-inch and 30-inch ports would vary from 30 to 45 degrees to provide flow separation for entrainment of ambient ocean water into each discharge jet and to fit the pipes into the available space.
- The ports would be inclined upward at 47 degrees to help prevent the brine from sinking immediately after discharge, by providing a longer arched flow path, allowing for more dilution prior to the brine interacting with the sea floor, and resulting in greater dissipation of discharge velocity.
- The diffuser modification would occupy the same physical space after the diffuser cap is placed on top of the existing discharge tower and the existing tower is lowered to maintain the existing height of the discharge tower with the diffuser cap.
- During installation of the diffuser, existing riprap surrounding the discharge tower would be side-cast and replaced after construction (the footprint of the riprap area would increase by approximately 4,000 square feet).

Under the co-located operating scenario, all six ports of the multiport diffuser would allow for the HBGS' currently permitted discharge of up to 387 MGD of seawater. With

the Project and HBGS operating during co-located operation while running all operational pumps and with all diffuser ports open, the initial discharge velocity would be approximately 10.8 feet/second. According to Poseidon, the multiport diffuser would reduce the salinity in the concentrated seawater discharged by the Project to no more than 2 ppt above ambient within 328 feet (100 meters) of the discharge point, thus complying with the Desalination Amendment requirements for receiving water salinity.

2.2 Stand-Alone Operation

When OTC operations are terminated at HBGS, the Project's intake system would be modified to operate under permanent stand-alone conditions. Prior to the permanent stand-alone conditions, Poseidon would retrofit the existing seawater intake pipeline with the offshore 1 mm wedgewire screen manifold that, according to Poseidon, would achieve a through-screen velocity of 0.5 feet/second or less, in accordance with requirements of California Ocean Plan Section III.M.2.d(1)(c). The potential offshore wedgewire screen intake modifications would add a 91-inch-diameter cylindrical wedgewire screen to the existing HBGS intake tower for an overall screen length of 26 feet and an effective screen area of approximately 105 inches, which would increase the size of the intake facilities.

Permanent stand-alone operations will also involve modification of the multiport diffuser that was placed on the outfall for co-located operations. The four, 42-inch nozzles on the diffuser will be sealed off, leaving only the two 30-inch nozzles available for the Project's long-term stand-alone discharge (approximately 56.7 MGD). The long-term stand-alone Project operation initial discharge velocity would be 10 feet/second. According to Poseidon, the modification to the engineered diffuser will continue to comply with Desalination Amendment requirements that receiving water salinity not exceed 2 ppt above ambient at a distance of 328 feet (100 meters) of the point where seawater desalination RO concentrate is discharged, and, based on the trajectory of the diffuser discharges, the brine discharges would not interact with the ocean floor until the plume velocities have been substantially reduced.

2.3 Project Equipment and Schedule

In-water construction of the wedgewire screen intake and diffuser system would occur from a derrick barge moored over the ends of the intake and discharge pipelines, located approximately 1,840 feet and 1,500 feet offshore, respectively. Work offshore would be limited to these areas and transit routes to and from the Port of Long Beach. Under Poseidon's currently proposed Project schedule: (1) construction for installing the wedgewire screens on the intake pipeline would take approximately 3 months; (2) construction of the outfall diffuser system would take approximately 2 months; (3) intake and discharge construction may overlap for a brief period (approximately 2 months); and (4) construction hours would be limited to between 7 a.m. and 6 p.m. to adhere to City Municipal Code.

3.0 ENVIRONMENTAL ANALYIS

3.1 Scope of CEQA Review (Supplemental EIR)

The proposed modifications to the existing HBGS intake and outfall structures would occur only on sovereign lands under the CSLC's jurisdiction and would require an amendment to the CSLC lease. None of the modifications would involve the City's jurisdiction onshore, or require any new City approval. Therefore, the CSLC is the agency responsible for reviewing the proposed modifications to these existing offshore structures pursuant to CEQA. Pursuant to State CEQA Guidelines sections 15162 and 15163, CSLC staff conducted a preliminary review of Poseidon's 2016 Lease amendment application in conjunction with the City's 2010 Subsequent EIR and HB Desalination Plant approval and the CSLC's 2010 Lease Amendment, which covered co-located and stand-alone operations. Staff determined that a Supplement to the City's 2010 Subsequent EIR (Supplemental EIR) is required based on the potential for significant impacts resulting from the proposed modifications to the Lease area.

A preliminary list of environmental issues and alternatives to be discussed in the Supplemental EIR is provided below. Additional issues and/or alternatives may be identified at the public scoping meeting, and in written comments, as part of the EIR process. The CSLC invites comments and suggestions on the scope and content of the environmental analysis, including the significant environmental issues, reasonable range of alternatives, and mitigation measures that should be included in the EIR. The CSLC uses the following designations when examining the potential for impacts according to CEQA issue areas.

Potentially Significant Impact	Any impact that could be significant, and for which feasible mitigation must be identified and implemented. If any potentially significant impacts are identified but cannot be mitigated to a less than significant level, the impact would be *significant and unavoidable*; if any potentially significant impacts are identified for which feasible, enforceable mitigation measures are developed and imposed to reduce said impacts to below applicable significance thresholds, the impact would be *less than significant with mitigation*.
Less Than Significant Impact	Any impact that would not be considered significant under CEQA relative to the applicable significance threshold, and therefore would not require mitigation.
No Impact	The Project would not result in any impact to the resource area considered.
Beneficial Impact	The Project would provide an improvement to an issue area in comparison to the baseline information.

Estimations of impact levels used for this Notice of Preparation are based solely on preliminary documents and do not preclude findings of significance that would be made during the preparation of the Supplemental EIR, including findings that could change the significance of an impact and how it would be addressed in the Supplemental EIR.

3.2 Permits and Agency Coordination

In addition to action by the CSLC, the Project may require permits and approvals from other reviewing authorities and regulatory agencies with oversight over aspects of the proposed Project such as, but not limited to, those listed in Table 2. Lease PRC 1980.1 requires Poseidon to obtain and maintain all applicable permits from other agencies.

Table 2. Potential Responsible, Coordinating, and Consultation Agencies/Entities

Regional	South Coast Air Quality Management District (AQMD)
State	California Coastal Commission (CCC)
	California Department of Fish and Wildlife (CDFW)
	California State Historic Preservation Officer (SHPO)
	Santa Ana Regional Water Quality Control Board (RWQCB)
Federal	U.S. Army Corps of Engineers (USACE)
	U.S. Coast Guard (USCG)
	U.S. Fish and Wildlife Service (USFWS)
	National Oceanic and Atmospheric Administration - Fisheries (NMFS)
Tribal	The CSLC staff will coordinate its review with local tribes consistent with the CSLC Tribal Consultation Policy (www.slc.ca.gov/About/Docs/Tribal.pdf), Executive Order B-10-11, and Tribal Consultation requirements under CEQA.

3.3 EIR Alternatives Analysis

In addition to analyzing the potential impacts associated with the proposed Project, in accordance with the State CEQA Guidelines, an EIR must:

> *…describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.* (§ 15126.6.)

The State CEQA Guidelines also require that the EIR evaluate a "no project" alternative and, under specific circumstances, designate an environmentally superior alternative from among the remaining alternatives. Alternatives will be identified as a result of the environmental analysis and information received during scoping. The EIR will:

- Provide the basis for selecting alternatives that are feasible and that would reduce significant impacts associated with the proposed Project;
- Provide a detailed explanation of why any alternatives were rejected from further analysis; and
- Evaluate a reasonable range of alternatives, including the "no project" alternative.

Possible alternatives not already evaluated in the City's 2010 Subsequent EIR include intake screen sizing and diffuser types and configurations. Alternatives to the HB Desalination Plant's site location would be encompassed in the no project alternative,

as the action before the CSLC is either to approve or disapprove Poseidon's proposed amendment to the existing CSLC Lease No. PRC 1980.1.

3.4 Currently Identified Potential Environmental Impacts

As noted above, the CSLC staff conducted a review of the City's 2010 Subsequent EIR and the CSLC's 2010 Lease amendment, which authorized both co-located and stand-alone operations of the proposed HB Desalination Plant. Based on CSLC staff's initial internal scoping, the modifications proposed in Poseidon's 2016 Lease amendment are not anticipated to affect the following environmental factors identified in State CEQA Guidelines Appendix G (Environmental Checklist Form), which can therefore be eliminated from consideration in the Supplemental EIR.

- Agricultural and Forest Resources
- Biological Resources (Terrestrial)
- Geology and Soils
- Hydrology
- Mineral Resources
- Population and Housing
- Public Services
- Utilities and Service Systems
- Special Impact Areas:
  - Socioeconomics
  - Environmental Justice
  - Growth-Inducing Impacts

The following sections provide information on the currently identified issues that may have potentially significant environmental effects associated with Project construction.

3.4.1 Aesthetics

The Supplemental EIR will evaluate visual impacts related to screen and diffuser installation, offshore riprap modification, and marine vessel activity. The visual intrusion from such activities would be temporary.

3.4.2 Air Quality and Greenhouse Gas (GHG) Emissions

In its 2010 Subsequent EIR, the City (1) found that even after incorporation of mitigation measures, construction of the HB Desalination Plant would result in unavoidable significant impacts, both individually and cumulatively, in regards to short-term construction-related reactive gases including nitrogen oxides (NO_x) and particulate matter (PM_{10} and $PM_{2.5}$); and (2) adopted a Statement of Overriding Considerations.

The CSLC's Supplemental EIR will analyze air quality and GHG emissions in separate sections. The Supplemental EIR will summarize current air quality conditions in the Project vicinity and analyze the potential Project-related air quality and GHG emissions impacts using guidelines provided by the South Coast AQMD. Potential air quality and GHG impacts would result from vessel transportation and offshore construction operations since the Project would generate criteria air pollutants. If proposed emissions exceed South Coast AQMD emissions thresholds, the analysis will evaluate the feasibility of mitigation measures to reduce these emissions to a less-than-significant level.

The Supplemental EIR would also review the updated Energy Minimization & Greenhouse Gas Reduction Plan (GHG Plan) submitted by Poseidon as part of its Lease Amendment application to the CSLC. The original GHG Plan developed in 2010 as a design feature of the desalination plant was approved by the City and CSLC and is a condition of Lease PRC 1980.1. According to Poseidon, the updated GHG Plan would ensure the construction and ongoing operation of the Huntington Beach Desalination Plant will have zero carbon emissions. In addition to offsetting 100 percent of the direct emissions from the construction of the facility, Poseidon commits to offset 100 percent of the emissions associated with the purchase of electricity necessary to provide power for desalination plant operations.

3.4.3 Biological Resources (Marine)

The Supplemental EIR will assess potential direct and indirect impacts of Project construction activities and vessel mooring on offshore biological resources, including federal- and State-listed species, species proposed for listing, and areas of biological significance such as local Marine Protected Areas (the Bolsa Chica Basin State Marine Conservation Area [SMCA] is located approximately 4.3 miles to the northwest; Crystal Cove SMCA is located approximately 7 miles to the southeast). Impacts of underwater noise due to construction activities on marine life will be analyzed in this section.

3.4.4 Cultural and Tribal Cultural Resources

The Supplemental EIR will analyze these issue areas in separate sections consistent with recent (2016) changes to the State CEQA Guidelines, Appendix G checklist addressing Tribal Cultural Resources. The Supplemental EIR will analyze the potential for Project activities, which involve some level of ground disturbance offshore in the vicinity of the existing intake and outfall, to adversely affect cultural resources, including shipwrecks if applicable, and Tribal Cultural Resources.

3.4.5 Hazards and Hazardous Materials

The City's 2010 Subsequent EIR stated that diffuser designs used in ocean outfalls would not be practical for retrofitting to the existing HBGS outfall tower because such designs are constrained by the hydraulic design parameters of the existing sea water circulation system. The Subsequent EIR stated:

> *The existing discharge pipeline was not designed for high levels of pressure, which immediately rules out conventional multi-ported diffusers that utilize many small diameter diffuser ports to create high velocity, super-critical discharge jets to induce initial dilution. If retrofitted to the discharge tower, such designs would result in too much back pressure for the existing pipeline to maintain structural integrity. The existing discharge tower produces a discharge point about mid-depth in the water column, making the retrofit of a conventional diffuser with lateral discharge arms infeasible from a structural strength and support perspective.*

The Hazards section of the CSLC's Supplemental EIR would examine Poseidon's proposed retrofit of a multi-port diffuser to the existing discharge tower, and discuss issues including, but not limited to:

- The design pressure and gradient along the discharge pipeline
- Information on the structural integrity of the existing pipeline
- Geotechnical recommendations for safe installation of the Project including tie-in details of the new diffuser cap with the existing discharge tower
- Engineering calculations verifying the competence of the diffuser and its anchoring system for on-bottom stability from bottom currents and 100-year storm forces.

The Supplemental EIR will also address potential conditions during construction that could result in the release of hazardous materials, fire, explosion, and other conditions that could be hazardous to the public, workers, and environment. This includes the handling, storage, and disposal of hazardous materials. Detailed analyses of impacts on specific resources will be addressed in their respective sections (e.g., Biological Resources and Marine Water Quality).

3.4.6 Land Use and Planning

The Supplemental EIR would evaluate whether the proposed activities could conflict with any applicable land use plan, policy, regulation, habitat conservation plan, or natural community conservation plan.

3.4.7 Marine Water Quality

The Supplemental EIR will address potential impacts on marine water quality resulting from Project activities. The environmental setting will focus on the most relevant characteristics of existing marine resources in the Project vicinity. Issues such as offshore currents and marine water quality are important in understanding the effects of potential turbidity or hazardous materials releases during screen and diffuser installation and riprap modification.

3.4.8 Noise

The Supplemental EIR will examine the Project's potential noise impacts from offshore noise sources on recreationists (e.g., park users, beachgoers, surfers) and residents. As noted above, potential impacts of underwater noise from construction activities on marine life will be analyzed in the Biological Resources section of the Supplemental EIR.

3.4.9 Recreation

The Supplemental EIR will provide details on existing recreational activities in the Project vicinity, and summarize potential recreation and public access impacts associated with the Project.

3.4.10 Transportation/Traffic

The Supplemental EIR will analyze potential impacts of offshore Project activities on marine vessel traffic, including transit of barges to and from the Port of Long Beach.

3.5 Cumulative Impacts

The State CEQA Guidelines require a Supplemental EIR to discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable" (§ 15130). A cumulative impact is created through a combination of the project being analyzed and other projects in the area causing related impacts. The Supplemental EIR will:

- Define the geographic scope of the Cumulative Projects Study Area (the area affected by cumulative projects), which would be considered for each issue area;
- Discuss the cumulative impacts of the Project, in conjunction with other closely related past, current and reasonably foreseeable probable future projects in the study area; and
- Identify, if appropriate, feasible measures to mitigate or avoid the Project's contribution to cumulative effects.