CALIFORNIA COASTAL COMMISSION
455 MARKET STREET, SUITE 228
SAN FRANCISCO, CA 94105-2219
FAX (415) 904-5400
TDD (415) 597-5885

Th9a & Th10a

A-5-HNB-10-225 / 9-21-0488
(Poseidon Water, Huntington Beach)

MAY 12, 2022

EXHIBITS

Table of Contents

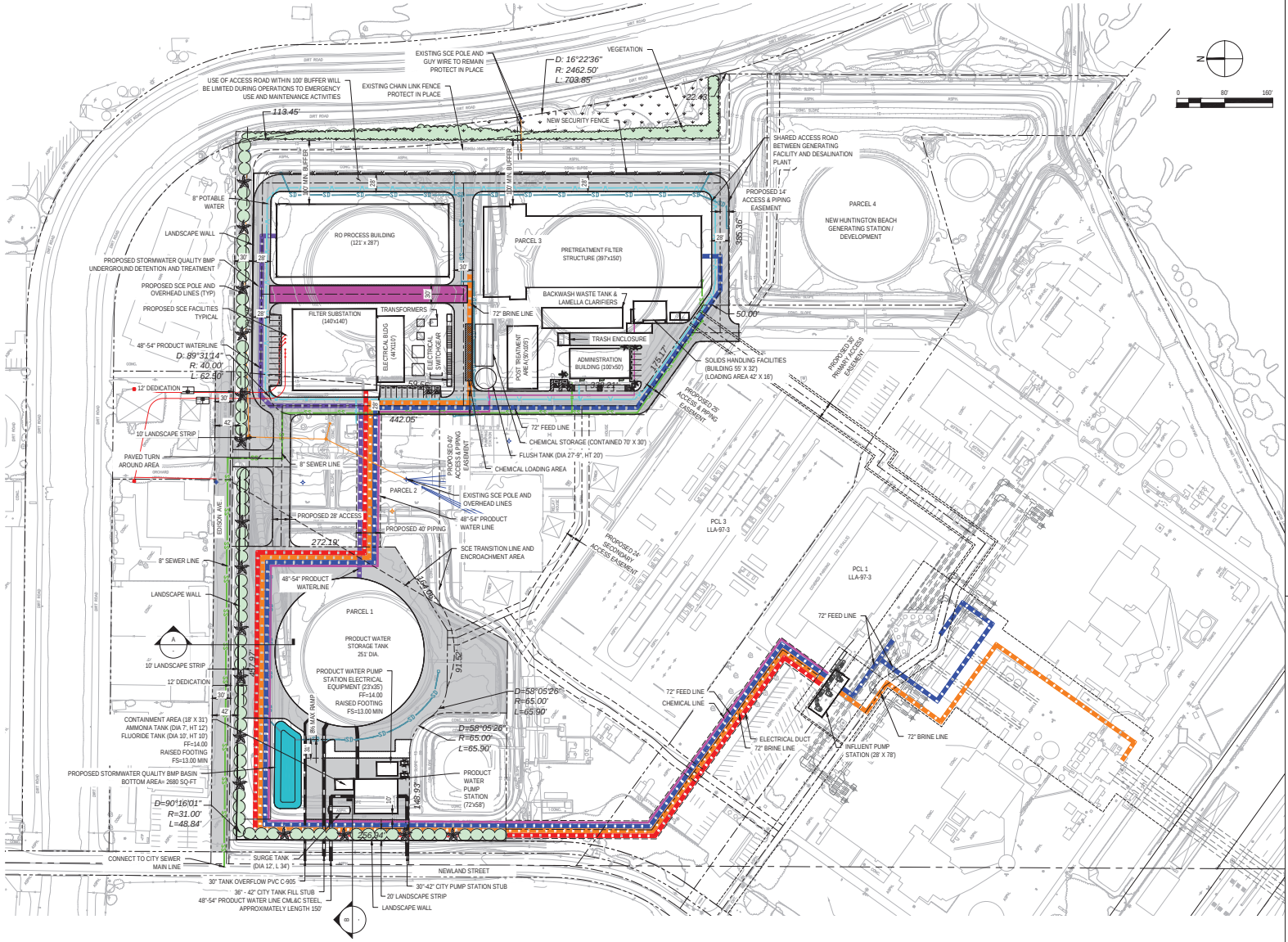
FIGURE 3-1
Regional Map

6483-01
MAY 2010

Seawater Desalination Project at Huntington Beach

Z:\Projects\6483\01\MAPDOC\MAPS\SEIR\Figure3-1_Regional.mxd

A-5-HNB-10-225 / 9-21-0488
(Poseidon Water, Huntington Beach)
EXHIBIT 2



ZONING CONFORMANCE MATRIX

PUBLIC - SEMI-PUBLIC ZONING DISTRICT (PS)
USE DESCRIPTION: RESOURCE PRODUCTION
PERMITTED USE: YES

DEVELOPMENT STANDARD	PS REQUIREMENT	PROJECT REQUIREMENT	PROJECT PROVIDED	NOTES
MINIMUM LOT AREA (SQ. FT.)	2 AC	2 AC	12.12 AC	
MINIMUM LOT WIDTH	100'	100'	423'	
MINIMUM SETBACKS				
FRONT (FT.)	10	10	> 10	BASED ON LEASE LINE
SIDE (FT.)	N/A	N/A		
STREET (FT.)	10	10	> 10	BASED ON LEASE LINE
REAR (FT.)	N/A	N/A		
MAXIMUM HEIGHT OF STRUCTURE	50'	50'	35'	35' TALLEST STRUCTURE
MINIMUM FLOOR AREA RATIO (FAR)	1.5	368,517	194,180 (SEE MATRIX BELOW)	0.35 PROVIDED
MINIMUM SITE LANDSCAPING (PER NET AREA)	8%	PARCEL 3 30,109 PARCEL 1 12,127 TOTAL 42,236	PARCEL 3 30,200 PARCEL 1 16,000 TOTAL 46,200	8.8% PROVIDED (ON-SITE)
FENCES AND WALLS	SEC.230.88		YES	ALL FENCING AND WALLS EXIT BY AES
OFF-STREET PARKING AND LOADING OFFICE	BY CUP	BY CUP		

BUILDING AND STRUCTURE AREA MATRIX

BUILDINGS		AREA
SOLIDS HANDLING AND BUILDING		1,760 S.F.
ADMINISTRATION BUILDING		5,000 S.F.
R.O. BUILDING		34,727 S.F.
ELECTRICAL BUILDING		4,840 S.F.
SUBTOTAL BUILDINGS		46,327 S.F.
TANKS AND STRUCTURES		AREA
OUTDOOR ELECTRICAL EQUIPMENT - SUBSTATION - SWITCH GEAR - TRANSFORMERS - PRODUCT WATER PUMP STATION ELEC.		23,541 S.F. (19,600) (960) (2,176) (805)
PRETREATMENT FILTER STRUCTURE		59,550 S.F.
CHEMICAL STORAGE AND CARBON DIOXIDE TANKS		2,100 S.F.
FLUSH TANK		605 S.F.
PRODUCT WATER STORAGE TANK		49,481 S.F.
AMMONIA/FLUORIDE STORAGE TANK (ENCLOSURE)		558 S.F.
POST-TREATMENT TANKS		5,250 S.F.
INFLUENT PUMP STATION		2,184 S.F.
PRODUCT WATER PUMP STATION		4,176 S.F.
SURGE TANK		408 S.F.
SUBTOTAL TANKS AND STRUCTURES		147,853 S.F.
TOTAL BUILDINGS AND STRUCTURES		194,180 S.F.

LEGEND

- EXISTING VEGETATION AREA
- ROADWAY / PAVEMENT 6" AC / 8" AB
- 72" FEED LINE
- 72" BRINE LINE
- ELECTRICAL DUCT
- 48" -54" PRODUCT WATERLINE
- CHEMICAL LINE
- WATER LINE
- SEWER LINE
- STORM DRAIN LINE
- EXISTING POWER PLANT PIPELINES
- VEGETATION
- PARCEL LINE
- EASEMENT LINE
- ROADWAY CENTER LINE
- STORMWATER QUALITY BASIN
- UNDERGROUND STORMWATER DETENTION AND TREATMENT SYSTEM

PROPERTY OWNER:
CITY OF HUNTINGTON BEACH
2000 MAIN STREET
HUNTINGTON BEACH, CALIFORNIA 92648
(714) 536-5553

AES CORPORATION
21730 NEWLAND STREET
HUNTINGTON BEACH, CALIFORNIA 92646
(714) 374-1491

APPLICANT:
POSEIDON RESOURCES CORPORATION
17011 BEACH BOULEVARD, SUITE 900
HUNTINGTON BEACH, CALIFORNIA 92647
(714) 596-7946

No.	Issue	Drawn	Approved	Date

POSEIDON RESOURCES
Poseidon Resources Corporation
17011 Beach Boulevard, Suite 900, Huntington Beach, California 92647
(714) 596-7946

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Drafting Check		Design Check	
Project Manager		Date	
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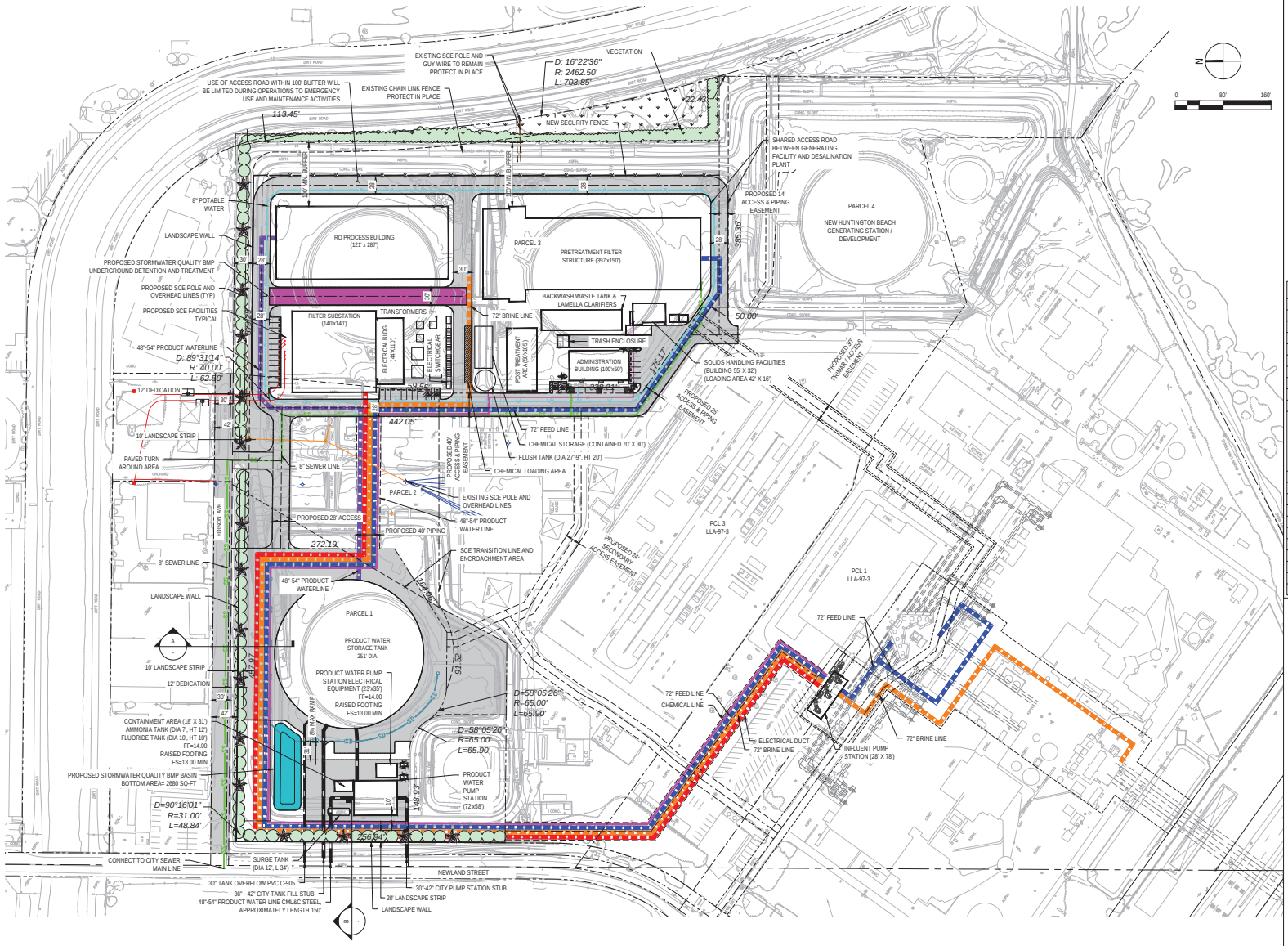
Client
Project
Title
POSEIDON RESOURCES
HB - DESALINATION PROJECT
GENERAL SITE PLAN
Project No. PRJ00010
Original Size Arch D
Sheet No. 02
Sheet 2 of 7

Plot Date: 14 April 2022 - 8:26 AM
Plotted By: Pedro Alvarez
Filename: N:\US\Irvine\Projects\5611\11199422\Digital_Design\ACAD 2017\Sheets\11199422-02-GeneralSitePlan.dwg



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Drafting Check		Design Check	
Project Manager		Date	
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Client
Project
Title

POSEIDON RESOURCES
HB - DESALINATION PROJECT
GENERAL SITE PLAN

Project No. PRJ00010
Original Size: Arch D
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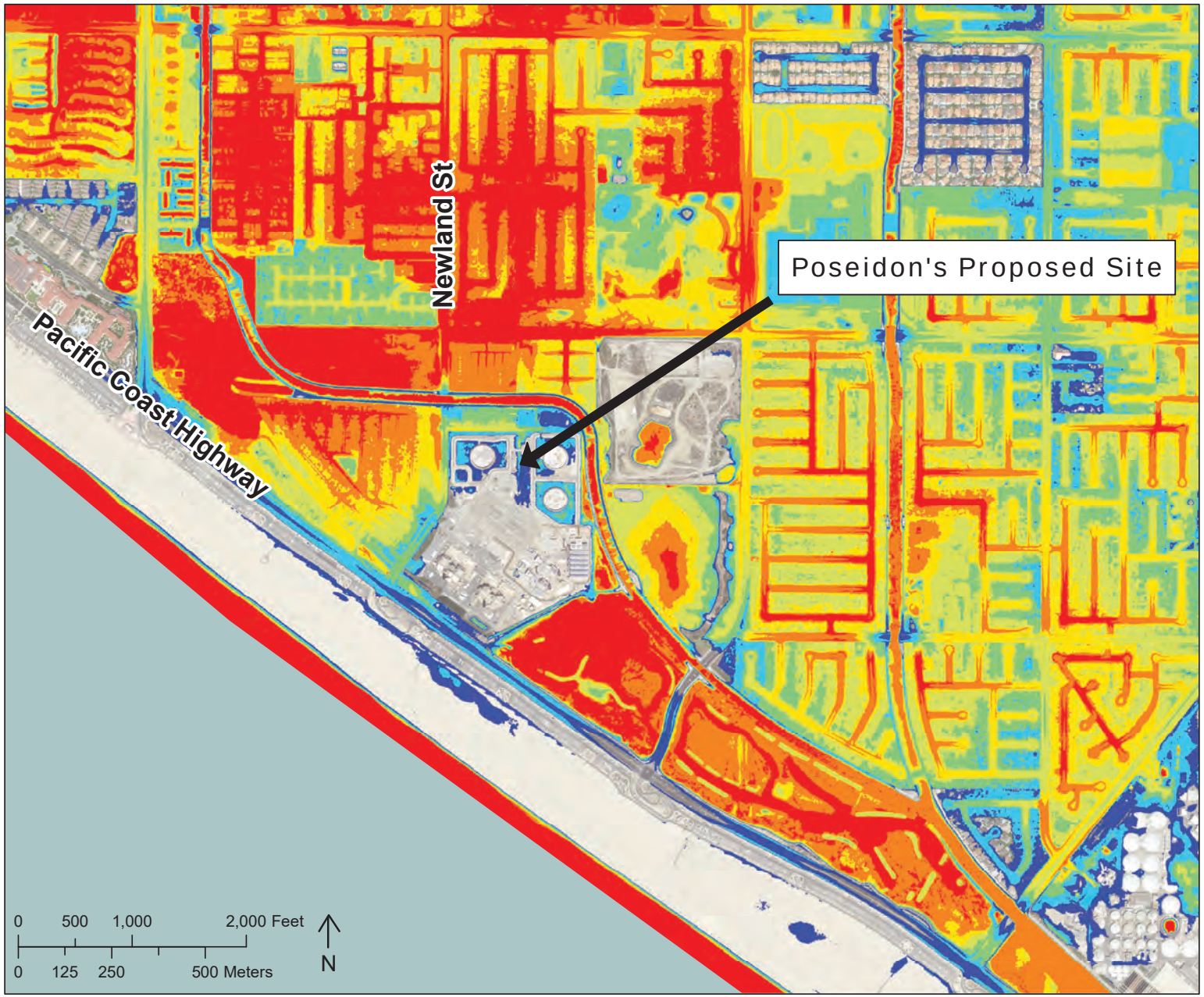


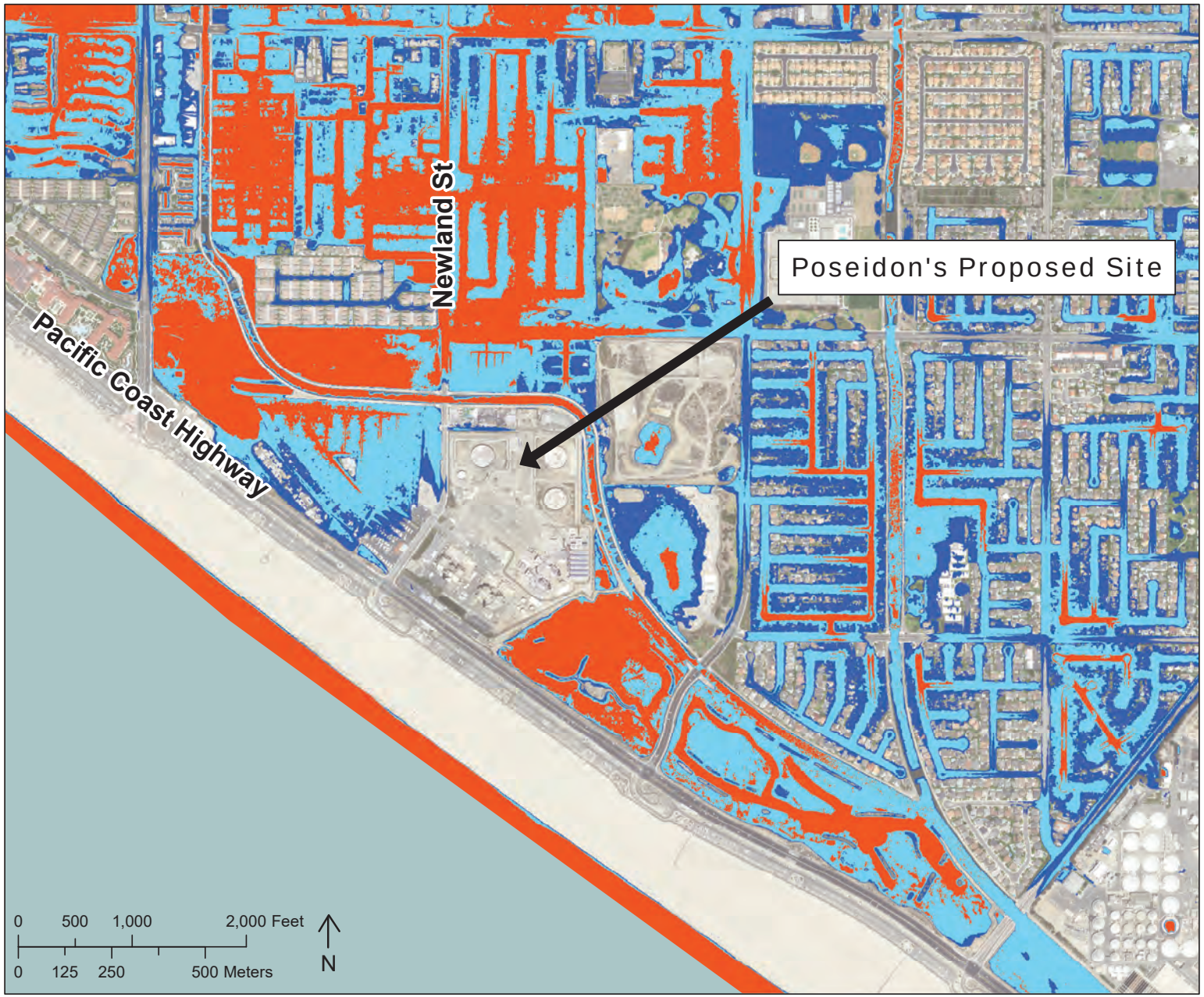
Elevations below the average daily higher tide (Mean Higher High Water or MHHW)

- +0 feet sea level rise (SLR)
- +1 feet
- +2 feet
- +3 feet
- +4 feet
- +5 feet
- +6 feet
- Above MHHW + 6 feet SLR

CALIFORNIA COASTAL COMMISSION

Data Sources: Elevation DEM from Orange County Public Works (2012); Aerial Imagery from U.S. Department of Agriculture (2018); MHHW Datum Elevation = 5.3 feet, NAVD88 from NOAA Tide Station 9410660 Los Angeles, CA

A-5-HNB-10-225 / 9-21-0488
(Poseidon Water, Huntington Beach)
EXHIBIT 4

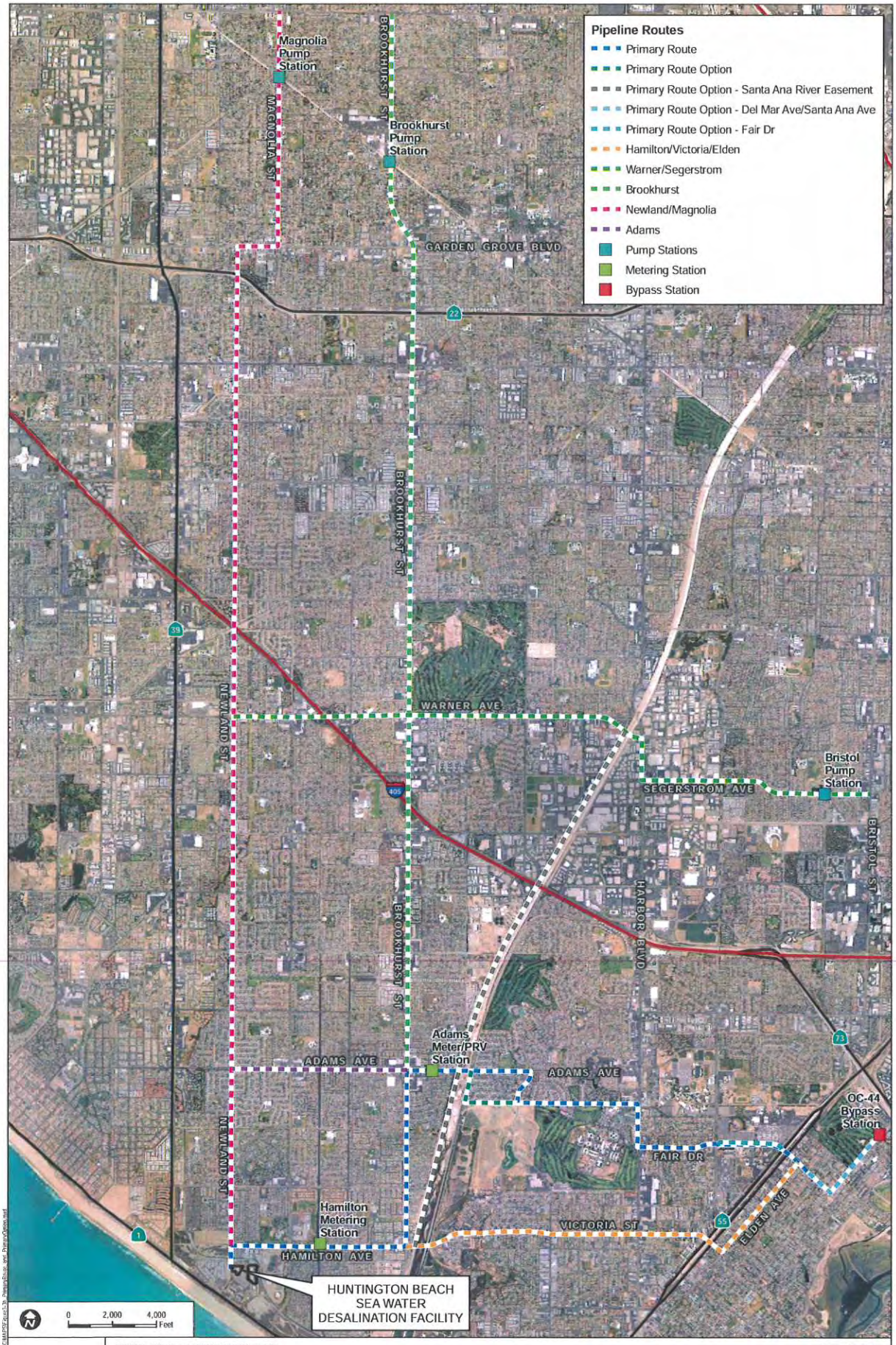


Existing low-lying elevations

- Below daily average higher tide or MHHW (5.3 feet, NAVD88)
- Below King Tide (7.0 feet, NAVD88)
- Below 100-year return period water level (7.9 feet, **NAVD88)**

CALIFORNIA COASTAL COMMISSION

Data Sources: Elevation DEM from Orange County Public Works (2012); Aerial Imagery from U.S. Department of Agriculture (2018); Tidal Datum Elevations from NOAA Tide Station 9410660 Los Angeles, CA



SOURCE: Poiseidon, April 2010; DigitalGlobe 2007

NOTE: See Figure 3-5 for the location of the Coastal Booster Station

FIGURE 3-3b

Offsite Water Delivery Facility Pipelines and Pump Stations

6483-01
MAY 2010

Seawater Desalination Project at Huntington Beach

City of Huntington Beach
2000 Main Street • Huntington Beach, CA 92648

OFFICE OF THE CITY CLERK
JOAN L. FLYNN
CITY CLERK

NOTICE OF ACTION

September 23, 2010

RECEIVED
SEP 24 2010
Dept. of Planning & Building

Josie McKinley
Poseidon Resources Corporation
17011 Beach Blvd., #900
Huntington Beach, CA 92647

SUBJECT: **COASTAL DEVELOPMENT PERMIT (CDP) NO. 10-014 AND TENTATIVE PARCEL MAP. NO. 10-130 (POSEIDON SEAWATER DESALINATION PROJECT)**

APPLICANT: Poseidon Resources Corporation, 17011 Beach Blvd., #900, Huntington Beach, CA 92647

REQUEST: **CDP:** To permit the construction and operation of a 50 million gallons per day seawater desalination project on a ±13 acre site. The project includes up to ±4 miles of water transmission lines (±1 mile in the Coastal Zone) in Huntington Beach to connect to an existing regional transmission system in Costa Mesa and a tentative parcel map to facilitate the development of the project. Concurrent with its consideration of Coastal Development Permit No. 10-014 the City Council shall consider rescission of Coastal Development Permit No. 02-05. Should the City Council approve Coastal Development Permit No. 10-014, that approval would replace the City Council's prior approval of Coastal Development Permit No. 02-05. **TPM**: To subdivide three parcels totaling ±19.5 acres into four parcels to facilitate the development of the project.

PROPERTY OWNERS: AES HB, LLC, 21730 Newland St., Huntington Beach, CA 92646; City of Huntington Beach, 2000 Main St., Huntington Beach, CA 92648

LOCATION: 21730 Newland (east side, south of Edison Avenue)

DATE OF ACTION: September 20, 2010

Dear Ms. McKinley:

At a regular meeting held on Monday, September 20, 2010 the City Council of the City of Huntington Beach considered your application and took action to conditionally approve Coastal Development Permit (CDP) No. 10-14 and Tentative Parcel Map (TPM) No. 10-013 and rescind Coastal Development Permit No. 02-05. Attached to this letter are the findings and conditions of approval for this application.

This project is in the appealable portion of the coastal zone. Action taken by the City Council may be appealed directly to the Coastal Commission unless Title 14, Section 13573 of the California Administrative Code is applicable. Section 13573(a)(3) states that an appeal may be filed directly with the Coastal Commission if the appellant was denied the right of local appeal because local notice and hearing procedures for the development did not comply with the provisions of this article. If the above condition exists, an aggrieved person may file an appeal within ten (10) working days, pursuant to Section 30603 of the Public Resources Code, in writing to:

South Coast Area Office
California Coastal Commission
200 Oceangate, 10th Floor
Long Beach, CA 90802-4302
Attn: Theresa Henry
(562) 590-5071

Provisions of the Huntington Beach Zoning and Subdivision Ordinance are such that any application becomes null and void one (1) year after final approval, unless actual construction has started. If you have any questions regarding this matter, please contact my office at (714) 536-5227.

Sincerely,

Joan L. Flynn
City Clerk

Enclosure: Findings and Conditions of Approval: CDP No. 10-014/TPM No. 10-013
Page 4 of the City Council Action Agenda for September 20, 2010

c: Scott Hess, Director of Planning and Building
Mary Beth Broeren, Planning Manager
Ricky Ramos, Senior Planner

FINDINGS AND CONDITIONS OF APPROVAL
COASTAL DEVELOPMENT PERMIT NO. 10-014/
TENTATIVE PARCEL MAP NO. 10-130

FINDINGS FOR APPROVAL - TENTATIVE PARCEL MAP NO. 10-130:

1. Tentative Parcel Map (TPM) No. 10-130 to subdivide three parcels totaling ±19.5 acres into four parcels is consistent with the General Plan Land Use Element designation of P (Public) on the subject property, or any applicable specific plan, or other applicable provisions of this Code. As modified by conditions and code requirements TPM No. 10-130 proposes four parcels that will comply with all requirements of the General Plan and Huntington Beach Zoning and Subdivision Ordinance including, but not limited to, minimum lot size, lot width, and landscaping. The proposed parcels can adequately accommodate development consistent with the General Plan and zoning designations on the parcels.

2. The site is physically suitable for the type and density of development. As modified by conditions and code requirements the proposed parcels will comply with, among others, minimum lot size, lot width, and landscaping requirements within the PS (Public-Semipublic) zoning district. The proposed parcel configuration and topography are suitable for the proposed development.

3. The design of the subdivision or the proposed improvements will not cause serious health problems or substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat with the exception of significant unavoidable impacts relating to short term construction air quality impacts and growth inducing impacts outside of Orange County. Notwithstanding the foregoing, the City Council approves the tentative parcel map because Subsequent Environmental Impact Report (SEIR) No. 10-001 was prepared with respect to the project and a finding was made that specific economic, social or other considerations outweigh any impacts that cannot be avoided.

4. The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision unless alternative easements, for access or for use, will be provided. There are no public access or use easements within the proposed parcel map.

5. The Final SEIR certified for the project on September 7, 2010 serves as adequate and appropriate environmental documentation for approval of TPM 10-130. The unavoidable significant adverse effects of the project as identified in Section 5.0 of the Statement of Facts and Findings (growth inducement outside of Orange County and short-term construction related impacts in regards to air quality) have been lessened in their severity by the application of standard code requirements, conditions, the inclusion of project design features and the imposition of the mitigation measures. The remaining unavoidable significant impacts are clearly outweighed by the economic, social, and other benefits of the project, as set forth in the "Statement of Overriding Considerations" included as Section 7.0 of the Statement of Facts and Findings. The City Council adopts the recitation of overriding considerations which justify approval of the project notwithstanding certain unavoidable significant environmental effects which cannot feasibly be substantially mitigated as set forth in the Statement of Overriding Considerations.

FINDINGS FOR APPROVAL – COASTAL DEVELOPMENT PERMIT NO. 10-014 (REPLACING COASTAL DEVELOPMENT PERMIT NO. 02-05):

1. Coastal Development Permit No. 10-014 to permit the construction and operation of a 50 million gallons per day seawater desalination project on a ±13 acre site including up to ±4 miles of water transmission lines (±1 mile in the Coastal Zone) in Huntington Beach to connect to a regional transmission system in Costa Mesa and Tentative Parcel Map No. 10-130 to facilitate the development of the project as proposed and modified by conditions of approval and code requirements, conforms to the General Plan, including the Local Coastal Program by implementation of the following Coastal Element goals, objective, and policies:

   a. Objective C1.1 (p. IV-C-106): Ensure that adverse impacts associated with coastal zone development are mitigated or minimized to the greatest extent feasible.

      The project is consistent with this objective because all of the project's potential adverse impacts have either been mitigated or they have been minimized to the greatest extent feasible. This objective has been met on an impact-by-impact basis as demonstrated in the Subsequent EIR certified in connection with the project, as supported by substantial evidence in the record, and as documented in the Statement of Facts and Findings. The severity of certain adverse impacts (growth inducement outside of Orange County and short-term construction related impacts in regards to air quality) have been lessened by the application of standard code requirements, conditions, the inclusion of project design features and the imposition of mitigation, but it has not been feasible to minimize those impacts to a level of insignificance. Consequently, those impacts have been mitigated to the greatest extent feasible and a statement of overriding considerations has been adopted (see, Statement of Facts and Findings).

   b. Policy C1.1.1 (p. IV-C-106): With the exception of hazardous industrial development, new development shall be encouraged to be located within, contiguous or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services, and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

      The project is consistent with this policy because it is proposed on a site that is already developed and will be in close proximity to the existing Huntington Beach Generating Station and the Station's existing seawater intake which will be able to accommodate the project. Pipelines are proposed to be routed in existing street right-of-way and easements or other already developed areas.

   c. Policy C1.1.2 (p. IV-C-106): Coastal dependent developments shall have priority over other developments on or near the shoreline. Coastal-related developments should be accommodated within reasonable proximity of the coastal-dependent uses they support.

      The project would be a coastal-dependent development because it would need to be sited on or adjacent to the sea in order to function at all. Seawater desalination facilities like the project fall within the Coastal Act's definition of coastal dependent because such facilities require "a site on, or adjacent to the sea" in order to draw seawater into the facility, which is the only source water that this project will use to produce potable desalinated water. The project's location adjacent to the existing Huntington Beach Generating Station and proximate to its existing seawater intake is consistent with

provisions in the Commission's 2004 report "Seawater Desalination and the California Coastal Act," which noted that desalination facilities sited near existing water distribution systems can mitigate potential adverse impacts and avoid additional infrastructure build out and growth that may be associated with such a build out. Further, seawater desalination facilities like the project are similar to other recognized coastal dependent uses that must be located adjacent to the sea to function, such as electric generating facilities, refineries, and offshore drilling for oil and gas. Thus, the project as located is consistent with this policy.

d. Policy C 1.2.1 - Accommodate existing uses and new development in accordance with the Coastal Element Land Use Plan and the Development and Density Schedule Table C-1

The project is consistent with this policy because it is consistent with the Coastal Element Land Use Plan and Density Schedule.

e. Policy C1.2.3 (p. IV-C-108): Prior to the issuance of development entitlement, the City shall make the finding that adequate services (i.e., water, sewer, roads, etc.) can be provided to serve the proposed development, consistent with the policies contained in the Coastal Element, at the time of occupancy.

The project is consistent with this policy because adequate services can be provided to serve the proposed development, consistent with the policies contained in the Coastal Element. Section 4.6 of the Subsequent EIR details the availability of all required public services for the proposed development.

The project will convey water to the regional distribution system through an approximately 10 mile pipeline including four miles of new pipeline in the City of Huntington Beach. The portions of the pipeline in the City will be built in the public street right of way and is subject to the terms in the pipeline Franchise Agreement between Poseidon Resources and the City of Huntington Beach and approved by the Huntington Beach City Council on September 7, 2010. Connection to the regional distribution system through the City of Costa Mesa will utilize an existing water pipeline known as the OC-44 , which will be upgraded to a 48 to 54 inch diameter pipe. The OC-44 pipeline is jointly owned by the City of Huntington Beach and the Mesa Consolidated Water District.

f. Objective C3.1 (p. IV-C-113): Preserve, protect and enhance, where feasible, existing public recreation sites in the Coastal Zone.

The project is consistent with this objective because, as discussed in Section 4.10 of the Subsequent EIR, **the limited area affected by salinities caused by the project that are higher than 40 ppt would not represent substantial ecological effects or degradation of water quality due to the absence of areas of special biological significance or the presence of threatened or endangered species. Specifically, benthic areas affected by project discharge do not support sensitive species, species that encounter elevated salinity will have very low exposure times, foraging areas affected would not be substantial, and no threatened or endangered species or kelp beds exist within the vicinity of the existing outfall. Furthermore, fishes with high commercial or recreational importance are very uncommon in the intake source water. In addition, the project is anticipated to**

have a negligible impact on parks and recreation facilities, and will be required to pay development impact fees prior to the issuance of grading permits. (See Subsequent EIR Section 4.6.)

g. Policy C4.2.1 (p. IV-C-119): Ensure that the following minimum standards are met by new development in the Coastal Zone as feasible and appropriate: Preservation of public views to and from the bluffs, to the shoreline and ocean and to the wetlands; Adequate landscaping and vegetation; Evaluation of project design regarding visual impact and compatibility; and Incorporate landscaping to mask oil operations and major utilities, such as the electrical power plant on Pacific Coast Highway.

   The project is consistent with this policy because the project plans include a number of measures to minimize adverse visual effects of the proposed facility. The facility would be comprised of relatively low profile buildings reaching approximately 35 feet above the existing grade, which is below the 50-foot height limitation specified in the Zoning Code. The overall appearance would be similar to a commercial office building. As part of the facility design, both vegetative and architectural screening has been added to ensure that exposed pipelines, tanks, and other utility-type equipment are screened from public view. The project would not significantly affect the scenic and visual qualities of the surrounding coastal areas and has been sited and designed to protect public views to and along the ocean and scenic coastal areas, such that it is visually compatible with the character of surrounding areas.

h. Objective C 4.7 - Improve the appearance of visually degraded areas within the Coastal Zone.

   The project is consistent with this objective because it will be an improvement to the area by demolishing three 40-foot high fuel storage tanks. The new proposed structures are more compatible with the surroundings because they are lower in height and have a more attractive design consistent with the General Plan and Design Guidelines. The project is required to provide a 10 foot (Edison) and 20 foot (Newland) landscape planter along the perimeter of the site to enhance the appearance of the area.

i. Policy C4.7.5 (p. IV-C-122): Require the review of new and/or expansions of existing industrial and utility facilities to ensure that such facilities will not visually impair the City's coastal corridors and entry nodes.

   The project is consistent with this policy because the project will result in the demolition of three 40-foot high fuel storage tanks. The new proposed structures are more compatible with the surroundings because they are lower in height and have a more attractive design consistent with the General Plan and Design Guidelines. Proposed pipeline facilities are located within the coastal zone; however consistent with the Local Coastal Program, the facilities would be located below grade to ensure that such facilities will not visually impair the City's coastal corridors and entry nodes.

j. Policy C4.7.8 (p. IV-C-122): Require landscape and architectural buffers and screens around oil production facilities and other utilities visible from public rights-of-way.

   The project is consistent with this policy because exterior berms will remain in place, landscaping is proposed along the Edison and Newland project frontages and architectural screening is provided for proposed tanks and structures.

k. Policy C4.7.9 (p. IV-C-122): Require the removal of non-productive oil production facilities and the restoration of the vacated site.

The project will replace a dilapidated fuel oil storage tank and will restore the site, substantially improving the existing visual character of the site.

l. Policy C6.1.1 (p. IV-C-124): Require that new development include mitigation measures to enhance water quality, if feasible; and, at a minimum, prevent the degradation of water quality of groundwater basins, wetlands, and surface water.

The project is consistent with this policy because it is subject to mitigation measures relating to water quality. **The Subsequent EIR contains a number of mitigation measures designed to prevent the degradation of and enhance water quality in groundwater basins, wetlands, surface water and product water. These mitigation measures are contained in the Subsequent EIR.**

As provided in Section 4.3 of the Subsequent EIR, the project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or contribute significant increases in the flow velocity or volume of stormwater runoff to cause environmental harm, or provide substantial additional sources of polluted runoff.

The project also will enhance water quality by removing bacteria from source water. In addition, the Project further will enhance water quality by reducing thermal footprint of the discharge from the power plant during the co-located operating condition.
Moreover, neither the Project's discharge of trace amounts of cleaning compounds nor the slightly increased salinity levels in the area will degrade the quality of ocean water surrounding the existing Huntington Beach Generating Station and the proposed desalination facility. The desalination facility will clean its reverse osmosis membranes with chemicals that are analogous to household cleaners. The initial rinse of the membrane cleaning solution will be treated at a wastewater treatment facility, and only the second rinse, which will contain trace amounts of cleaning compounds below detection limits for hazardous waste, will be discharged into the ocean after it is thoroughly diluted in water. As concluded in Appendix R to the Subsequent EIR (RO Membrane Cleaning Solution Discharge Test Stream Data), even before dilution, the vast majority of the chemicals within the membrane cleaning solution would be either below detection levels or regulatory limits. Dilution of these substances will even further minimize the already less than significant impacts on the local marine environment.
The Subsequent EIR analyzed the potential impacts of the project on ocean water quality. Based on the analysis contained in the Subsequent EIR, no mitigation measures are required to protect or enhance ocean water quality. (See SEIR Section 4.10.) Specifically, the Subsequent EIR found that there would be no degradation of water quality and there was not a reasonable potential for acute toxicity effects to occur at or below a seawater concentration of 40 ppt. The slightly elevated salinity level of the project's seawater discharge in the co-located operating scenario achieves compliance with the project's approved NPDES Order No. R8-2006-0034 and the standards established in the Order and the water quality objectives established within the Ocean Plan. NPDES Order No. R8-2006-0034 establishes a 1,000 foot Zone of Initial Dilution (ZID) and a dilution factor of 7.5:1 or greater that must be met at the edge of the ZID. Further, most marine species in

the water around Huntington Beach are also found in geographic regions that naturally have a salinity range comparable to or greater than what is predicted in the ZID. See Appendix O to EIR (Marine Biological Considerations Related to the Reverse Osmosis Desalination Project at the Applied Energy Sources Huntington Beach Generation Station).

The stand-alone operating condition would **comply with the standards and 7.5:1 dilution factor established in Order No. R8-2006-0034 and comply with Ocean Plan standards. Similar to the co-located condition, the limited area affected by salinities higher than 40 ppt would not represent substantial ecological effects or degradation of water quality due to the absence of areas of special biological significance or the presence of threatened or endangered species.**

Further, dewatering discharge during project construction would be directed to a desilting system, and would be sampled and tested periodically to ensure compliance with all NPDES regulations and with *De minimus* Permit requirements (Order No. R8-208-0003 (CAG 9980)). Should contaminated groundwater be encountered, mitigation measures require groundwater remediation prior to any discharge into the sanitary sewer system. The maximum dewatering volume associated with desalination facility construction will be over five times smaller than the groundwater "draw" volume associated with natural daily tidal fluctuations to which the wetlands are exposed. Despite the fact that it is highly unlikely for dewatering operations to have an effect on the nearby wetlands and structures, a monitoring well system will be installed and operated for the duration of the project construction period in order to ascertain that construction activities do not have any measurable impacts on groundwater quality or levels outside of the boundaries of the desalination facility site. The measured water level will be compared to the water level in a control groundwater monitoring well that is outside of the desalination facility site in order to confirm that groundwater level in the wetlands is not influenced by the dewatering operations. Thus, dewatering activities due to project construction are not anticipated to have significant impacts in regards to hydrogeology and water quality.

m. Policy C6.1.2 (p. IV-C-124): Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance.

The project is consistent with this policy because, as discussed in Section 4.10 of the Subsequent EIR, **the limited area affected by salinities caused by the project that are higher than 40 ppt would not represent substantial ecological effects or degradation of water quality due to the absence of areas of special biological significance or the presence of threatened or endangered species. Specifically, benthic areas affected by project discharge do not support sensitive species, species that encounter elevated salinity will have very low exposure times, foraging areas affected would not be substantial, and no threatened or endangered species or kelp beds exist within the vicinity of the existing outfall. Thus, there are no areas or species requiring special protection.**

Studies of desalination facility entrainment and impingement analyzed in Section 4.10 of the Subsequent EIR also show that the project will result in less than significant entrainment and impingement impacts and therefore will not conflict with this policy. The most frequently entrained species by the existing Huntington Beach Generating station are very abundant in the area of the Huntington Beach

Generating Station intake and the Southern California Bight, and therefore actual ecological effects due to any additional entrainment from the desalination facility under co-located operating conditions are insignficiant, and the loss of marine organisms due to the project's potential entrainment will have no effect on the species' ability to sustain their populations. Moreover, species with high commercial and recreational importance, such as California halibut and rockfishes, were shown to be very uncommon in the Huntington Beach Generating Station intake flows, and therefore the project would not adversely impact species of special significance. Project entrainment under stand-alone conditions is similarly less than significant and impacts on marine organisms resulting from the project are relatively small, would not substantially reduce populations of affected species, or affect the ability of the affected species to sustain their populations.

With respect to impingement, under co-located operating conditions the project would not increase the volume or velocity of the existing Huntington Beach Generating Station cooling water intake and thus would not increase the number of impingement losses caused by that intake and would avoid impingement impacts that would result from the implementation of a new intake structure. Under stand-alone operating conditions, the project would result in an estimated average daily impingement of 0.9 pounds per day, which is less than the daily diet of one brown sea. For the Carlsbad Desalination Project, Coastal Commission determined of impingement of more than twice this amount was de minimus and insignificant. The Huntington Beach Generating Station's existing velocity cap and bar racks on the Huntington Beach Generating Station intake would remain in place during stand-alone operating conditions, which serve to substantially reduce impingement of marine mammals and sea turtles. Studies on the effectiveness of the HBGS' velocity cap have shown impingement reductions as high as 90%[1]. Based on impingement measurements discussed in Section 4.10 of the Subsequent EIR, project impingement would not result in substantial reductions in fish or shellfish operations, and it is not anticipated that project impingement losses would have any effects on the ability of impinged species to sustain their populations. Moreover, the project is not within an Area of Special Biological Significance, and the low flows projected for the stand-alone operating condition indicate that stand-alone project impingement may be lower than impingement caused by existing Huntington Beach Generating Station operations.

n. Policy C6.1.3 (p. IV-C-124): Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific and educational purposes.

The project is consistent with this policy because, as discussed in Section 4.10 of the Subsequent EIR, **the limited area affected by salinities caused by the project that are higher than 40 ppt would not represent substantial ecological effects or degradation of water quality due to the absence of areas of special biological significance or the presence of threatened or endangered species. Specifically, benthic areas affected by project discharge do not support sensitive species, species that encounter elevated salinity will have very low exposure times, foraging areas affected would not be substantial, and no threatened or endangered species or kelp beds exist within the vicinity of the existing outfall.**

[1] Water Quality Control Policy for the use of Coastal and Estuarine Waters for Power Plant Cooling, Final Substitute Environmental Document (SED pg. 100)

Furthermore, fishes with high commercial or recreational importance are very uncommon in the intake source water.

Studies of desalination facility entrainment and impingement analyzed in Section 4.10 of the Subsequent EIR also show that the project will result in less than significant entrainment and impingement impacts and therefore will not conflict with this policy. The most frequently entrained species by the existing Huntington Beach Generating station are very abundant in the area of the Huntington Beach Generating Station intake and the Southern California Bight, and therefore actual ecological effects due to any additional entrainment from the desalination facility under co-located operating conditions are insignficiant, and the loss of marine organisms due to the project's potential entrainment will have no effect on the species' ability to sustain their populations. Moreover, species with high commercial and recreational importance, such as California halibut and rockfishes, were shown to be very uncommon in the Huntington Beach Generating Station intake flows, and therefore the project would not adversely impact species of special significance. Project entrainment under stand-alone conditions is similarly less than significant and impacts on marine organisms resulting from the project are relatively small, would not substantially reduce populations of affected species, or affect the ability of the affected species to sustain their populations.

With respect to impingement, under co-located operating conditions the project would not increase the volume or velocity of the existing Huntington Beach Generating Station cooling water intake and thus would not increase the number of impingement losses caused by that intake and would avoid impingement impacts that would result from the implementation of a new intake structure. Under stand-alone operating conditions, the project would result in an estimated average daily impingement of 0.9 pounds per day, which is less than the daily diet of one brown sea pelican. For the Carlsbad Desalination Project, Coastal Commission determined of impingement of more than twice this amount was de minimus and insignificant. The Huntington Beach Generating Station's existing velocity cap and bar racks on the Huntington Beach Generating Station intake would remain in place during stand-alone operating conditions, which serve to substantially reduce impingement of marine mammals and sea turtles. Studies on the effectiveness of the HBGS' velocity cap have shown impingement reductions as high as 90%[2]. Based on impingement measurements discussed in Section 4.10 of the Subsequent EIR, project impingement would not result in substantial reductions in fish or shellfish operations, and it is not anticipated that project impingement losses would have any effects on the ability of impinged species to sustain their populations. Moreover, the project is not within an Area of Special Biological Significance, and the low flows projected for the stand-alone operating condition indicate that stand-alone project impingement may be lower than impingement caused by existing Huntington Beach Generating Station operations.

Thus, healthy populations of all species of marine organisms that may be affected by project operations would be maintained.

o. Policy C6.1.4: The biological productivity and the quality of coastal waters, streams, wetlands, estuaries and lakes appropriate to maintain organisms and for the protection of human health shall be maintained, and where feasible, restored.

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[2] Ibid.

The project is consistent with this policy because, as provided in the findings for Policies C6.1.1 and 6.1.3, the project would not degrade water quality or adversely affect biological productivity.

p. Policy C6.1.12 (p. IV-C-127): Periodically review the City's policies on water conservation, including the Water Conservation Ordinance, to ensure the use of state of the art conservation measures for new development and redevelopment, and retrofitting of existing development, where feasible and appropriate, to implement these measures.

The project is consistent with this policy because as a user of potable water provided by the City of Huntington Beach, the project must comply with all applicable requirements of the Water Conservation Ordinance. (See Municipal Code Chapter 14.18.)

q. Policy C6.1.13 (p. IV-C-127): Encourage research and feasibility studies regarding ocean water desalinization as an alternative source of potable water. Participate in regional studies and efforts where appropriate.

The project does not conflict with this policy as it is a seawater desalination facility intended to provide an alternative source of potable water.

r. Policy C6.1.19 (p. IV-C-128): Prior to approval of any new or expanded seawater pumping facilities, require the provision of maximum feasible mitigation measures to minimize damage to marine organisms due to entrainment in accordance with state and federal law.

Application of CEQA significance thresholds results in a determination that the seawater desalination facility would not cause significant adverse impacts to marine life due to entrainment when it operates in either the co-located operating condition, or in the stand-alone operating condition. Sections 30230 and 30231 of the California Coastal Act (Coastal Act) require generally that marine resources be maintained, enhanced, and where feasible, restored. They also require that the marine environment be used in a manner that sustains biological productivity and maintains healthy populations of all marine species. The Subsequent EIR concluded that under either the co-located or stand-alone operating condition that the desalination project would not substantially reduce populations of affected species such that the sustainability of the affected species could not be maintained. As discussed in Section 4.10 of the Subsequent EIR, **the most frequently entrained species by the existing Huntington Beach Generating station are very abundant in the area of the Huntington Beach Generating Station intake and the Southern California Bight, and therefore actual ecological effects due to any additional entrainment from the desalination facility under co-located operating conditions are insignificant, and the loss of marine organisms due to the project's potential entrainment will have no effect on the species' ability to sustain their populations.** Project entrainment under stand-alone conditions is similarly less than significant and impacts on marine organisms resulting from the project are relatively small, would not substantially reduce populations of affected species, or affect the ability of the affected species to sustain their populations. Further, there are no threatened or endangered species in the desalination project's source water and the project is not within an Area of Special Biological Significance. Therefore, it is not anticipated that the project would conflict with these policies or the LCP.

It should also be noted that the existing Huntington Beach Generating Station intake is fitted with a velocity cap and bar racks which serve to substantially reduce impingement effects, as noted in the discussion of project design features in Subsequent EIR Section 3.4. These features serve to avoid impingement of larger fishes and organisms such as marine mammals and sea turtles, and would remain in place. Therefore it is not anticipated that impingement of marine mammals or sea turtles would result from operation of the desalination facility. Studies on the effectiveness of the HBGS' velocity cap have shown impingement reductions as high as 90%[3]. Thus it is not anticipated that the project would conflict with provisions of the Water Code requiring that new industrial facilities using seawater for processing must use the best available site, design, technology and mitigation feasible to minimize intake and mortality of marine life. (See Water Code Section 13142.5(b).)

s. Policy C7.1.3 (p. IV-C-129): Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The project has been intentionally located, and additional mitigation measures have been crafted, to avoid any significant environmental impacts to the Magnolia Marsh wetland area situated to the southeast of the project site. (See SEIR Section 4.9.) The project will be separated from coastal wetlands by significant setbacks and existing containment berms, which will keep storm water onsite. In addition, the desalination facility will feature an onsite local storm water drainage system, which will include catch basins that will collect any potential runoff that is contained by the existing berms and then direct it to a storm water pump via gravity lines. The project is conditioned to incorporate applicable Best Management Practices in order to contain stormwater runoff and will be in compliance with all standards as administered by the State Water Resources Control Board and County of Orange. Further, the project will be graded so that all onsite stormwater will flow away from the wetland area and toward the local drainage system. Any outdoor lighting will have limited intensity and be directed away from the sky and adjacent wetlands.

The project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or contribute significant increases in the flow velocity or volume of stormwater runoff to cause environmental harm, or provide substantial additional sources of polluted runoff. (See SEIR Section 4.3.) Although no significant impacts have been identified, mitigation measures ensure adequate sizing and design of the stormwater drainage system.

Accordingly, the project is consistent with this policy because it includes significant setbacks from the areas discussed in this policy, is further buffered by existing berms and proposed landscaping, and is subject to mitigation measures to ensure that runoff will not adversely affect these areas. In addition, pipelines are proposed to be routed in existing street right-of-way and easements or other already developed areas.

t. Policy C7.1.4 (p. IV-C-130): Require that new development contiguous to wetlands or environmentally sensitive habitat areas include buffer zones. Buffer zones shall be a

[3] Ibid.

minimum of one hundred feet setback from the landward edge of the wetland, with the exception of the following:

A lesser buffer may be permitted if existing development or site configuration precludes a 100-foot buffer, or conversely, a greater buffer zone may be required if substantial development or significantly increased human impacts are anticipated. In either case, the following factors shall be considered when determining whether a lesser or wider buffer zone is warranted. Reduced buffer zone areas shall be reviewed by the Department of Fish and Game prior to implementation. (a) Biological significance of adjacent lands: The buffer should be sufficiently wide to protect the functional relationship between wetland and adjacent upland. (b) Sensitivity of species to disturbance: The buffer should be sufficiently wide to ensure that the most sensitive species will not be disturbed significantly by permitted development, based on habitat requirements of both resident and migratory species and the short and long term adaptability of various species to human disturbance. (c) Susceptibility of parcel to erosion: The buffer should be sufficiently wide to allow for interception of any additional material eroded as a result of the proposed development based on soil and vegetative characteristics, slope and runoff characteristics, and impervious surface coverage. (d) Use of existing cultural features to located buffer zones: The buffer zone should be contiguous with the environmentally sensitive habitat area and make use of existing features such as roads, dikes, irrigation canals, and flood control channels where feasible.

The project is consistent with this policy because it adheres to all of the minimum setback requirements included in Policy C7.1.4. A buffer zone in excess of 100 feet is not warranted because the proposed development is not substantial. Rather it is limited to the buildings, tanks, pipelines and appurtenances described in Section 3.4 of the Subsequent EIR which include project design features agreed to by the applicant (for example, noise attenuation features). Likewise, human impacts have not been significantly increased by the project because the proposed desalination facility would only employ an approximate total of 18 people. None of the factors that could result in requiring a greater buffer zone are present. The buffer zone provided by the project is sufficiently wide to protect the functional relationship between the nearby wetland and the upland, to protect the most sensitive species and to intercept any material eroded as a result of the proposed development. The buffer zone provided by the project makes use of existing features including without limitation the existing flood control channel and existing containment berms. Finally, even though a buffer zone in excess of 100 feet is not warranted, due to the project location the buffer zone provided by the project often exceeds 100 feet.

u. Policy C7.1.5 (p. IV-C-130): Notify county, state, and federal agencies having regulatory authority in wetlands and other environmentally sensitive habitats when development projects in and adjacent to such areas are submitted to the City. The implementation of any Habitat Conservation Plan shall require an amendment to the Local Coastal Program. Incidental take of sensitive habitat and/or species that occurs in the context of development must be consistent with this LCP.

The project does not conflict with this policy because it does not propose any development in wetlands or environmentally sensitive habitats, and would not result in the incidental take of sensitive habitats or species.

v. Goal C8 (p. IV-C-131): Accommodate energy facilities with the intent to promote beneficial effects while mitigating any potential adverse effects.

As part of this Coastal Development Permit and Poseidon's related entitlement applications, the project was reconfigured to accommodate potential future plans for the existing power plant either to expand or to switch to a different cooling system. Accordingly, the project does not conflict with this goal, because the project was reconfigured to accommodate the existing energy facility.

w. Policy C8.2.4 (p. IV-C-132): Accommodate coastal dependent energy facilities within the Coastal Zone consistent with Sections 30260 through 30264 of the Coastal Act.

The project is not an energy facility. The project is co-located with the existing Huntington Beach Generating Station. As provided in the finding for LCP Goal C8, the project was reconfigured to accommodate an existing energy facility and thus does not conflict with this policy.

x. Policy C8.3.1 (p. IV-C-133): Promote the use of solar energy and encourage energy conservation.

The project is consistent with this policy because the desalination facility buildings would accommodate potential solar panels on a roof surface of approximately 39,000 square feet, with the potential to generate approximately 606 MWh/yr of electricity. Moreover, the proposed project would incorporate high-efficiency design, green building design and would reduce energy that would otherwise be needed to pump 56,000 acre feet of water per year into Orange County. The project's Energy Minimization and Greenhouse Gas Reduction Plan specifically requires the desalination facility to incorporate on-site energy minimization features including numerous Project components designed to ensure that the Project will use only the minimum energy necessary. These include energy efficiency measures like the state of the art "pressure exchanger" energy recovery technology that allows recovery and reuse of 33.9% of the energy associated with desalination's reverse osmosis process, as well as high efficiency and premium efficiency motors and variable frequency drives on the intake water pumps to improve their efficiency. In addition, the project would avoid 175,000 MWh/yr of electricity consumption that would otherwise be required to deliver imported water to serve Orange County customers, and the Energy Minimization and Greenhouse Gas Reduction Plan requires Poseidon to entirely offset the project's net GHG emissions above the existing baseline for this water importation so that the project will not cause an increase in GHG emissions above the existing baseline. These energy minimization measures will reduce impacts to coastal resources that would have been caused through additional energy usage, and will minimize energy consumption consistent with Coastal Act section 30253(4) and other applicable Coastal Act and LCP policies The features of the project's Energy Minimization and Green House Gas Reduction Plan are consistent with the plan approved by the Coastal Commission as part of Poseidon's Carlsbad desalination plant's Coastal Development Permit.

y. Policy C10.1.4 (p. IV-C-136): Require appropriate engineering and building practices for all new structures to withstand ground shaking and liquefaction such as those stated in the Uniform Building Code.

The project is consistent with this policy because it adheres to all appropriate and applicable building standards related to ground shaking and liquefaction.

The proposed desalination project is located within an unused fuel oil storage tank facility constructed in 1961 and formerly owned and operated by Southern California Edison. In addition to the proposed desalination facility site, the proposed project would also include several related off-site improvements, including tie-in pipelines between the existing Huntington Beach Generating Station condenser cooling water discharge system and the proposed desalination project, modifications to an existing pump station and up to approximately 4 miles of product water delivery pipelines within the city. The intake/discharge pipelines would be located entirely within the existing Huntington Beach Generating Station site. The majority of the product water delivery pipeline would be located within existing public streets, easements, or other rights-of-way in urban areas. As such, the proposed new development is located within existing developed areas.

The proposed use is consistent with the Coastal Element Land Use Plan designation of P (Public) for the site because it will produce potable water for other water suppliers to distribute to the public, and it is a use that is similar to governmental administrative and related facilities. Even though Poseidon will not be regulated by the Public Utilities Commission, Poseidon will sell the output of the desalination facility through wholesale contracts with retail water providers that are regulated by the state, public water agencies, and municipalities. Therefore, and as the City Planning and Building Department determined in a letter dated February 6, 2006, because the facility will be a wholesale supplier to regulated utilities, public water agencies and municipalities, and will provide much-needed water services to the public, it is properly classified as a public/semi-public use. Typical permitted uses within areas of the P (Public) designation include governmental administrative and related facilities, such as utilities, schools, public parking lots, infrastructure, religious, and similar uses. As the City Planning and Building Department has previously determined, use of the words and phrases "such as"' and "similar uses" provides evidence of an intent to provide for other land uses not explicitly listed under this category; therefore, the uses listed under Public (P) are not exclusive, but are examples. As an example, the Huntington Beach Generating Station site, which is also designated as Public (P), is an industrial electrical generating station that is not specifically cited in the list of permitted uses, but is nonetheless consistent with the General Plan designation. Thus, the desalination facility is compatible and consistent with the Land Use Plan designation of P (Public). In addition, the desalination facility site is zoned as Public-Semipublic with Oil and Coastal Zone Overlays (PS-O-CZ). This designation provides for similar uses to those allowed by the City of Huntington Beach General Plan. Included under Section 204.08(R) of the City's zoning code as acceptable uses under this zoning designation are "water or wastewater treatment plants... and similar facilities of public agencies or public utilities" (City of Huntington Beach 1997). **As of September 6, 2005, the Director of Planning and Building had determined pursuant to his authority under Section 204.02 of the zoning code that the desalination project is consistent with this zoning designation. Thus, the proposed use is compatible and consistent with the Coastal Element Land Use Plan and the Zoning and Subdivision Ordinance, as well as with properties immediately surrounding the subject site and meets the requirements of the Land Use Plan and the Development and Density Schedule.**

The project will improve the appearance of the area by demolishing three existing unused 40-foot high fuel storage tanks and replacing them with lower profile, modern,

and more attractive structures. The proposed structures vary in height from a maximum of 35 feet for the water tank to a minimum of 12 feet high for the ammonia tank. The proposed desalination project will not impact public views to the coast. There are limited views across the Huntington Beach Generating Station site due to the height of the existing structures. However, views will be improved to the extent that the new proposed desalination project structures will have a lower profile than the existing fuel storage tanks proposed to be demolished. A 10 foot and 20 foot planter along the street frontage on Edison and Newland respectively will further improve the appearance of the project with attractive landscaping.

As conditioned, the project is required to prepare a final landscaping plan along Edison Avenue for approval by the Design Review Board that is consistent in design, colors and materials with the landscaping for Huntington Beach Generating Station for a cohesive appearance. In addition, the conditions of approval for the project require compliance with landscaping requirements for the project site, and that landscaping along the Newland and Edison lease area street frontages include the densest type and number of trees to provide the most effective screening possible, which must be maintained to the approval of the City Landscape Architect. Landscaping within the eastern portion of the site will consist of native wetlands planting for compatibility with the wetlands to the southeast.

In addition, the bottom portion of the structures will be hidden behind the existing berm along the perimeter. As noted above, the proposed structures are in substantial compliance with the Design Guidelines by employing variations in form, building details, colors, and materials that create visual interest, and the design is carried through all the structures including the architectural screen for the tanks to achieve a unified theme.

The conditions of approval also require that utility meters be screened from public view and that backflow prevention devices be prohibited in the front yard setback and be screened from view. The conditions further require that all exterior mechanical equipment be screened from view on all sides, and that rooftop mechanical equipment be setback from the exterior edges of buildings.

The Subsequent EIR analyzed the potential impacts of the project on water quality generally, as well as both ocean water quality and product water quality. Based on the analysis contained in the Subsequent EIR, no mitigation measures are required to protect or enhance ocean water quality. (See SEIR Section 4.10.) Specifically, the Subsequent EIR found that there would be no degradation of water quality and there was not a reasonable potential for acute toxicity effects to occur at or below a seawater concentration of 40 ppt. The slightly elevated salinity level of the project's seawater discharge in the co-located operating scenario achieves compliance with the project's approved NPDES Order No. R8-2006-0034 and the standards established in the Order and the water quality objectives established within the Ocean Plan. NPDES Order No. R8-2006-0034 establishes a 1,000 foot Zone of Initial Dilution (ZID) and a dilution factor of 7.5:1 or greater that must be met at the edge of the ZID.

The stand-alone operating condition would have lower concentrations of seawater constituents than identified for the co-located condition. The elevated salinity levels anticipated for the desalination project in the stand-alone operation scenario would comply with the standards and 7.5:1 dilution factor established in Order No. R8-2006-

0034 and comply with Ocean Plan standards. Similar to the co-located condition, the limited area affected by salinities higher than 40 ppt would not represent substantial ecological effects or degradation of water quality due to the absence of areas of special biological significance or the presence of threatened or endangered species.

The Subsequent EIR contains a number of mitigation measures designed to prevent the degradation of and enhance water quality in groundwater basins, wetlands, surface water and product water. These mitigation measures are contained in the Subsequent Environmental Impact Report for the project.

The Subsequent Environmental Impact Report analyzed under both co-located and stand alone operating scenarios the potential impacts to marine organisms due to impingement and entrainment and concluded that no mitigation measures were required. The Subsequent EIR noted that under the co-located operating scenario impingement and entrainment are the responsibility of the Huntington Beach Generating Station and that the proposed desalination facility does not directly take seawater from the ocean, and that withdrawal of feed water for desalination is from the Huntington Beach Generating Station cooling-water discharge. Under the stand alone operating scenario, the Subsequent EIR noted that impingement and entrainment of the proposed project will be insignificant and for these reasons, no mitigation measures are required to reduce impingement and/or entrainment impacts to marine organisms. The Subsequent EIR concluded that under either the co-located or stand-alone operating condition that the desalination project would not substantially reduce populations of affected species such that the sustainability of the affected species could not be maintained. There are no threatened or endangered species in the desalination project's source water and no areas of special biological significance. (See also findings for Policy C6.1.19.)

The desalination project is surrounded by industrial properties, a 145-foot wide flood control channel, Huntington Beach Generating Station, a wetland area to the southeast and vacant property and a mobile home park to the west. The wetland area is separated from the project by Huntington Beach Generating Station's existing unused oil tank and an existing berm and the mobile home park is separated by Newland Street and a vacant parcel. The project has been designed to not create any impacts to the wetlands or residential uses. Nonetheless, a number of mitigation measures will be required to ensure that impacts are minimized.

State and Federal agencies with regulatory authority in wetlands and other environmentally sensitive habitats have been consulted as part of the CEQA process for the project. These agencies include, among others, the US Fish and Wildlife Service, California Department of Fish and Game, and California Coastal Commission.

The project as conditioned will require compliance with the standards set forth in the most recent edition of the Uniform Building Code to assure safety of the occupants and seismic safety to the satisfaction of the Department of Planning and Building prior to issuance of a building permit.

Lastly, the project is an ocean water desalination plant that will create an alternative, local drought-proof source of potable water, and therefore reduce on a 1:1 basis the demand by the project's Orange Country public water agency customers for water imported through the State Water Project. When the project is completed, it will

provide Orange County with 50 million gallons of potable water per day, accommodating the needs of Orange County regardless of weather or governmentally imposed conditions affecting water supply. By building the facility and locating it in Huntington Beach, the facility will demonstrate the opportunities offered by desalination, and will offer cities, counties, and the State of California a tangible example of how desalination can become more widely accepted throughout the state and the nation, and will encourage additional research and feasibility studies regarding ocean water desalination as an alternative source of potable water.

2. The project is consistent with the requirements of the CZ Overlay District, O Overlay District, the base zoning district, as well as other applicable provisions of the Municipal Code. The project meets or exceeds all minimum development standards including but not limited to setbacks, height, parking, and lot size/width. The project is required to comply with all Public Works, Fire, and Planning and Building Department codes and requirements. The project conforms to the City's Design Guidelines and incorporates variations in form, building details, colors, and materials that create visual interest. The project provides buffering from sensitive uses such as residential developments through landscaping, a block wall, and increased setbacks. The perimeter wall is designed in a manner to create an attractive appearance and will be consistent with the wall design approved for the portion of the HBGS property to the south for a cohesive appearance.

   The project meets all the requirements of the O Overlay District. The project meets the minimum size requirements, and the project includes a reuse plan to remediate property that has been contaminated by previous oil-related use. The property is required to operate in compliance with Title 15, Uniform Fire Code, and any other applicable Federal, State, County, or local rules and regulations, and must be approved by the Fire Department. Non-permitted equipment will not be allowed to be used on the project site, and all requirements for the use of an O overlay zone have been or will be met, including dedication requirements.

   The project meets all the applicable requirements for the CZ overlay district. The project preserves and improves existing visual resources and complies with maximum height limitations, off-street parking requirements, landscaping requirements, and other requirements. Due to the nature of existing utility improvements at the project location, there is currently no public access at the site; therefore, public access will not be affected by the project.

3. At the time of occupancy the proposed development can be provided with infrastructure in a manner that is consistent with the Local Coastal Program. The proposed project is an infill development, which as conditioned and with the implementation of all mitigation measures will provide all necessary infrastructure to adequately service the site and not impact adjacent development. This includes dedication and improvements to the project frontage along Edison Avenue to improve circulation in the area.

   The proposed project will comply with City of Huntington Beach Fire Department requirements, including the installation of fire sprinklers and fire hydrants, and impacts of the project on the Fire Department are not expected to be significant. There are no anticipated additional impacts of the project on Police protection. The project is expected to have little or no impact on libraries. The impacts on roadway maintenance caused by the project are expected to be less than significant. The project is anticipated to have a negligible impact on parks and recreation facilities

within the City. Project impacts to existing wastewater facilities are expected to be minimal, and the project plans are anticipated to include a new sewer line or private sewer system to accommodate additional wastewater. A local storm water drainage system would be implemented as part of the site facility, and storm water would be treated on-site prior to off-site discharge, as necessary to meet applicable requirements set by the Santa Ana Regional Water Quality Control Board or the City. The project would require new facilities to support operational water uses, but these uses are not expected to create significant impacts. There are no significant impacts of the project on reclaimed water use. The project would not create any significant impacts on the disposition of solid waste. The project's power demand would be less than one percent of the demand within Orange County or Southern California, and is anticipated to be less than significant. No impacts on natural gas supply are anticipated in the implementation of the project. No significant impacts on telephone and cable service are anticipated by the project.

4. The development of the desalination project and approximately one mile of water transmission lines within the Coastal Zone conforms to the public access and public recreation policies of Chapter 3 of the California Coastal Act as they will not impede any public access to the coast and public recreation opportunities in the area. All public access to the coast and public recreation in the area will not be impeded during the long-term operation of the facility as well as during the construction process with the implementation of conditions of approval and mitigation measures.

   The site does not currently provide public access or public recreation opportunities because of the nature of the historic uses at the site. The proposed project is consistent with the Public and Semipublic utility uses for which the site is designated, and is not suited for public access or recreation purposes for a number of reasons, including concerns about public safety.

   The site is located landward of Pacific Coast Highway and would not provide a connection to the coast or public recreation opportunities, as it is virtually surrounded by industrial, utility or commercial uses. Nonetheless, because no public access or recreational opportunities currently exist on the site, the project will not impede existing public access to the coast or public recreation opportunities in the area.

   The project will not impact any existing public parking or beach access and will not discourage or impact any existing lower cost visitor and recreational facilities. The project site is currently not accessible to the beach, thus no access will be impacted.

   The proposed project will not impede any unique water-oriented activities, nor does it involve any oceanfront land suitable for recreational use. The project involves the use of private lands that are not suitable for visitor-serving commercial recreational facilities. Even if the lands were suitable for such visitor-serving uses, the project proposes a coastal-dependent industry use, which is not of a lower priority than visitor-serving uses.

5. The Final SEIR certified for the project on September 7, 2010 serves as adequate and appropriate environmental documentation for approval of CDP 10-014. The unavoidable significant adverse effects of the project as identified in Section 5.0 of the Statement of Facts and Findings (growth inducement outside of Orange County and short-term

construction related impacts in regards to air quality) have been lessened in their severity by the application of standard code requirements, conditions, the inclusion of project design features and the imposition of the mitigation measures. The remaining unavoidable significant impacts are clearly outweighed by the economic, social, and other benefits of the project, as set forth in the "Statement of Overriding Considerations" included as Section 7.0 of the Statement of Facts and Findings. The City Council adopts the recitation of overriding considerations which justify approval of the project notwithstanding certain unavoidable significant environmental effects which cannot feasibly be substantially mitigated as set forth in the Statement of Overriding Considerations.

CONDITIONS OF APPROVAL – TENTATIVE PARCEL MAP NO. 10-130

1. The tentative parcel map received and dated August 11, 2010 shall be the conceptually approved layout with the following modifications:

   a. Remove Note G on Newland Street because the dedication and street widening on Newland Street has already occurred and there is no need for additional dedication. **(PW)**

   b. Horizontal control (i.e. bearing and distance) should be added for the hammerhead off of Edison Street. (PW)

   c. Remove the word "Emergency" from Note J and replace it with the word "Public" so that Note J would state "Proposed Public Access Easement." (PW)

CONDITIONS OF APPROVAL – COASTAL DEVELOPMENT PERMIT NO. 10-014:

1. The site plans, floor plans, elevations, and landscaping plan received and dated August 12, 2010 shall be the conceptually approved layout with the following modifications:

   a. The landscape area on the east side of the project site on Parcel 3 shall include the removal of all Myoporum, and shall be planted with a palette of plants indigenous to the Southern California coastal community.

   b. Provide a patio along the front entrance of the administration building. (DRB)

   c. Provide landscape planters around the administration building. (DRB)

   d. Provide screening for the solids loading area and filter substation compatible with the project. (DRB)

   e. Provide screening to the top of the chemical storage, carbon dioxide, and flush tanks. (DRB)

   f. The landscaping plan shall reflect plant materials that are more mature than the minimum code requirements subject to the approval of the City Landscape Architect. (DRB)

   g. The applicant shall install landscaping on Parcel 2 along Newland and Edison to match the project for a consistent appearance.

h. The landscaping and wall plan shall be consistent in design, colors, and materials with the landscaping and wall plan for AES for a cohesive appearance.

i. The landscaping along the Newland and Edison lease area street frontages shall include the densest type and number of trees to provide the most effective screening possible and shall be maintained to the approval of the City Landscape Architect.

j. A perimeter block wall shall be constructed along the City Beach Operations Maintenance facility/Poseidon boundary, per Public Works Department requirements. (PW)

k. Buildings of the subject project may not cross property lines. Lot lines shall be adjusted at the proposed treatment facility accordingly. (PW)

l. Revise 36"-42" City Pipeline Stub to 18"-36" City Pipeline Stub. (PW)

m. Tree species planted along Edison Street shall not canopy over the street to avoid blocking large maintenance vehicles accessing the City Beach Operations Maintenance facility. (CS)

2. Prior to issuance of demolition permits, the following shall be completed: For the demolition of the three (3) 200 foot diameter fuel oil tanks, a work plan must be submitted and approved by the Fire Department prior to commencement of work. (FD)

3. Prior to issuance of grading permits, the following shall be completed:

   a. The applicant shall submit written proof of final project approval by each applicable regulating agency including but not limited to the California Coastal Commission, Santa Ana Regional Water Quality Control Board, South Coast Air Quality Management District and all applicable water agencies and cities.

   b. The required Precise Grading Plan shall include the following: (PW)

      1) Extension of the existing 8-inch diameter City sewer main in Edison Avenue easterly to the terminus of said street.
      2) Connection to the existing 8-inch sewer main along the adjacent property's northerly property line (also southerly of the existing Orange County Flood Control District's right-of-way) shall be prohibited.

   c. Prior to issuance of any permit, the applicant will enter into a Franchise agreement approved and executed by the City for the generation and transport of product water from the site, and through and across the city's streets, rights-of-way or properties. (PW) (MC 3.44)

   d. A separate (new) irrigation water service and meter installed per Water Division Standards, and sized to meet the minimum requirements set by the landscape irrigation demand and the Water Efficient Landscape Requirements (MC 14.52) the minimum size shall be 1". (PW)

e. The proposed 30" tank overflow line shall be prohibited from surface discharging directly into the public right-of-way. (PW)

f. Areas for containment shall be provided to mitigate possible spillage of any materials affecting storm water quality that may be stored on-site, and to protect the adjacent wetlands to the maximum extent feasible. (PW)

4. Prior to submittal for building permits, the following shall be completed:

a. Zoning entitlement conditions of approval shall be printed verbatim on one of the first three pages of all the working drawing sets used for issuance of building permits (architectural, structural, electrical, mechanical and plumbing) and shall be referenced in the sheet index. The minimum font size utilized for printed text shall be 12 point.

b. A Water Purchase Agreement shall be executed between the applicant/operator of the seawater desalination project and the City of Huntington Beach and shall incorporate the following: (PW)

1) The City will have the option (the "Option") to enter into a water purchase agreement ("Water Purchase Agreement") to purchase water from the Project on terms essentially the same as all of the other water purchase agreements for the Project; provided, however that the City's price for up to 3,360 acre-feet per year (3 million gallons per day or 4.6 cubic feet per second) of the water purchased from the Project will be equal to the combination of (1) a 5% discount on the purchase price of water supplied by MWD via the Municipal Water District of Orange County (MWDOC) and (2) any subsidy received by the City from the Metropolitan Water District of Southern California or any other third party for the purchase of water from the Project such as, but not limited to, MWDOC; and provided further that the City's price will not exceed the purchase price for Project water in the other water purchase agreements for the Project.

2) The City will have the first right to purchase up to an additional 4,000,000 gallons per day (6.1 CFS) of additional water from the Project during a declared water emergency at the same costs as above for not to exceed seven days in any 30 day period and not to exceed 28,000,000 gallons in any one emergency event.. The definition of a declared water emergency is a 50% or greater loss of overall City water supply (not including droughts) or connected facilities such as distribution system, booster stations, reservoirs, wells and imported connections causing a reduction of at least 50% of the City's water supply.

c. The applicant/operator of the seawater desalination project will enter into an Amended and Restated Owner Participation Agreement (OPA) approved and executed by the Redevelopment Agency of the City of Huntington Beach. (EDD)

d. The applicant shall conduct and submit to the Planning and Building Department an additional noise study at the project design stage and include sound level sampling at approximately 3 a.m. The applicant shall attenuate project generated noise with the intent being to avoid a perceptible increase in noise at the nearest residential property, but allowing up to a 5 dBA increase above the nighttime ambient noise levels at the nearest residential property line based on noise levels determined in the design level noise study.

5. The structures cannot be occupied, the final building permits cannot be approved, utilities cannot be released, the use cannot commence, and the Certificate of Occupancy cannot be issued until the following has been completed: The applicant shall demonstrate that all measures required by these conditions to protect the nearby wetlands have been implemented.

6. During demolition, remediation, grading, site development, and/or construction, the following shall be adhered to:

   a. Construction equipment shall be maintained in peak operating condition to reduce emissions.

   b. Use low sulfur (0.5%) diesel fuel by weight in all diesel equipment.

   c. Shut off engines when not in use.

   d. Attempt to phase and schedule activities to avoid high ozone days first stage smog alerts.

   e. Discontinue operation during second stage smog alerts.

   f. Ensure clearly visible signs are posted on the perimeter of the site identifying the name and phone number of a field supervisor to contact for information regarding the development and any construction/ grading activity.

   g. Discovery of additional contamination/pipelines, etc. must be reported to the Fire Department immediately and the approved work plan modified accordingly. (FD)

7. The applicant shall completely remove the storage tanks from the site within 12 months from the date of approval of City building permits and agreements.

8. No parking shall be permitted on the south side of Edison Ave. (PW)

9. With the development of the proposed Poseidon Seawater Desalination Project Facility, the applicant/operator of the project will deliver potable water to the City from a location within the project site, specifically the proposed Tank Storage site. The applicant/operator of the project shall provide a water pipeline from the tank storage site, a bypass water pipeline and located within the booster pump station, two pump cans including base plates, baffles, steal discharge heads, and suction manifolds per City requirements and specification. (PW)

10. The applicant shall keep the facility under video surveillance 24 hours per day every day. Videos should be saved for at least 30 days to provide Police with the recording.(PD)

11. Post clear signage describing the acceptable behavior allowed and uses of the facility. Signs should also make it clear that there is 24/7 video surveillance.(PD)

12. The administration building should be clearly marked to help visitors.(PD)

13. The entire facility should be lighted throughout all hours of darkness, but must conform to the lighting requirements of Subsequent Environmental Impact Report No. 10-001.(PD)

14. The project shall comply with the approved Mitigation Monitoring and Reporting Program for Subsequent Environmental Impact Report No. 10-001.

15. The Planning and Building Department Director ensures that all conditions of approval herein are complied with. The Planning and Building Department Director shall be notified in writing if any changes to the site plan, elevations and floor plans are proposed as a result of the plan check process. Building permits shall not be issued until the Planning and Building Department Director has reviewed and approved the proposed changes for conformance with the intent of the City Council's action and the conditions herein. If the proposed changes are of a substantial nature, an amendment to the original entitlement reviewed by the City Council may be required pursuant to the Huntington Beach Zoning and Subdivision Ordinance.

16. The applicant and applicant's representatives shall be responsible for ensuring the accuracy of all plans and information submitted to the City for review and approval.

17. The applicant/property owner and each successor in interest to the property which is the subject of this project shall defend, indemnify and hold harmless the City of Huntington Beach and its agents, officers, and employees from any claim, action or proceedings, liability cost, including attorney's fees and costs against the City or its agents, officers or employees, to attack, set aside, void or annul any approval of the City, City Council, Planning Commission, or Design Review Board concerning this project. The City shall promptly notify the applicant of any claim, action or proceeding and should cooperate fully in the defense thereof.

18. The project shall comply with the requirements of the Energy Minimization and Greenhouse Gas Reduction Plan attached as Appendix W to the Subsequent Environmental Impact Report.

19. Tentative Parcel Map No. 10-130 and Coastal Development Permit No. 10-014 shall become null and void unless exercised within two years of the date of final approval by the City Council, or within two years of the date of final Coastal Development Permit approval by the Coastal Commission if the Coastal Development Permit is appealed, or such extension of time as may be granted by the Director pursuant to a written request submitted to the Planning and Building Department a minimum 30 days prior to the expiration date.

PUBLIC HEARING/ADMINISTRATIVE ITEMS

6-1. Approve Coastal Development Permit (CDP) No. 10-014 and Tentative Parcel Map (TPM) No. 10-130 for the Poseidon Seawater Desalination Project
TPM Continued from September 7, 2010

Recommended Action:
A) Approve Coastal Development Permit No. 10-014 and Tentative Parcel Map No. 10-130 to permit the Seawater Desalination Project with staff recommended findings and conditions of approval; and,

B) Rescind Coastal Development Permit No. 02-05; and,

C) Ratify City Council's approval at its September 7, 2010 meeting of Entitlement Plan Amendment No. 10-001 to amend Conditional Use Permit No. 02-04; the Exchange Agreement and Escrow Instructions between the City of Huntington Beach and Poseidon Resources (Surfside) LLC for properties located south of Edison Avenue and east of Newland Street; and the Pipeline Franchise Agreement with Poseidon Resources (Surfside) LLC to construct, own and operate a new water pipeline in the public right-of-way.
Approved 5-0-2 (Coerper, Hardy absent)

6-2. Approve the Amended and Restated Owner Participation Agreement by and between the Redevelopment Agency of the City of Huntington Beach and Poseidon Resources (Surfside) LLC
Continued from September 7, 2010

Redevelopment Agency Recommended Action:
A) Waive the Resolution No. 214 requirement for thirty (30) day review of the Owner Participation Agreement; and,

B) Approve the Amended and Restated Owner Participation Agreement by and between the Redevelopment Agency of the City of Huntington Beach and Poseidon Resources (Surfside) LLC; and,

C) The City Council finds that the Final SEIR serves as adequate and appropriate environmental documentation for approval of the Amended and Restated Owner Participation Agreement. The City Council finds that the unavoidable significant adverse effects of the Project as identified in Section 5.0 of the Statement of Facts and Findings (growth inducement outside of Orange County and short-term construction related impacts in regards to air quality) have been lessened in their severity by the application of standard conditions, the inclusion of Project design features and the imposition of the mitigation measures. The City Council finds that the remaining unavoidable significant impacts are clearly outweighed by the economic, social, and other benefits of the Project, as set forth in the "Statement of Overriding Considerations" included as Section 7.0 of the Statement of Facts and Findings. The City Council adopts the recitation of overriding considerations which justify approval

STATE OF CALIFORNIA—THE NATURAL RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *GOVERNOR*

CALIFORNIA COASTAL COMMISSION

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W9a

Filed: 10/05/10
49th Day: 11/22/10
Staff: TL-SF
Staff Report: 11/4/10
Hearing Date: 11/17/10
Commission Action: Substantial Issue Found

FINAL ADOPTED FINDINGS – FINDING OF SUBTANTIAL ISSUE

Local Government:	City of Huntington Beach
Decision:	Approval with Conditions
Appeal No.:	A-5-HNB-10-225
Applicant:	Poseidon Resources / AES Huntington Beach
Project Description:	Construction and operation of a desalination facility.
Project Location:	On the site of the AES Power Plant, 21730 Newland Avenue, Huntington Beach, Orange County
Appellants:	Orange County Coastkeeper, Surfrider Foundation, Residents For Responsible Desalination, Commissioners Wan and Mirkarimi

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SUBSTANTIVE FILE DOCUMENTS:

- Certified City of Huntington Beach Local Coastal Program.
- City of Huntington Beach Coastal Development Permit (CDP) File No. 10-014.
- Coastal Commission Appeal File No. A-5-HNB-06-101.
- Coastal Commission Appeal File No. A-5-HNB-10-225.
- Appeal Applications from Orange County Coastkeeper, Surfrider Foundation, and Residents For Responsible Desalination (collectively the Environmental Group Appellants), and Commissioners Wan and Mirkarimi.

TABLE OF CONTENTS:

I. APPELLANT CONTENTIONS

Appellants contend that the project does not conform to several provisions of the City's LCP related to protection of marine life and water quality, protection of wetlands and environmentally sensitive habitat areas, land use, adequate public services, energy use and development, public recreation, water conservation, protection against seismic events and liquefaction, growth-inducement, and the requirement for mitigation to the maximum extent feasible.

II. LOCAL GOVERNMENT ACTION

The coastal development permit was approved by the City of Huntington Beach City Council on September 20, 2010, concurrent with approval of Tentative Parcel Map #10-013. Previously, on September 7, 2010, the City certified a Final Supplemental Environmental Impact Report for the project. Concurrent with the City's approval of this CDP, it rescinded a CDP it had previously issued to the applicant for a similar project in February 2006.

III. APPEAL PROCEDURES

After certification of a LCP, the Coastal Act provides for limited appeals to the Coastal Commission of certain local government actions on coastal development permits. Projects within cities and counties may be appealed if they are located within the appealable areas as defined by Section 30603(a) of the Coastal Act. The grounds for appeal are limited to the assertion that "development does not conform to the certified local coastal program." Where the project is located between the first public road and the sea or within 300 feet of the mean high tide line, the grounds of appeal are limited to those contained in Section 30603(b) of the Coastal Act. Those grounds are that the development does not conform to the standards set forth in the certified local coastal program or the access policies set forth in the Coastal Act.

Section 30625(b) of the Coastal Act requires the Commission to hear an appeal unless it determines that no substantial issue is raised by the appeal. If the staff recommends "substantial issue" and no Commissioner objects, the Commission will proceed to a de novo hearing on the merits of the project at the same meeting if the staff has prepared a recommendation on said merits, or at a subsequent meeting if there is no such recommendation.

If the staff recommends "no substantial issue" or the Commission decides to hear arguments and vote on the substantial issue question, proponents and opponents will have three minutes per side to address whether the appeal raises a substantial issue. It takes a majority of Commissioners present to find that no substantial issue is raised. If substantial issue is found, the Commission will proceed to a full public hearing on the merits of the project at either the same or a subsequent meeting as described above. If the Commission conducts a de novo hearing on the permit application, the applicable test for the Commission to consider is whether the proposed development is in conformity with the certified LCP. In addition, for projects located between the sea and the first public road paralleling the sea, Section 30604(c) of the Coastal Act requires a finding that the development conforms to the public access and public recreation policies of Chapter 3.

The only persons qualified to testify before the Commission at the "substantial issue" stage of the appeal process are the applicant, persons who opposed the application before the local government (or their representatives), and the local government. Testimony from other persons must be submitted in writing. At the time of the *de novo* portion of the hearing, any person may testify.

IV. RESOLUTION

Resolution to Find Substantial Issue:

The Commission finds that Appeal No. ***A-5-HNB-10-225*** *presents a substantial issue with respect to the grounds on which the appeal has been filed under section 30603 of the Coastal Act regarding consistency with the certified local coastal plan and/or the public access and recreation policies of the Coastal Act.*

V. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

1. PROJECT DESCRIPTION

The development approved by the City is a desalination facility to be constructed and operated by Poseidon Resources within the AES Power Plant site in Huntington Beach. The project also includes a water delivery pipeline that will be constructed along a route yet to be determined, but that is estimated to range from about eight to 10 miles long. The pipeline would connect the facility to the regional water distribution system. The purpose of the project is to produce from seawater approximately 50 million gallons per day (MGD) of potable water for use within various parts of Orange County.

The approved development includes several buildings and structures that will house pre-treatment facilities, desalination equipment, a product water storage tank, administration offices, and other supporting structures and equipment. These structures would be located in portions of the northern part of the power plant site. Part of the proposed facility footprint includes fuel oil storage tanks formerly used by the power plant. Those tanks would be removed as part of the project. The project also includes pipelines connecting the power plant cooling system with the pre-treatment part of the facility.

To produce potable water, Poseidon would withdraw approximately 100 MGD of seawater from the once-through cooling system currently used by the power plant.[1] The cooling system's 14-foot diameter intake structure extends under the beach and seafloor to approximately 1700 feet offshore where it emerges into the water column, and a similar discharge structure extends under the beach and seafloor to about 1500 feet offshore where it emerges into the water column. With the 100 MGD pulled in by the desalination facility, it would produce 50 MGD of potable water and about 50 MGD of a high-salinity effluent. That effluent, along with up to 6.5 MGD of backwash water and cleaning fluids, would be routed to the outfall and mixed with the power plant cooling water discharge to create a combined discharge with salinities ranging up to more than 20% over ambient seawater salinity.

2. PERMIT JURISDICTION

Most of the land-based portions of the project are located within the Coastal Zone in the City of Huntington Beach and subject to the City's certified Local Coastal Plan (LCP). The project is also within the appeal jurisdiction of the Coastal Commission.[2] Additionally, a portion of the project is within the Commission's retained jurisdiction – the facility's intake and outfall are within coastal waters and the project involves both a "change in intensity of use" of those waters

[1] Poseidon's current NPDES permit, which expires in August 2011, allows it to operate at its design capacity only when the power plant cooling system is using at least 126.7 MGD. Power plant operations have varied from very low intake flows when it is not generating electricity to up to 507 MGD. The power plant cooling system is scheduled to be shut down on or before 2020 and replaced with a system that does not use seawater.

[2] Pursuant to Coastal Act Section 30603, the Commission's appeal jurisdiction includes developments approved by a local government that are located within 100 feet of any wetland, estuary, or stream, within 300 feet of the inland extent of the mean high tideline of the sea where there is no beach, or on tidelands or public trust lands.

and a discharge to those waters – so the project will require a permit directly from the Commission.

3. PERMIT HISTORY

In February 2006, the City issued CDP #02-05 to Poseidon for construction and operation of a desalination facility similar to the current project, but at a different location within the power plant site. That CDP was appealed to the Commission, and on April 12, 2006, the Commission found that the appeal raised Substantial Issue with consistency to the City's Local Coastal Program.[3] In May 2006, Poseidon submitted a CDP application to Commission staff for those portions of the project within the Commission's retained jurisdiction; however, that application remains incomplete.

In early 2010, the City started review of a Supplemental Environmental Impact Report to address modifications to the original proposed project. In September 2010, the City certified the Supplemental EIR, rescinded its previously-issued CDP, and issued a new CDP. On October 4 and 5, 2010, Commission staff received timely appeals from the Environmental Group Appellants and from Commissioners Wan and Mirkarimi.

4. APPELLANTS' CONTENTIONS & STANDARD OF REVIEW

All appellants contend that approval of the project by the City is inconsistent with policies of the City's certified LCP related to marine resources and water quality, wetlands and environmentally sensitive habitat areas, land use, public services, energy use and development, and the LCP requirement that adverse impacts be mitigated to the maximum extent feasible. Environmental Group Appellants additionally contend the City's approval is inconsistent with LCP policies governing public recreation, growth-inducement, and water conservation. Appellants Wan and Mirkarimi additionally contend the City's approval is inconsistent with LCP policies related to protection against seismic and liquefaction events. The standard of review for this appeal is consistency with the certified LCP of the City of Huntington Beach.

5. APPEAL ISSUES RAISING SUBSTANTIAL ISSUE

5A) Appeal Issue: Marine Biology and Water Quality

LCP Policy C 6.1.1 states:

> "*Require that new development include mitigation measures to enhance water quality, if feasible and at a minimum, prevent the degradation of water quality of groundwater basins, wetlands, and surface water.*"

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[3] In its April 2006 decision, the Commission found that substantial issue existed with respect to several of the LCP policies contested in this current appeal, including LCP policies related to protection of marine life and water quality (LCP Policies C6.1.1, C6.1.2, C.6.1.3, C6.1.4, and C6.1.19), protection of environmentally sensitive habitat areas (LCP Policy C7.1.3), energy use and development (LCP Policy C8), and adequate public services (C1.2.3).

LCP Policy C 6.1.2 states:

> *"Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance."*

LCP Policy C 6.1.3 states:

> *"Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes."*

LCP Policy C 6.1.4 states:

> *"The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain organisms and for the protection of human health shall be maintained and, where feasible, restored."*

LCP Policy C 6.1.19 states:

> *"Prior to approval of any new or expanded seawater pumping facilities, require the provision of maximum feasible mitigation measures to minimize damage to marine organisms due to entrainment in accordance with State and Federal law."*

These LCP provisions apply to the approved project due to its use of seawater and its new pumping facilities.[4] The provisions generally require that marine resources and water quality be maintained, enhanced, and where feasible,[5] restored, and that maximum feasible mitigation measures be required to minimize entrainment. The City's findings state, for a number of reasons, that the project is consistent with the above policies. Appellants contend, for reasons described below, that the project is inconsistent with those policies. The Commission's Findings regarding overall consistency with the above policies are provided below, along with Findings on specific policies and appeal contentions.

For all the above policies, it appears that the City used several criteria or standards of review that were not adequate for defining the significance or severity of the project's impacts for purposes of LCP conformity. In several instances, it also analyzed project impacts in ways that were not sufficient to evaluate the project's conformity to these policies. Examples are provided below.

- **Use of Incorrect Review Standards:** In several instances, the City's nonconformity with the above LCP policies appears to be due to the City's reliance on standards and determinations of significance selected for use in the EIR rather than those required by the LCP. The focus of the EIR was to determine whether the project causes <u>significant</u> impacts; whereas many

[4] The City's General Plan Coastal Element includes waters of the Pacific Ocean in its definition of "surface waters."

[5] "Feasible" is defined in the LCP (and the Coastal Act) as "Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."

provisions of the LCP require that any impacts be identified and then mitigated, where feasible. Some of the criteria the EIR used to define a "significant impact" resulted in determinations of significance that fell far short of identifying the kinds of impacts for which the LCP requires avoidance, additional analysis, mitigation, or other measures.

The City acknowledges in the EIR that the project's conformity for purposes of the Coastal Act requires use of a more rigorous standard. The EIR's Response to Comments states that the EIR review was meant to determine whether the project would conflict with applicable plans and policies, and then states:

> *"[d]etermining whether a conflict may arise that would preclude implementation of a plan or policy is entirely different from the more extensive process that may be involved in making a determination of "conformance" or "consistency" with a particular law, policy or other regulatory program. While it is understood that the Coastal Commission may apply a more rigorous standard in determining conformance of the project with the Coastal Act, such a standard is not required under CEQA."*

Even with this acknowledgement, the City used the EIR's less-than-adequate standards to determine LCP conformity. For example, the City's findings for LCP Policy 6.1.2 rely on the EIR's conclusions that the project would cause less than significant entrainment impacts; however, the EIR defined a significant entrainment impact, in part, as whether the project would affect a species' ability to sustain its population, which is a less protective standard than the LCP Policy's requirement that marine resources be "maintained, enhanced, and where feasible, restored". Similarly, regarding the effects of the project's chemical and saline discharges on marine life and coastal waters, LCP Policy C6.1.1 requires that the project "prevent the degradation" of water quality, whereas the EIR standards referenced in the CDP determined whether there were project impacts based on less stringent criteria, such as whether marine organisms experienced "substantial ecological losses of source populations". The City's findings on LCP Policy 6.1.3 state that the project's high salinity effluent will not affect areas that support sensitive species; however, the standard of review for that LCP policy is that the project will maintain healthy populations of all marine species.

In its findings for LCP Policy 6.1.4, the CDP merely states that the project is consistent with this policy because it would not degrade water quality or adversely affect marine life as described in the CDP's findings on LCP Policies 6.1.1 and 6.1.3. As noted elsewhere in these Findings, however, the CDP's conclusions about those policies are not adequate for ensuring LCP conformity. Further, the City's findings do not address the "feasible restoration" aspect of LCP Policy 6.1.4's standard of review. Regarding LCP Policy C6.1.19,[6] the CDP states that neither the project's entrainment nor its high-salinity effluent will negatively influence affected species' ability to sustain their populations, which is the incorrect standard of review for a policy requiring that damage to marine organisms be minimized. Overall, the standards of review and levels of significance the City used in the EIR cannot be relied upon to determine conformity of the project to these LCP polices.

[6] The project is subject to LCP Policy C6.1.19 because it includes new pumps to bring seawater into the desalination facility and may include new pumps to replace existing pumps within the power plant.

- **Use of Incomplete/Inaccurate Analyses:** In several instances, the City's CDP findings relied on EIR analyses that were not adequate to determine the project's conformity to these LCP policies. For several of the policies, the City's findings state that the project does not require mitigation measures because the EIR identified the project's impacts as less than significant. However, because the cited EIR analyses were based on different, and generally less protective, standards of review than required under the LCP, they are not adequate for determining LCP conformity.

  These include insufficient analyses of necessary and feasible mitigation measures required pursuant to LCP Policies C6.1.2, 6.1.4, and 6.1.19. For example, the CDP implies that the project intake does not require mitigation measures under LCP Policy 6.1.2 because it is not located within an Area of Special Biological Significance; however, the CDP does not acknowledge, as it should, that the facility's entrainment affects organisms from not just the immediate area, but from coastal waters up to several dozen miles away with areas of sensitive marine habitats. Similarly, for LCP Policy C6.1.19, which requires maximum feasible mitigation measures in accordance with state and federal law, the City's findings state that the project is not anticipated to conflict with applicable provisions of state Water Code Section 13142.5 regarding impingement, but the findings do not address that section's full requirements regarding the project's entrainment impacts.[7] For LCP Policy C6.1.4, the City refers to its findings for LCP Policies C6.1.1 and 6.13, which, as described elsewhere in these Commission Findings, are not adequate to ensure conformity to those policies. Additionally, several of the City's analyses resulted in what are described as mitigation measures but are more appropriately defined as minor and incidental benefits that are caused by, and are incidental to, the project's adverse impacts. Regarding LCP Policy 6.1.1, for example, the CDP states that the EIR includes a number of mitigation measures meant to improve water quality and prevent water quality degradation; however, the measures cited are those resulting from substantial adverse project-related impacts. For instance, the CDP notes that the project will be "removing bacteria from source water", which is solely an incidental effect of the significant adverse entrainment impacts the project will cause by removing seawater containing fish eggs, larvae, plankton, and other important coastal resources. The CDP also notes that the project will be "reducing thermal footprint of the discharge from the power plant during the co-located operating condition"; however, this is similarly an incidental effect of the project's introduction of 50 MGD of highly saline effluent into the power plant outfall.

For both of the above examples, the measures the City claimed were sufficient for LCP adequacy were not supported by adequate analyses and the resulting findings were used either to require inadequate mitigation or to support the inclusion of incidental effects as adequate mitigation. As a result, neither the City's CDP nor the project EIR on which the City relied for its CDP findings identified or properly evaluated many of the project's expected adverse impacts or the potentially feasible mitigation measures that could be required of the project to avoid or minimize these impacts. The City's approved CDP therefore does not conform to the above LCP policies.

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[7] Water Code Section 13142.5(b) states: "*For each new or expanded coastal powerplant or other industrial installation using seawater for cooling, heating, or industrial processing, the best available site, design, technology, and mitigation measures feasible shall be used to minimize the intake and mortality of all forms of marine life.*"

Appellants also contend that the City's approval does not adequately take into account the scheduled phase-out of the power plant's once-through cooling system, which results in the City inadequately identifying impacts and necessary mitigation measures. The previous CDP issued by the City in February 2006 for the earlier version of this project presumed that the power plant cooling system would continue to operate and that the desalination facility would rely solely on the power plant's cooling water discharge. This scenario provided the basis of the City's previous findings that the desalination facility would not cause marine life impacts beyond those caused by the power plant and would not require marine life mitigation measures beyond those required of the power plant.[8] In contrast, the current CDP acknowledges that the power plant is expected to phase out its cooling system, which would result in stand-alone desalination facility operations. However, the City's findings continue to rely in part on the project's 2006 NPDES permit, which anticipates that the facility will operate in conjunction with the power plant when the power plant is pumping at least 126.7 MGD through its cooling system.[9] Under the recently modified expectation of stand-alone operation, the desalination facility would operate the existing intake and discharge for several additional decades beyond the power plant's expected use of that cooling system and would pull in and discharge a higher minimum amount of seawater than anticipated in the co-location scenario described in the NPDES permit – i.e., the stand-alone facility would take in a minimum of 152 MGD instead of 126.7 MGD (about a 20% increase) and would discharge about 102 MGD instead of 76.7 MGD (about a 33% increase). The City's analyses do not adequately address the differences between the previous scenario on which the soon-to-expire NPDES permit relies and Poseidon's currently anticipated stand-alone operations, and they do not adequately characterize the adverse entrainment, impingement, and salinity impacts caused by this increased volume and duration.

In sum, the project will clearly cause adverse impacts to marine resources, water quality, and other coastal resources in excess of those that would allow consistency with the above LCP policies. The City's approval did not adequately identify the full range of impacts, in part due to using incorrect standards of review, inaccurate determinations of significance, and incomplete analyses of feasibility and needed mitigation measures. As a result, the City did not adequately evaluate the project's impacts to coastal resources and did not identify necessary mitigation measures that would avoid or minimize those impacts. The City's approval is therefore not sufficient to determine whether the project conforms to the above LCP provisions. Based on the record provided by the City and the information provided by the appellants, the Commission

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[8] The City's February 27, 2006 CDP, at page 11 of *Agenda Item D1A, Suggested Findings for Approval – Coastal Development Permit 02-05*, states:

> "*The Recirculated Environmental Impact Report analyzed the potential impacts to marine organisms due to entrainment and concluded that no mitigation measures were required. The Recirculated EIR noted that entrainment is currently permitted for the once-through cooling water system of the HBGS, and that the proposed desalination facility does not directly take seawater from the ocean, and that withdrawal of feedwater for desalination is from the HBGS cooling-water discharge and not subject to intake regulation under the Federal Clean Water Act (316b). In addition, the proposed project will not alter in any way existing HBGS cooling water intake operations. For those reasons, no mitigation measures are required to reduce entrainment impacts to marine organisms.*"

[9] The current NPDES permit expires in August 2011. It requires the project to reduce its pumping when the power plant pumps less than 126.7 MGD.

finds that substantial issue exists with respect to the project's consistency with the City's certified LCP.[10]

5B) Appeal Issue: Protection of Wetlands & Environmentally Sensitive Habitat Areas

LCP Policy C 6.1.4 states:

> *"The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain organisms and for the protection of human health shall be maintained and, where feasible, restored."*

LCP Policy C6.1.20 states:

> *"Limit diking dredging, and filling of coastal waters, wetlands, and estuaries to the specific activities outlined in Policy 30233 and 30607.1 of the Coastal Act and to those activities required for the restoration, maintenance, and/or repair of the Municipal Pier and marina docks. Conduct any diking dredging and filling activities in a manner consistent with Section 30233 and 30607.1 of the Coastal Act."*

LCP Policy C7.1.3 states:

> *"Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas."*

LCP Policy C7.1.4 states:

> *"Require that new development contiguous to wetlands or environmentally sensitive habitat areas include buffer zones. Buffer zones shall be a minimum of one hundred feet setback from the landward edge of the wetland, with the exception of the following:*
>
> *A lesser buffer may be permitted if existing development or site configuration precludes a 100 feet buffer, or conversely, a greater buffer zone may be required if substantial development or significantly increased human impacts are anticipated. In either case, the following factors shall be considered when determining whether a lesser or wider buffer zone is warranted. Reduced buffer zone areas shall be reviewed by the Department of Fish and Game prior to implementation.*
>
> *a) Biological significance of adjacent lands: The buffer should be sufficiently wide to protect the functional relationship between the wetland and adjacent upland.*
> *b) Sensitivity of species to disturbance: The buffer should be sufficiently wide to ensure that the most sensitive species will not be disturbed significantly by permitted development, based on habitat requirements of both resident and migratory species and the short and long term adaptability of various species to human disturbance.*

[10] In its 2006 Substantial Issue Findings for the previous version of this project, the Commission found that substantial issue existed with respect to the project's consistency with LCP Policies C6.1.1, C6.1.2, C6.1.3, C6.1.4, and 6.1.19.

c) *Susceptibility of parcel to erosion: The buffer should be sufficiently wide to allow for interception of any additional material eroded as a result of the proposed development based on soil and vegetative characteristics, slope and runoff characteristics, and impervious surface coverage.*

d) *Use existing cultural features to locate buffer zones: The buffer zones should be continguous with the environmentally sensitive habitat areas and make use of existing features such as roads, dikes, irrigation canals, and flood control channels where feasible."*

LCP Policy C.7.1.5 states, in relevant part:

> *"Notify County, State and Federal agencies having regulatory authority in wetlands and other environmentally sensitive habitats when development projects in and adjacent to such areas are submitted to the City."*

The above-referenced LCP policies require protection of wetlands and environmentally sensitive habitat areas and limit the kinds of development that may be approved in or near those areas. The City's findings do not evaluate the project's conformity to wetland protection components of LCP Policies C6.1.4 and C6.1.20. For LCP Policies C7.1.3 and C7.1.4, the City states that the project has been located to avoid significant impacts to the nearby Magnolia Marsh through setbacks and buffers, berms, grading, redirection of stormwater, and other measures. For LCP Policy C7.1.5, the City states that the project does not conflict with this policy because it involves no development in wetlands.

Appellants contend that the City's approval is inconsistent with the above policies for three main reasons – first, that the City did not properly delineate wetlands present within the project footprint and therefore did not adequately avoid and mitigate for wetland impacts; second, that the City's noise studies were inadequate to identify possible impacts to wetland-dependent wildlife species; and third, that the lack of an identified pipeline route makes it impossible to know whether the potential river crossing or the locations of pipelines and pump stations might adversely affect wetlands in a manner inconsistent with the above LCP policies.

Regarding the first appeal issue – the potential presence of wetlands within the project footprint – the project EIR evaluated site wetlands in a manner inconsistent with the Commission's wetland delineation methods.[11] As a result of the City's reliance on the EIR, the CDP findings do not properly identify the project's potential impacts to wetlands and do not adequately address

[11] The City's definition of wetlands is similar to that of the Coastal Commission. The City's General Plan Coastal Element defines wetlands as: "Land which may be covered periodically or permanently with shallow water and includes saltwater marshes, freshwater marshes, open or closed brackish water marshes, mudflats, and fens. Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following attributes:

1. At least periodically, the land supports predominantly hydrophytes; or
2. The substrate is predominantly undrained hydric soil; or
3. The substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

the project's conformity to these LCP policies. Further, and contrary to Commission staff guidance, observations during a Commission staff site visit, and previous Commission determinations regarding similar wetland issues nearby, the EIR does not adequately examine site hydrology and improperly asserts that wetland vegetation at the site is not acting as wetland vegetation.[12] Because the EIR erroneously concludes that there are no wetland areas that would be affected by the project, the CDP apparently omits the necessary findings regarding those areas and the findings needed to determine the project's conformity to the above policies. At the very least, additional evaluation is necessary to make a conclusive wetland determination at the site and to properly assess the project's conformity to the LCP wetland protection policies. Regarding the second appeal issue about the impacts of project-related noise on nearby wetlands, the City heard testimony at its September 7, 2010 CEQA hearing that the project's noise studies misidentified the baseline noise levels in the project area and underestimated the effects on nearby residences of project-related noise from several types of pumps, construction equipment, and other machinery. At that hearing, Poseidon offered to conduct further studies after the facility started operating and to mitigate for any noise impacts that were at decibel levels above those allowed for residences. This proposed modification, however, does not address likely or potential noise effects on sensitive species in nearby wetland areas that are in some cases closer to the project site than the nearest residences. Some of the EIR's apparently underestimated noise levels at the nearby residences are at or above City noise standards, which suggests that nearby wetland species could experience noise at even higher levels. The EIR identified species known to exist in the wetlands include the endangered Belding's Savannah Sparrow and California least tern, several raptors (Cooper's hawk, Sharp-shinned hawk, Northern harrier, etc.), and other birds. However, the EIR did not identify noise standards for wetlands or environmentally sensitive habitat areas and did not identify those nearby areas as sensitive noise receptors. As a result, the EIR did not evaluate potential noise impacts on species in nearby wetland or environmentally sensitive habitat areas. Because these expected noise levels are likely to disturb or adversely affect various species – e.g., breeding and nesting birds – or may require additional buffering or mitigation measures, the City's findings do not ensure conformity to the above LCP policies.

Regarding the third appeal issue about the potential for additional wetland impacts due to subsequent selection of pipeline routes and pump station locations, neither the CDP nor EIR adequately address this issue for purposes of LCP conformity. Because the CDP relies on the inadequate EIR approach to wetland delineation, it is not apparent whether there are additional wetlands that may be affected in or near the possible pipeline routes, and therefore no certainty as to potential impacts or necessary mitigation measures.

Therefore, based on the record provided by the City and the information provided by the appellants, and for the reasons cited above, the Commission finds that a substantial issue exists with respect to the project's consistency with the above policies of the City's certified LCP.[13]

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[12] The EIR's conclusions contradict site characteristics identified by the Commission's ecologist, Dr. Jonna Engel, on a site visit in the spring of 2009 during which she identified evidence of wetland vegetation and hydrology.

[13] Note: In its 2006 Substantial Issue Findings for the previous version of this project, the Commission found that substantial issue existed with respect to the project's consistency with LCP Policy C7.1.3.

5C) Appeal Issue: Land Use

LCP Policy C1.2.1 states:

> *"Accommodate existing uses and new development in accordance with the Coastal Element Land Use Plan and the Development and Density Schedule Table C-1."*

The City's findings state that "[t]he project is consistent with this policy because it is consistent with the Coastal Element Land Use Plan and Density Schedule." The Land Use Plan designates the project site as "Public", and the City states that the project falls within this designation because the project is similar to a utility, which is allowed under this designation.[14] Appellants contend that the City's CDP findings regarding this policy are insufficient to determine conformity to the LCP, since the findings merely assert that the project is consistent with the policy. Appellants also contend that the City's approval does not conform to this LCP policy because the project is not an allowable type of development under the Land Use Plan's site designation. Appellants further contend that allowing an industrial and non-public, non-utility use such as this project at this site would require an amendment to the City's LCP.

> ***Note:*** See related appeal issues on land use designation below in Section 5D – Energy Use and Development.

The City's application of this policy is inconsistent with the LCP in at least two ways:

- First, the City partially supports its conclusion that the project is similar to a utility by referencing the City's zoning code that allows "water or wastewater treatment plants…and similar facilities of public agencies or public utilities."[15] However, this zoning code appears to allow only water treatment plants of public agencies or public utilities, which does not include the proposed project. The project is not public, as it is owned by a private entity. The City acknowledges that the project is not subject to oversight or regulation by the state Public Utilities Commission (PUC), so it is not a utility for purposes of state law, and neither the CDP nor the EIR cite the PUC as a permitting or regulating agency.[16]

- Second, in some instances, the City's review identifies the project as something other than a utility, including an "industrial use", which is not allowed under the Land Use Plan's site designation.[17] The City notes that the project will be subject to a "commercial/industrial" capital fee tax and the EIR incorporates the project's NPDES permit, which describes the project as an "industrial" facility conducting "industrial" activities and allowing the use of affected ocean waters for "industrial service supply" (that permit also specifically exempts those waters from municipal and domestic supply). The U.S. EPA additionally categories the

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[14] Pursuant to the City's Zoning Code at Chapter 214, uses allowed under the Public and Semipublic classification are: Cemetery, Cultural Institutions, General Day Care, Government Offices, Hospitals, Maintenance & Service Facilities, Park & Recreation Facilities, Public Safety Facilities, Religious Assembly, General Residential Care, Public or Private Schools, Major Utilities, and Minor Utilities.

[15] Referenced in the City's findings for LCP Policy C10.1.4.

[16] At the time of the City's adoption of the relevant policy, the power plant site was owned by Southern California Edison, which was regulated as a utility by the state Public Utilities Commission.

[17] The City's Zoning Code at Section 214.06 prohibits uses that are not listed within the designation.

facility for NPDES purposes as an industry.[18] The City also notes that the project is subject to state Water Code Section 13142.5, which applies to industrial facilities. Further, Poseidon categorizes itself as something other than a "utility" – for example, in its City business license as a "government administrator of general economic programs" (through SIC Code 9611), and as a "manufacturing/industrial" entity rather than a "utility" in its declarations to the California Secretary of State.[19] Finally, the City and Poseidon have apparently disagreed as to whether the project is subject to certain City taxes or is exempt because Poseidon is a "water corporation," not a utility.

It is therefore not clear from the City's record whether the project is a utility, a non-allowed industrial use, or some other use. At the very least, additional evaluation is necessary to address these inconsistencies and to conclusively determine whether the project conforms to this LCP policy or whether the proposal may require an amendment to the land use designation. Therefore, based on the record provided by the City and the information provided by the appellants, and for the reasons cited above, the Commission finds that a substantial issue exists with respect to the project's consistency with LCP Policy C1.2.1 (see also the discussion of the site designation for energy facility expansion in Appeal Issue 5D – Energy Use and Development).[20]

5D) Appeal Issue: Energy Use and Development

LCP Policy C8 state:

> *"Accommodate energy facilities with the intent to promote beneficial effects while mitigating any potential adverse effects."*

LCP Policy C8.2.2 states:

> *"Require the mitigation of adverse impacts from new technologies employed in electricity generation to the maximum extent feasible."*

LCP Policy C8.2.4 states:

> *"Accommodate coastal dependent energy facilities with the Coastal Zone consistent with Sections 30260 through 30264 of the Coastal Act."*

LCP Policy C8.3.1 states:

> *"Promote the use of solar energy and encourage energy conservation."*

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[18] The EPA Facilities Registry System identifies the project as "SIC Code 4941: Industrial Group – Water Supply (link accessed 10/29/10) http://iaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?p_registry_id=110027244480

[19] See Poseidon's filings pursuant to Government Code 86104 at http://cal-access.sos.ca.gov/Lobbying/Employers.

[20] Note: In its 2006 Substantial Issue Findings for the previous version of this project, the Commission found that a substantial issue exists with respect to the project's consistency with the LCP land use policies.

The CDP findings for LCP Policy C8 state that the project is configured to accommodate both the existing power plant and its potential future plans to expand or switch to a different cooling system. The City did not evaluate the project for consistency with LCP Policy C8.2.2. For LCP Policy C8.2.4, the City states that the project is not an energy project, but that it has been configured to accommodate an existing energy facility and is therefore consistent with the policy. The City states that the project is consistent with LCP Policy C8.3.1 because the project will reduce energy used to pump water into Orange County (see also Appeal Issue 5E below). Appellants contend that the City's approval is inconsistent with the above policies for several reasons, including inadequate or inaccurate review to determine consistency with these policies and designation under both City and Coastal Commission policies of the entire power plant site as being available for power plant expansion. For LCP Policy C8.3.1, appellants contend that the City's conclusions about net energy use resulting from the project are based on an erroneous analysis and that the project EIR is internally inconsistent regarding this analysis.

The City's findings and the supporting EIR do not provide an adequate assessment for determining conformance to these policies. LCP Policy C8.2.4 incorporates by reference Coastal Act policies that designate the entire power plant site, including the area the City slated for the desalination facility, as being available for power plant expansion. The LCP's Coastal Element (at page IV-C-75) additionally states that vacant land adjacent to the power plant provides an opportunity for its potential expansion. The City's findings state only that the project was configured to accommodate the existing plant, with inadequate recognition of potential future expansion. Siting the desalination facility adjacent to the power plant may affect the ability of the plant to expand or to make the upcoming required changes to its cooling system; however, the City's review does not adequately describe how much of the area of the site may be needed for expansion, a new system, or both. Further, because the City did not evaluate the project's potential conflict with LCP Policy C8.2.2, it did not adequately address the project's likely non-conformity with this policy's requirement to address the expected new cooling technology needed at the power plant. Reducing the area available on the site will constrain the plant's options for either expansion or new and less environmentally harmful cooling technology, and therefore is not consistent with the first three policies above.[21] Regarding LCP Policy C8.3.1, and as described in Appeal Issue 5E below, because the City conducted an inaccurate analysis of the project's expected energy use, it downplays the project's likely substantial effects on local energy supplies and is not supportive of energy conservation.

Therefore, and based on the record provided by the City, the information provided by the appellants, and for the reasons cited above, the Commission finds that a substantial issue exists with respect to the project's consistency with the City's certified LCP.

5E) Appeal Issue: Adequate Public Services

LCP Policy C1.1.1 states:

> "*With the exception of hazardous industrial development, new development shall be encouraged to be located within, contiguous or in close proximity to, existing developed*

[21] The Commission previously identified areas inland of the existing power plant as suitable for expansion in its 1978 consideration of a proposal by Southern California Edison to construct additional combined-cycle power units at Huntington Beach.

> *areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services, and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.*"

LCP Policy C1.2.3 states:

> "*Prior to the issuance of development entitlement, the City shall make the finding that adequate services (i.e., water, sewer, roads, etc.) can be provided to serve the proposed development, consistent with the policies contained in the Coastal Element, at the time of occupancy.*"

These LCP provisions require in general that new development be sited in areas able to accommodate it or in areas with adequate public services, and that the development not result in significant adverse effects. The City's CDP findings state that the project is consistent with LCP Policy C1.1.1 because it is to be located in close proximity to the Huntington Beach Generating Station and that it is consistent with LCP Policy C1.2.3 because there are adequate services available. Appellants contend that the City's findings are inadequate to support the project's consistency with the requirements of these LCP policies to avoid potential adverse effects and to ensure the availability of needed public services.

Regarding LCP Policy C1.1.1, which requires that projects avoid significant adverse impacts, the City's approval does not adequately acknowledge or evaluate the expected adverse impacts resulting from the project extending the life of the intake and discharge used by the power plant cooling system. The project would extend and expand the system's impacts to marine life and water quality due to its planned continual use (24 hours per day, 365 days per year) for several additional decades, which represents a significant increase over the power plant system's current relatively intermittent operations and its currently scheduled retirement on or before 2020 (see also the discussion of the project's marine life and water quality impacts in Appeal Issue 5A above).

Regarding the policies' requirements related to adequate public services, the City's findings essentially state that the project will be consistent with these policies because adequate services can be provided. Those findings refer to Section 4.6 – Public Services and Utilities – of the project EIR; however, neither the assertion in the City's findings nor the EIR analyses show that the City's approval is consistent with these policies, particularly as they relate to the facility's expected electricity use. The EIR states that the facility's continual use of from 30 to 35 megawatts of electricity (or about 306,680 megawatt hours per year, which is equal to that used by about a quarter-million households) will result in a net reduction of electricity because the project will eliminate the electricity used by the State Water Project (SWP) to import water into Orange County – that is, because the project will provide 56,000 acre-feet of water annually for Orange County, the SWP will reduce its pumping and its electricity demand.

For several reasons, however, the City's analysis and conclusion are incorrect and understate the project's impact on local electricity supplies.[22] First, no element of the project ensures reduced SWP water imports into Southern California or Orange County, so there is no basis for the City's

[22] Note: The City's analysis for these policies is also inconsistent with its findings regarding the project's growth-inducing impacts. See Appeal Issue 5H below.

assumption of reduced electricity use, either locally or at the state level. As the Coastal Commission determined earlier this year regarding Poseidon's similar assertions for its Carlsbad project,[23] the project does not ensure a one-for-one reduction of water imports to Southern California and would therefore not necessarily reduce electricity use.

Further, even if the SWP were to reduce its electrical use due to the project, the project itself would continue to demand 30 to 35 megawatts of electricity. The EIR bases its review on the project obtaining electricity from either the adjacent power plant or from the grid; however, neither the EIR nor the CDP assess how the desalination facility's local demand on electricity from the power plant would affect coastal resources and how or whether such use would conform to the requirement of LCP Policy C.1.2.3 to be consistent with the City's Coastal Element policies. For example, if the power plant produces more electricity than it would otherwise to provide power to the adjacent desalination facility, it would result in more entrainment than it would otherwise, at least until the power plant's current cooling system is retired. However, neither the City's CDP nor EIR identifies measures to avoid or mitigate this impact, and the resulting increased operations of the power plant may not be consistent with the marine biology provisions of the City's Coastal Element.

Appellants additionally contend that the City's approval does not conform to LCP Policy C1.2.3 because the City did not identify a selected pipeline route for the project, and it is therefore not possible to determine whether pipeline-related impacts and needed mitigation for those impacts will conform to that policy. Depending on the yet-to-be selected route, the project could cause additional adverse effects due to a potential river crossing or due to the likelihood of liquefaction along some areas of the route. Either of those elements could require more substantial excavations or construction methods than contemplated by the City, and those methods could result in more significant harm or disruption to public services than was addressed in the City's review. For example, evidence provided to the City during its review suggests that pipeline placement along roadways in areas with high liquefaction potential could require much more extensive excavations (in both width and depth) than the City evaluated, which could lead to major public access disruptions and could render all or some of the routes infeasible. It is not apparent from the record that the City adequately considered this information (see also Appeal Issue 5G below).

Therefore, based on the record provided by the City, the information provided by the appellants, and for the reasons cited above, the Commission finds that a substantial issue exists with respect to the project's consistency with the above policies of the City's certified LCP.[24]

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[23] See the Commission's "Final Adopted Findings for R2-E-06-13 – Request For Revocation on Poseidon's Carlsbad Desalination Facility", February 2010. The Commission found for the Carlsbad project, which uses the same proposed approach as this Huntington Beach proposal for energy and greenhouse gas reduction, that, at best, the region's main water importer – the Metropolitan Water District of Southern California – might occasionally forego marginal transfers or purchases of imported water if it deems Poseidon's supply more suitable. Additionally, many of those transfers or purchases are not necessarily foregone, but are instead stored for later transport to Southern California, which would require the use of electricity that the CDP incorrectly presumes would not be needed.

[24] Note: In its 2006 Substantial Issue Findings for the previous version of this project, the Commission found that substantial issue existed with respect to the project's consistency with LCP policy C1.2.3.

5F) Appeal Issue: Effects on Public Recreation

LCP Policy C3.1 states:

> *"Preserve, protect, and enhance, where feasible, existing public recreation sites in the Coastal Zone."*

The City's findings state that the project is consistent with this policy because it will have a negligible impact on parks and recreational facilities. With regard to the project's effects on fishing due to its intake of seawater and its discharge of high-salinity effluent, the CDP states that fish with high commercial or recreational value are uncommon in the source water and that nearby areas do not support sensitive species. Applicants contend that the project's continuance of the system used by the power plant to draw in and discharge seawater causes adverse effects that run counter to this policy's requirement to protect existing recreational fishing opportunities.

Regarding the intake, and as noted by the appellants, the City's findings are inconsistent with conclusions of numerous state and federal agencies about the adverse effects of open water intakes on marine life. The findings are also inconsistent with the entrainment study done at this power plant showing its effects on commercially- and recreationally-important species, such as halibut, crab, and others. The most recent entrainment study for the power plant showed that the intake drew in and killed organisms originating along the Southern California shoreline from up to several dozen miles away, which is a much larger source water area than considered in the City's findings.

Regarding the discharge, concerns raised during the City's review include the potential that the project's high-salinity effluent will adversely affect marine life. The effluent's salinity concentration is expected to be about 40 parts per thousand, which is about 20 percent higher than ambient seawater salinity and about 10 percent higher than naturally-occurring variability. Discharge modeling shows that the project will create areas of higher than natural salinity covering from about five to several dozen acres of nearshore benthic habitat, and affecting similarly-sized areas of the nearshore water column. The City's findings state that this would not represent substantial ecological effects or water quality degradation because those immediate areas do not include special biological areas or endangered or threatened species and because many of the species present in the nearby waters are also present in higher-salinity waters elsewhere – e.g., in the Gulf of California. However, this conclusion does not address the likelihood that local organisms not acclimated to higher salinities may avoid areas within the effluent plume, resulting in loss of foraging habitat as well as loss of recreational fishing opportunities within that area. The findings also state that any species exposed to elevated salinities would have low exposure times and that the areas represent insubstantial foraging areas; however, the City has not cited *in situ* tests or monitoring results to support such findings.

Therefore, and based on the record provided by the City, the information provided by the appellants, and for the reasons cited above, the Commission finds that a substantial issue exists with respect to the project's consistency with the City's certified LCP.

5G) Appeal Issue: Adequate Protection Against Seismic Events and Liquefaction

LCP Policy C10.1.4 states:

> *"Require appropriate engineering and building practices for all new structures to withstand ground shaking and liquefaction such as those stated in the Uniform Building Code."*

The City's findings state that its approval provides consistency with this policy because it requires the project to meet all appropriate and adequate building standards related to ground shaking and liquefaction and because it will be consistent with applicable provisions of the Uniform Building Code. Appellants contend that the City's findings are inadequate because the project does not yet include an identified pipeline route, and the City can therefore not yet determine what measures are needed to withstand potential liquefaction. Appellants further contend that the City did not adequately address testimony provided at its September 7, 2010 CEQA hearing documenting that the City's approval would not sufficiently avoid liquefaction impacts.

The EIR review is based on pipelines being located largely within existing public streets, easements, or other rights-of-way and states that the alignments will not disturb native vegetation or adversely affect sensitive resources. It identifies anticipated traffic effects as being limited to no more than two traffic lanes during construction, and further states that a project-specific geotechnical evaluation will be needed before pipelines are placed. At the same time, the City has identified the project site and the entire area surrounding the power plant site, including portions of likely pipeline routes, as having high liquefaction potential.[25] Testimony provided to the City suggests that soil and subsurface characteristics within potential pipeline routes may require trenching that is much more extensive (in both width and depth) that evaluated in the EIR and may require a type of fill that is incompatible with roadways. Both the additional trenching and alternative fill could result in significant disruptions to traffic and coastal access, as well as substantially increase the project's construction-related and air quality impacts. It does not appear that the City evaluated these concerns sufficiently to ensure conformity to this LCP policy, and, in fact, put off until some future date the geotechnical analysis needed to identify and mitigate potential impacts. Therefore, based on the record provided by the City, the information provided by the appellants, and for the reasons cited above, the Commission finds that a substantial issue exists with respect to the project's consistency with the City's certified LCP.

5H) Appeal Issue: Mitigation to the Maximum Extent Feasible

LCP Policy C1.1 states:

> *"Ensure that adverse impacts associated with coastal zone development are mitigated or minimized to the greatest extent feasible."*

[25] See the "Liquefaction Potential" Map at page IV-C-93 of the City's General Plan Coastal Element.

The City's findings for this LCP Policy state that all the project's potential adverse impacts have either been mitigated or have been minimized to the greatest extent feasible.[26] As described in the appeal issues above, appellants contend that the City failed to address or adequately mitigate many of the project's potential or likely impacts, resulting in non-conformity with the above-referenced policies as well as with LCP Policy C1.1.

In addition, appellants contend that the City's findings are contradictory with regards to the project's anticipated growth-inducement, and that these contradictory findings prevent conformity to this policy. The City evaluates the project both as not being growth-inducing – for example, in its analyses of the project's electrical use and greenhouse gas emissions – and as being growth-inducing – in the EIR's discussion of growth-inducement and the associated Statement of Overriding Considerations. The City's analyses inconsistently determined both that the project would provide "replacement water" – that is, it would only replace an existing source of water – as well as "new water" – that is, it would result in new water being brought into the area, resulting in potential additional growth. As a result of this inconsistency, it is not clear that the City's review evaluated all potential mitigation measures that may be needed to address the project's impacts. Therefore, based on the record provided by the City, the information provided by the appellants, and for the reasons cited above, the Commission finds that a substantial issue exists with respect to the project's consistency with the City's certified LCP.

5I) Appeal Issue: Coastal Dependency

LCP Policy C1.1.2 states:

> *"Coastal dependent developments shall have priority over other developments on or near the shoreline. Coastal-related developments should be accommodated within reasonable proximity of the coastal-dependent uses they support."*

The City's findings state that the project is a coastal-dependent development because it needs to be sited on or adjacent to the ocean in order to function at all. The City states the project is similar to other coastal-dependent developments, such as electrical generating facilities, refineries, and offshore oil and gas production. Appellants contend that the City is incorrect in categorizing the project as coastal-dependent since it does not need to be "on or adjacent to the sea in order to function at all."[27]

While the current proposed project would rely in part on existing coastal-dependent infrastructure – i.e., the intake and discharge of the power plant – the desalination facility itself would be located about a quarter-mile from the ocean, not "on or adjacent" to the ocean. Further, as evidenced by many desalination facilities that are similarly set back from the shoreline and by many inland desalters that draw brackish water from inland aquifers, desalination facilities do not necessarily require a location "on or adjacent" to the ocean. The City's findings do not make it clear that this particular project is coastal dependent. Therefore,

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[26] The findings also note, however, that the City adopted a Statement of Overriding Considerations to address adverse impacts related to growth-inducement and construction that have not been mitigated to a level of insignificance.

[27] The City's Coastal Element defines "coastal dependent" as "any development or use which requires a site on, or adjacent to, the sea to be able to function at all."

based on the record provided by the City, the information provided by the appellants, and for the reasons cited above, the Commission finds that a substantial issue exists with respect to the project's consistency with the City's certified LCP.

6. APPEAL ISSUES NOT RAISING SUBSTANTIAL ISSUE

6A) Appeal Issue: Water Conservation

LCP Policy C6.1.12 states:

> *"Periodically review the City's policies on water conservation, including the Water Conservation Ordinance, to ensure the use of state of the art conservation measures for new development and redevelopment, and retrofitting of existing development, where feasible and appropriate, to implement these measures."*

The City states that the project is consistent with this policy in that it must comply with applicable provisions of the City's Water Conservation Ordinance. Appellants contend the City's approval is inconclusive regarding consistency with this policy.

The policy primarily provides direction to the City to ensure it updates elements of City requirements related to water conservation. The City's Water Conservation Ordinance is one of those elements, and includes conservation provisions applicable to new and existing development, such as limits on water use, timing of landscape watering, limits on new development during severe declared water shortages, and other similar measures. Because the policy provides guidance to the City rather than to particular new projects, the City's approval does not result in an inconsistency with this policy. Further, as noted in the City's findings, the approved project will be subject to applicable provisions of the Water Conservation Ordinance. Therefore, based on the record provided by the City, the information provided by the appellants, and for the reasons cited above, the Commission finds that ***no*** substantial issue exists with respect to the project's consistency with LCP Policy C6.1.12.

A-5-HNB-10-225 / 9-21-0488
(Poseidon Water, Huntington Beach)
EXHIBIT 8

2/11/2021

SOCIETY OF NATIVE NATIONS

HONORING PAST AND FUTURE GENERATIONS

To: California Coastal Commission

Re: Tribal Consultation with the Poseidon Project

My name is Frankie Orona. I am Tongva / Chumash of California, born and raised in Los Angeles; I am the Executive Director of Society of Native Nations and the environmental liaison for Antony Morales, the Tribal Chief of the Gabrieleno Tongva Tribe of the San Gabriel Band of Mission Indians. Chief Antony Morales has not been consulted in the Poseidon Project, nor was he asked by the California Coastal Commission to be part of the consultation until 2/10/22, when we had the first Tribal consultation with the CCC EJ representatives. As the original people of the land where this project is proposed, we have an inherent and sovereign right to protect the land, air, water, and environment that our people co-exist with to ensure that our next generation is protected with having a healthy, sustainable future.

I am aware of and have expressed our concern to the California Coastal Commission about the Poseidon Project and the lack of Tribal Consultation. As described in the nearly 3000-page application submitted to the California Coastal Commission, they had failed to engage with the many Tribes that should have been consulted in a meaningful way before any application was submitted. The complete lack of Tribal consultation required under California state and federal laws should result in a denial of the applicant's Coastal Development Permits by the California Coastal Commission.

We would also like you to understand that tribal consultation does not mean consent. The process between the government and state agencies with Tribes has failed for generations, and a new policy and approach to tribal consultation needs to be developed. If you would like to arrange a meeting for clarification and context regarding Tribal consultation with Antony Morales, the Tribal Chief of the Gabrieleno Tongva Tribe of the San Gabriel Band of Mission Indians, please email or call to have proper consultation set up.

We thank you for your time

Prayers for good health and safety during these times

Sincerely

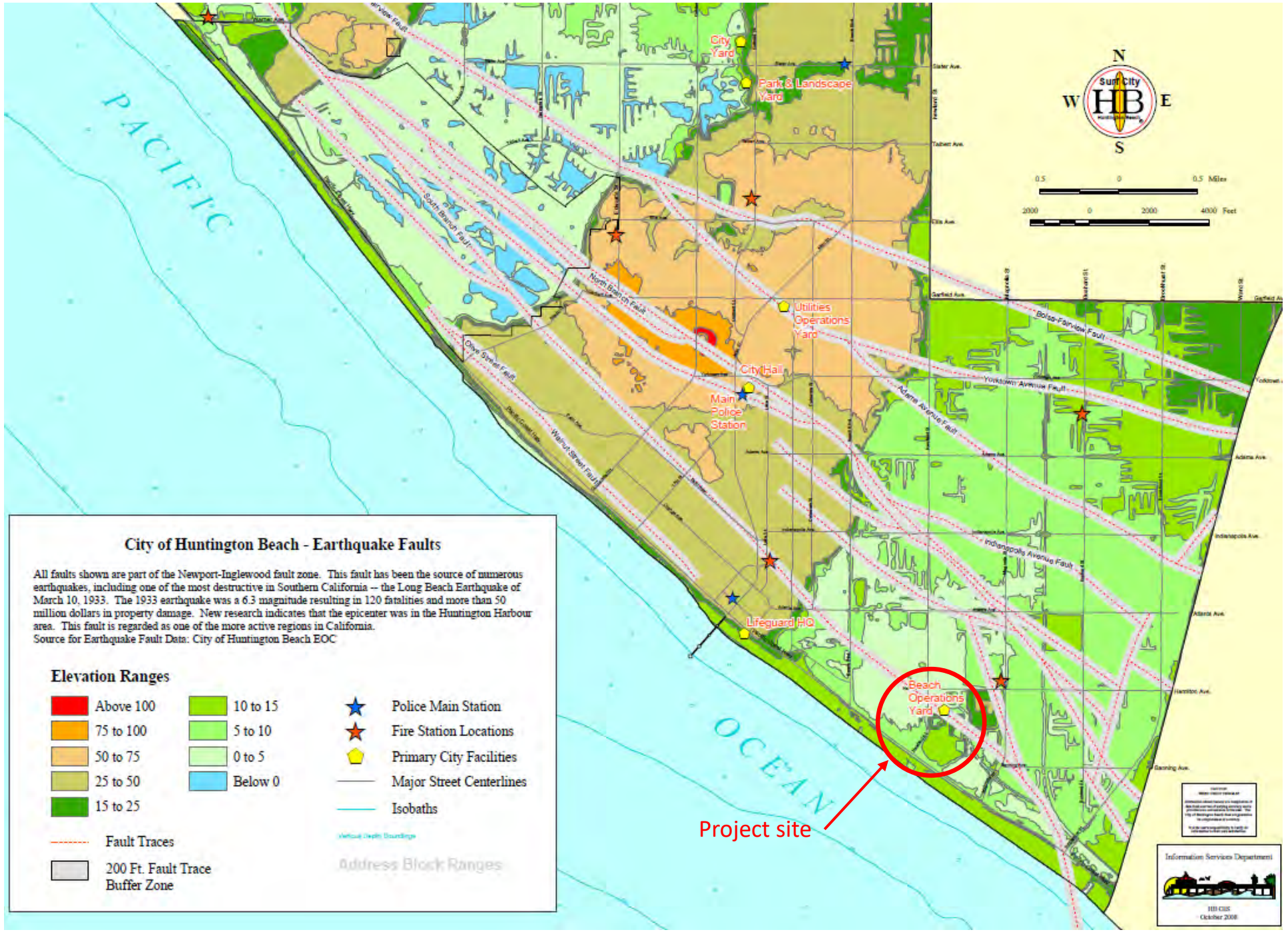
Frankie Orona - Executive Director

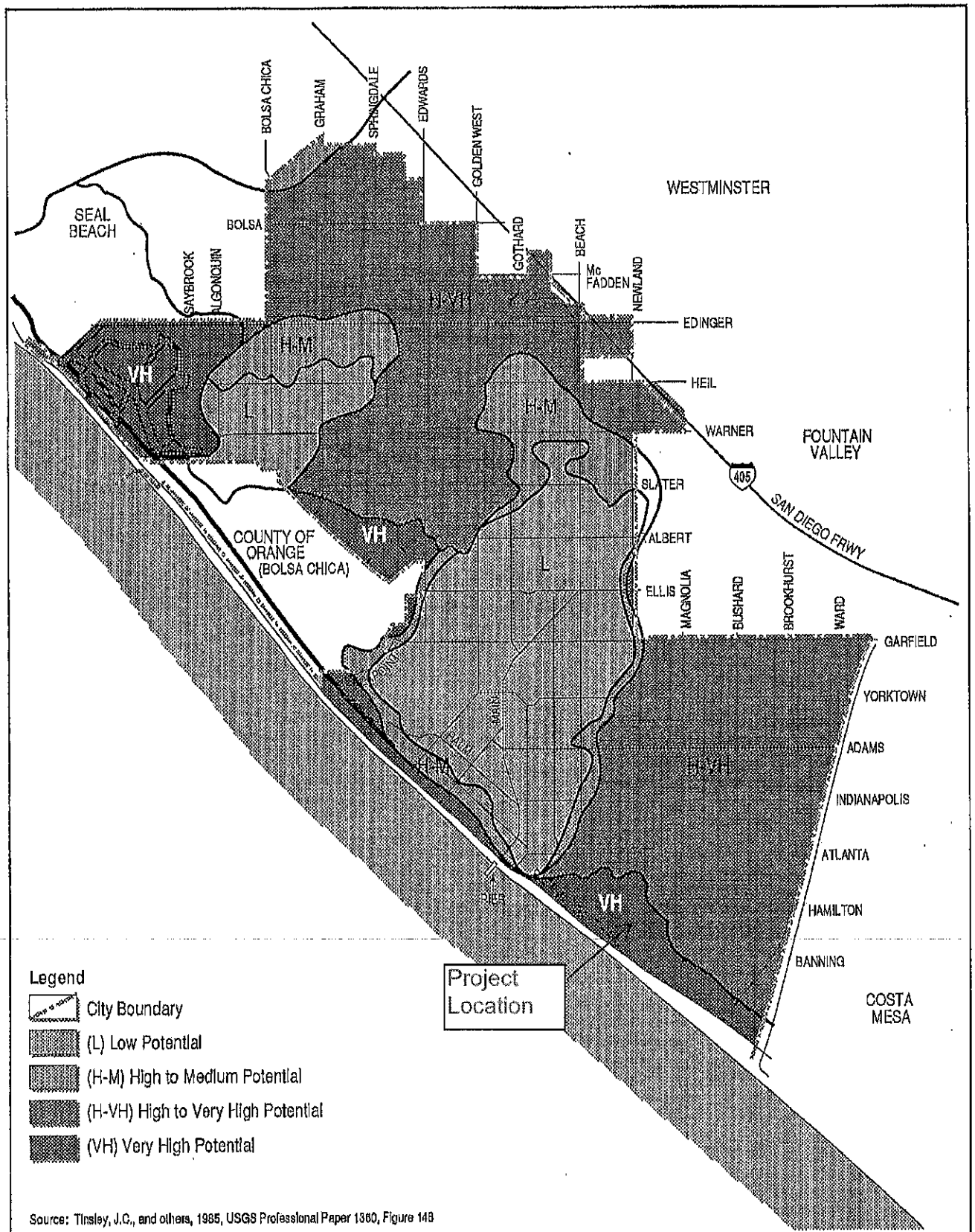
Society of Native Nations - Non-Profit 501(C)(3) Organization

Phone: 210-468-8201 - Fax: 210-568-6345

Email: frankie@societyofnativenations.org - Website: www.societyofnativenations.org

A-5-HNB-10-225 / 9-21-0488 (Poseidon Water, Huntington Beach) EXHIBIT 9





Source: Tinsley, J.C., and others, 1985, USGS Professional Paper 1360, Figure 148

LIQUEFACTION POTENTIAL

CITY OF HUNTINGTON BEACH GENERAL PLAN

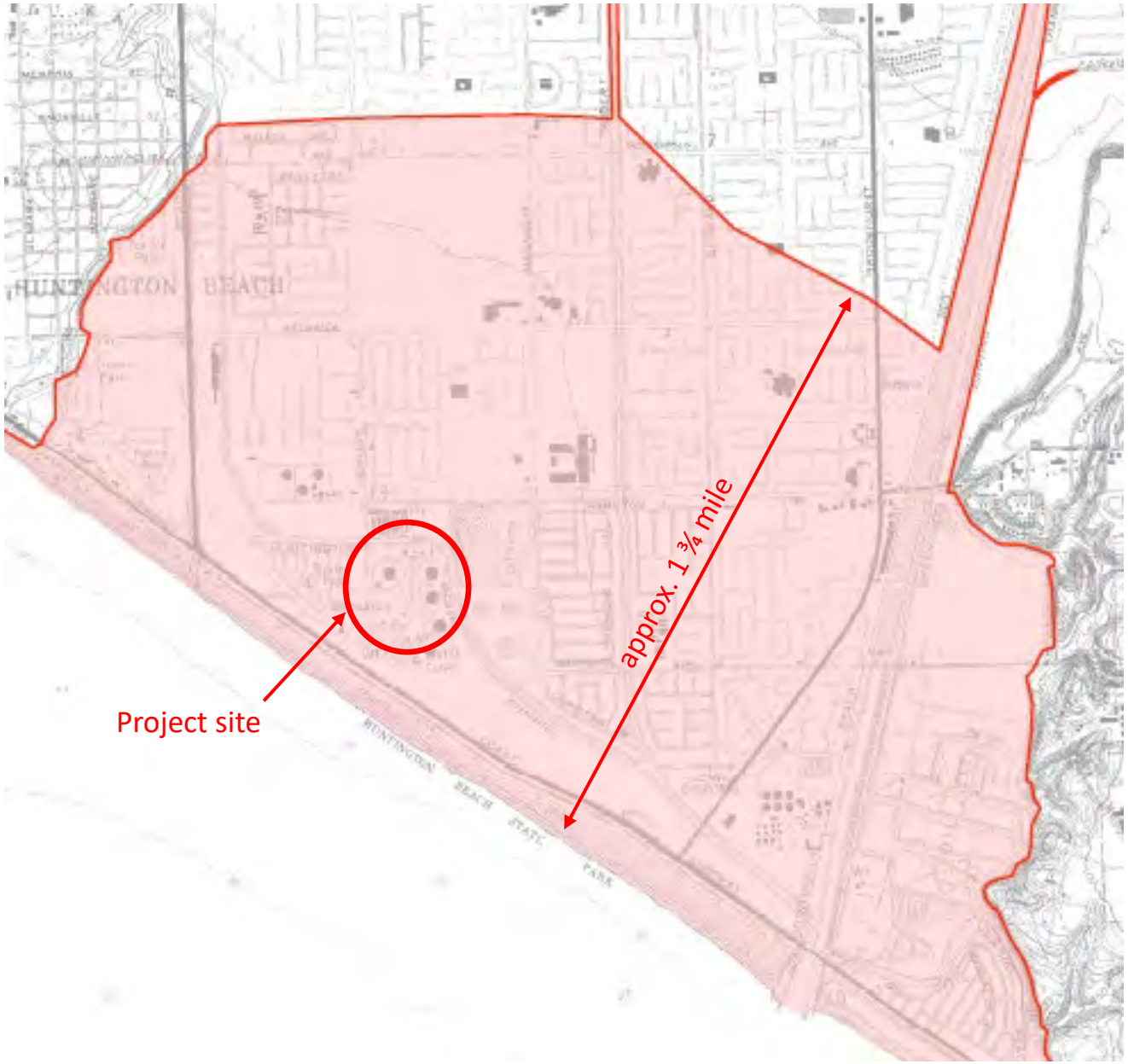
MILES 0 0.5 1.0 NORTH

FIGURE EH-7

A-5-HNB-10-225 / 9-21-0488
(Poseidon Water, Huntington Beach)
EXHIBIT 11

Huntington Beach LCP Tsunami Inundation

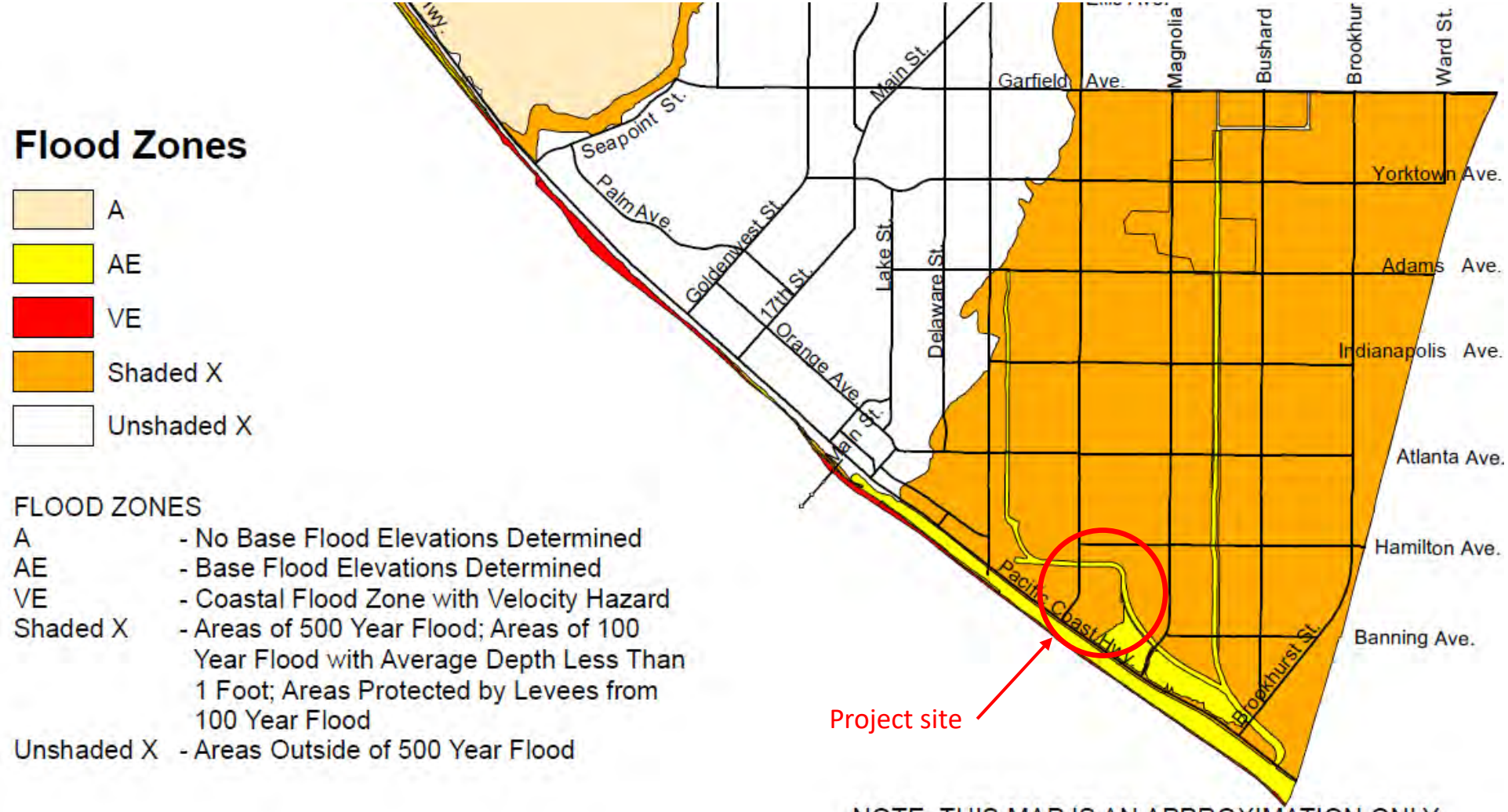
– based on scenario with approx. 11-foot runup.



CA Geological Survey, 2009

City of Huntington Beach Flood Zones

A-5-HNB-10-225 / 9-21-0488 (Poseidon Water, Huntington Beach) EXHIBIT 12



FLOOD ZONES

A	- No Base Flood Elevations Determined
AE	- Base Flood Elevations Determined
VE	- Coastal Flood Zone with Velocity Hazard
Shaded X	- Areas of 500 Year Flood; Areas of 100 Year Flood with Average Depth Less Than 1 Foot; Areas Protected by Levees from 100 Year Flood
Unshaded X	- Areas Outside of 500 Year Flood

NOTE: THIS MAP IS AN APPROXIMATION ONLY. PLEASE CONSULT THE ACTUAL FLOOD MAP AT CITY HALL OR AT WWW.FEMA.GOV TO DETERMINE FLOOD ZONE.

Community Number: 065034
Source: Federal Emergency Management Agency 12-03-09, 12-15-09, 5-18-10, 9-27-10

Newland Marsh Restoration

Newland Marsh – Land Acres

Habitat Type	Existing[1]	Planned[2]	Change	Creation	Enhancement
Brackish	6.98	0.4	-6.58	0	0.4
Subtidal	2.37	6.09	3.72	3.72	2.37
Mudflat	0	2.64	2.64	2.64	0
Low Marsh	0	9.17	9.17	9.17	0
Mid Marsh	3.2	14.06	10.86	10.86	3.2
High Marsh	17.83	3.87	-13.96	0	3.87
Transitional Wetlands	0	8.03	8.03	8.03	0
Transitional Uplands	0	0.04	0.04	0.04	0
Upland/Developed	14.44	0.52	-13.92	0	0.52
Total Acreage	**44.82**	**44.82**	**-**	**26.39**	**9.84**

Total Wetland Acreage (below MHHW elevation)

Available Mitigation Credits

Marine Life Mitigation Credits from Creation[3]	26.39
Marine Life Mitigation Credits from Enhancement[4]	4.92
Brackish and High Marsh Habitat Conversion[5]	-11.41
Total Marine Life Mitigation Credits (For Onshore or Offshore Impacts)	**19.90**
Total Wetland Mitigation Credits (For Onshore Impacts)[6]	**8.03**

Notes

1. Existing habitat acreages are based off the Newland Marsh Restoration Project Biological Resources Report (Tidal Influence 2022), adjusted based on further conversations with WRA and Tidal Influence.
2. Planned habitat acreages are based off the 30% Design plans (Moffat & Nichol 2022).
3. Wetland habitat creation is awarded 1 marine life mitigation credit for every 1 acre created.
4. Wetland habitat enhancement is awarded 0.5 marine life mitigation credits for every 1 acre enhanced. This ratio for wetland habitat enhancement is supported by Gleason's Beach Mitigation Framework Memo (CDP 2-20-0282).
5. The marine life mitigation credits are adjusted for the existing productivity associated with the High Marsh and Brackish areas that will be converted to other habitat types. The adjustment assumes that, on average, the created habitat is 80% more biologically productive than the existing habitat. The existing tide gates are occasionally blocked and therefore there is poor tidal influence in these areas, which is why the increased tidal connectivity proposed by the restoration work will result in a significant increase to biological productivity (see Newland Marsh Wetlands Conceptual Restoration Plan Final Report, Moffat & Nichol 2019). Calculation: -11.41 acres = (-6.58 – 13.96) / (1 + 80%)
6. Transitional wetland habitat that is created above the tidal inundation level is proposed to compensate for potential indirect onshore wetland impacts but is not proposed for impacts to marine life.

South Los Cerritos Restoration – Phase I

South Los Cerritos Phase I (Muted Tidal Connectivity) – Land Acres

Habitat Type	Existing[1]	Planned[2]	Change	Creation	Enhancement
Subtidal	0	2.02	2.02	2.02	0
Riparian	0	0	0	0	0
Low marsh	6.18	4.72	-1.46	0	4.72
Mid marsh	0.93	16.56	15.63	15.63	0.93
High marsh	12.72	7.68	-5.04	0	7.68
Transitional wetlands	0	3.47	3.47	3.47	0
Unvegetated Salt Flat	5.03	0	-5.03	0	0
Upland/Developed	17.46	7.87	-9.59	0	7.87
Total Acreage	**42.32**	**42.32**	**-**	**17.65**	**13.33**

Total Wetland Acreage (below MHHW elevation)

Available Mitigation Credits

Marine Life Mitigation Credits from Creation[3]	17.65
Marine Life Mitigation Credits from Enhancement[4]	6.67
High and Low Marsh Habitat Conversion[5]	-4.33
Total Marine Life Mitigation Credits (For Onshore or Offshore Impacts)	**19.98**
Total Wetland Mitigation Credits (For Onshore Impacts)[6]	**3.47**

Notes

1. Existing habitat acreages are based off the unpublished vegetation community survey mapping data (provided by Tidal Influence 2022, with permission from the Los Cerritos Wetlands Authority).
2. Planned habitat acreages are based off The Los Cerritos Wetlands Habitat Restoration Plan (Coastal Restoration Consultants 2021).
3. Wetland habitat creation is awarded 1 marine life mitigation credit for every 1 acre created.
4. Wetland habitat enhancement is awarded 0.5 marine life mitigation credits for every 1 acre enhanced. This ratio for wetland habitat enhancement is supported by Gleason's Beach Mitigation Framework Memo (CDP 2-20-0282).
5. The marine life mitigation credits are adjusted for the existing productivity associated with the High Marsh and Low Marsh areas that will be converted to other habitat types. The adjustment assumes that, on average, the created habitat is 50% more biologically productive than the existing habitat. Calculation: -4.33 acres = (-1.46 – 5.04) / (1 + 50%)
6. Transitional wetland habitat that is created above the tidal inundation level is proposed to compensate for potential indirect onshore wetland impacts but is not proposed for impacts to marine life.

South Los Cerritos Restoration – Phase II

South Los Cerritos Phase II (Full Tidal Connectivity) – Land Acres

Habitat Type	Existing[1]	Planned[2]	Change	Creation	Enhancement
Subtidal	0	1.31	1.31	1.31	0
Riparian	0.49	3.27	2.78	2.78	0.49
Low marsh	0.66	0	-0.66	0	0
Mid marsh	9.36	15.45	6.09	6.09	9.36
High marsh	1.1	7.55	6.45	6.45	1.1
Transitional wetlands	0	2.44	2.44	2.44	0
Unvegetated Salt Flat	5.89	0.62	-5.27	0	0.62
Upland/Developed	39.31	26.17	-13.14	0	26.17
Total Acreage	**56.81**	**56.81**	**-**	**16.63**	**10.95**

Total Wetland Acreage (below MHHW elevation)

Available Mitigation Credits

Marine Life Mitigation Credits from Creation[3]	16.63
Marine Life Mitigation Credits from Functional Lift to Phase I Acreage[4]	23.24
Marine Life Mitigation Credits from Enhancement[5]	5.48
Low Marsh Habitat Conversion[6]	-0.66
Total Marine Life Mitigation Credits (For Onshore or Offshore Impacts)	**44.68**
Total Wetland Mitigation Credits (For Onshore Impacts)[7]	**2.44**

Notes

1. Existing habitat acreages are based off the unpublished vegetation community survey mapping data (provided by Tidal Influence 2022, with permission from the Los Cerritos Wetlands Authority).
2. Planned habitat acreages are based off The Los Cerritos Wetlands Habitat Restoration Plan (Coastal Restoration Consultants 2021).
3. Wetland habitat creation is awarded 1 marine life mitigation credit for every 1 acre created.
4. The functional lift is based on the conversion of zero and muted tidal regimes from Phase I into to fully tidal during Phase II. For every 1 acre of wetland habitat from Phase I that is functionally uplifted by full tidal connectivity, 0.75 acres of marine life mitigation credits are awarded (see "Re: Functional Lift Analysis for Determining Mitigation Credit at the South San Diego Bay Salt Ponds" 2014, associated with Otay River Estuary Restoration Project – CDP-0509-19). Calculation: 23.24 acres = (17.65 + 13.33) * 75%
5. Wetland habitat enhancement is awarded 0.5 marine life mitigation credits for every 1 acre enhanced. This ratio for wetland habitat enhancement is supported by Gleason's Beach Mitigation Framework Memo (CDP 2-20-0282).
6. The marine life mitigation credits are adjusted for the existing productivity associated with the Low Marsh areas that will be converted to other habitat types. The adjustment assumes that, on average, the created habitat is just as biologically productive as the existing habitat.
7. Transitional wetland habitat that is created above the tidal inundation level is proposed to compensate for potential indirect onshore wetland impacts but is not proposed for impacts to marine life.

Revised Mitigation Opportunities Table

Additional Coastal Commission Mitigation Opportunities			
Name	Mitigation Type	Potentially Available Acre Credits	
		Marine Life Mitigation Credits	Wetland Mitigation Credits
Newland Marsh	MLMP (full)	~~13~~ 19.90	8.03
Southern Los Cerritos Wetlands Restoration			
Phase 1 – Short-Term	MLMP (fee-based)	~~15~~ 19.98	3.47
Phase 2 – Mid-Term	MLMP (fee-based)	~~45~~ 44.68	2.44
Upper Los Cerritos Mitigation Bank			
Phase I	Credit Purchase	~~21~~ 21.31	-
Phase II	Credit Purchase	58	-
Pond 20 Mitigation Bank	Credit Purchase	~~75~~ 64.84	11.64
Total Commercially, Potentially Available Mitigation Credits		**~~227~~ 228.71**	**25.58**

Note: Revisions to Upper Los Cerritos Mitigation Bank and Pond 20 Mitigation Bank credit numbers are based on the final submitted marine life mitigation plans.

Exhibit: Poseidon Huntington Beach - marine life mitigation shortfall scenario

Assumptions:

* Credits based on Regional Board's 100.5 credit determination and CCC staff review of Poseidon's proposed credits.
* No credits for Palos Verdes (not viable), or Pond 20 (distance).
* Poseidon starts Bolsa Chica inlet dredging four years before starting facility operations.
* Poseidon gets all Phase I mitigation permits two years after starting operations.
* Poseidon completes construction of Phase I mitigation sites two years later (Year 4 of operations).
* All Phase I mitigation is fully successful five years later (Year 9 of operations).
* All Phase II mitigation becomes viable at Year 15 of operations (including limited S. Los Cerritos Phase I credits).
* At Year 16, Bolsa Chica mitigation starts to decline at 10% per year due to climate change/SLR effects.
* All other mitigation is fully successful throughout remainder of facility's operating life.

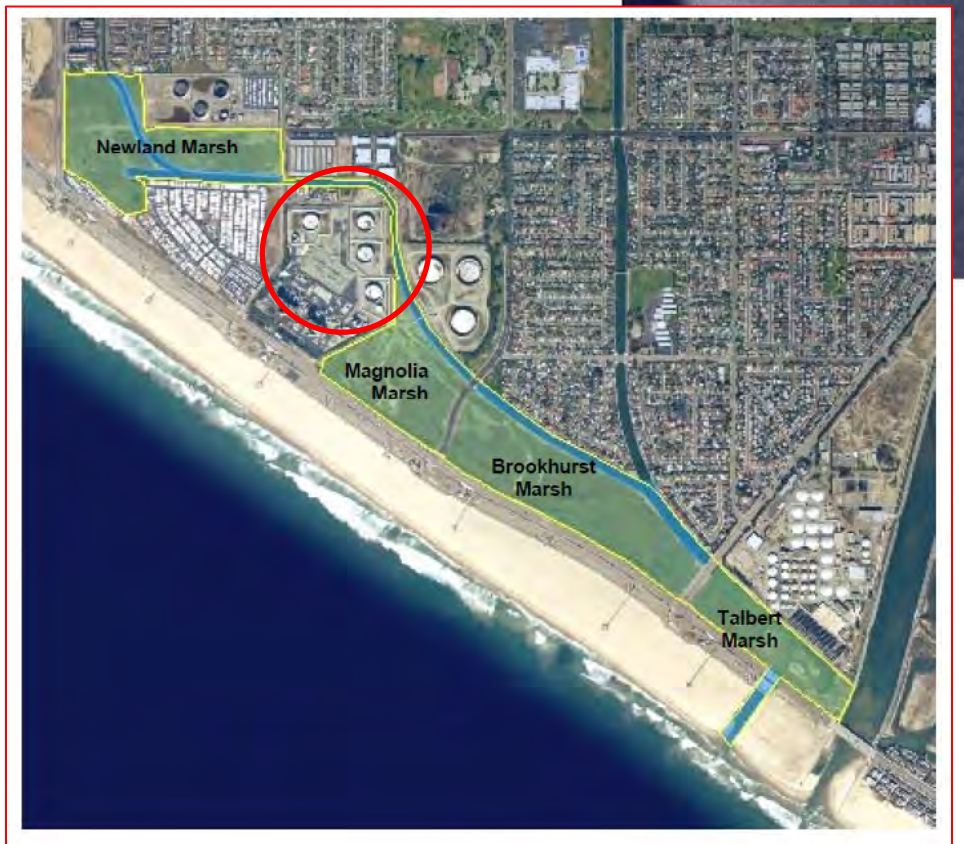
Result: Starting at Year1 of operations, Poseidon would have an ongoing mitigation deficit that would total -617 credits by Year 12. The deficit would then decrease to about -263 credits at Year 29, but then would start to increase again, reaching a deficit of about -429 by Year 50.

Year:	Event:	Credits needed each year:		Phase I projects (credits starting Year 9)				Phase II projects		
			Bolsa Chica dredging credits: *	Credits for all other Bolsa Chica mitigation projects:	Newland Marsh credits:	S. Los Cerritos Phase I credits:	Upper Los Cerritos Phase I credits:	Phase II Mitigation Projects (SLC and ULC):	Sum of each year's impacts (-) and credits (+):	Cumulative impacts versus cumulative credits:
-4	Poseidon completes financing, starts facility construction, and starts Bolsa Chica inlet dredging	0	15	0	0	0	0	0	15	15
-3			15						15	30
-2	Poseidon starts CEQA review and permitting process for mitigation.		15						15	45
-1	final year of facility construction	0	15	0	0	0	0	0	15	60
1	**Year 1 of desal operations**	-100.5	15	0	0	0	2.85	0	-82.65	-22.65
2	Obtain all mitigation permits, start mitigation construction	-100.5	15	0	0	0	2.85	0	-82.65	-105.3
3		-100.5	15	0	0	0	7.6	0	-77.9	-183.2
4	Complete all near-term mitigation construction	-100.5	15	0	0	0	7.6	0	-77.9	-261.1
5		-100.5	15	0	0	0	10.45	0	-75.05	-336.15
6		-100.5	15	0	0	0	13.3	0	-72.2	-408.35
7		-100.5	15	0	0	0	16.15	0	-69.35	-477.7
8		-100.5	15	0	0	0	19	0	-66.5	-544.2
9	All near-term mitigation becomes fully successful	-100.5	15	43.8	12	0	19	0	-10.7	-554.9
10		-100.5	15	43.8	12	0	19	0	-10.7	-565.6
11		-100.5	15	43.8	12	0	19	0	-10.7	-576.3
12		-100.5	15	43.8	12	0	19	0	-10.7	-587
13		-100.5	15	43.8	12	0	19	0	-10.7	-597.7
14		-100.5	15	43.8	12	0	19	0	-10.7	-608.4
15	Phase II projects become viable	-100.5	15	43.8	12	5	19	51.5	45.8	-562.6
16	SLR starts to reduce Bolsa Chica credits	-100.5	13.5	39.42	12	5	19	51.5	39.92	-522.68
17		-100.5	12.15	35.48	12	5	19	51.5	34.63	-488.05
18		-100.5	10.94	31.93	12	5	19	51.5	29.87	-458.19
19		-100.5	9.84	28.74	12	5	19	51.5	25.58	-432.61
20		-100.5	8.86	25.86	12	5	19	51.5	21.72	-410.89
21		-100.5	7.97	23.28	12	5	19	51.5	18.25	-392.64
22		-100.5	7.17	20.95	12	5	19	51.5	15.12	-377.51
23		-100.5	6.46	18.85	12	5	19	51.5	12.31	-365.20
24		-100.5	5.81	16.97	12	5	19	51.5	9.78	-355.42
25		-100.5	5.23	15.27	12	5	19	51.5	7.50	-347.92
26		-100.5	4.71	13.74	12	5	19	51.5	5.45	-342.47
27		-100.5	4.24	12.37	12	5	19	51.5	3.61	-338.86
28		-100.5	3.81	11.13	12	5	19	51.5	1.95	-336.92
29		-100.5	3.43	10.02	12	5	19	51.5	0.45	-336.46
30		-100.5	3.09	9.02	12	5	19	51.5	-0.89	-337.36
31		-100.5	2.78	8.12	12	5	19	51.5	-2.10	-339.46
32		-100.5	2.50	7.30	12	5	19	51.5	-3.19	-342.66
33		-100.5	2.25	6.57	12	5	19	51.5	-4.17	-346.83
34		-100.5	2.03	5.92	12	5	19	51.5	-5.06	-351.89
35		-100.5	1.82	5.33	12	5	19	51.5	-5.85	-357.74

			Bolsa Chica dredging credits: *	Credits for all other Bolsa Chica mitigation projects:	Newland Marsh credits:	S. Los Cerritos Phase I credits:	Upper Los Cerritos Phase I credits:	Phase II Mitigation Projects (SLC and ULC):	Sum of each year's impacts (-) and credits (+):	Cumulative impacts versus cumulative credits:
36		-100.5	1.64	4.79	12	5	19	51.5	-6.57	-364.30
37		-100.5	1.48	4.31	12	5	19	51.5	-7.21	-371.51
38		-100.5	1.33	3.88	12	5	19	51.5	-7.79	-379.30
39		-100.5	1.20	3.49	12	5	19	51.5	-8.31	-387.61
40		-100.5	1.08	3.14	12	5	19	51.5	-8.78	-396.39
41		-100.5	0.97	2.83	12	5	19	51.5	-9.20	-405.59
42		-100.5	0.87	2.55	12	5	19	51.5	-9.58	-415.17
43		-100.5	0.79	2.29	12	5	19	51.5	-9.92	-425.10
44		-100.5	0.71	2.06	12	5	19	51.5	-10.23	-435.33
45		-100.5	0.64	1.86	12	5	19	51.5	-10.51	-445.83
46		-100.5	0.57	1.67	12	5	19	51.5	-10.76	-456.59
47		-100.5	0.52	1.50	12	5	19	51.5	-10.98	-467.57
48		-100.5	0.46	1.35	12	5	19	51.5	-11.18	-478.75
49		-100.5	0.42	1.22	12	5	19	51.5	-11.36	-490.12
50		-100.5	0.38	1.10	12	5	19	51.5	-11.53	-501.65

A-5-HNB-10-225 / 9-21-0488
(Poseidon Water, Huntington Beach)
EXHIBIT 15

Historical wetlands



From Southern California Wetlands Recovery Project, *Wetlands on the Edge*, 2018.

Current setting

2013 Post Mortem Wetland Delineation from Staff Report

Direct Wetland Impacts

The City's LCP policies on wetland protection require protection of biological productivity and other wetland functions and values. They also require that development adjacent to environmentally sensitive areas be sited and designed to prevent impacts which would significantly degrade those areas. The LCP also requires buffer zones be established around wetlands to protect them from proposed development. The City determined in its SEIR that there were no wetlands within the project footprint. However, from the information provided by the City and Poseidon, Commission staff has determined that there were approximately 3.5 acres of wetlands within the project site and there are an additional approximately 0.5 acres on the east side of the project site, as defined in the Coastal Act and the Commission's regulations.

The project site consisted largely of tidally-influenced wetlands before the power plant was constructed in 1958. It is within an area of former tidal marsh, dune habitat, and floodplain of the Santa Ana River that extended for several miles along this part of the Huntington Beach shoreline. Although most of this area has been developed or disturbed, wetlands have re-emerged and wetland characteristics have reappeared in many locations, due in part to the area's relatively high groundwater table, the continued presence of hydric soils beneath much of the area, anthropogenically influenced topography and hydrology in some areas, and the presence of nearby wetland vegetation that provides an ongoing seed source.

This re-emergence is apparently what happened at the proposed project site. Although the site had been filled several decades ago as part of power plant development, the existing oil storage tanks at the site have been out of service since the mid-1990s and their containment areas had not been maintained for several years. As has happened at many locations along the coast, the site again supported wetlands that met the Commission's jurisdictional parameters and were subject to applicable LCP and Coastal Act provisions, including avoidance or mitigation. As shown in the initial Commission staff photos of the site from 2009, the site included some areas of mature vegetation, indicating it had been present at the site for several years. There is also an area of wetlands on the eastern part of the site adjacent to the flood control channel and connected to the Magnolia Marsh, which is described in the Findings below regarding the project's indirect wetland and ESHA impacts.

Neither of the proposed project's first two CEQA reviews – in 2003 and 2005 –identified wetlands within the project site. Later, however, during a January 26, 2009 site visit, the Commission's geologist, Dr. Mark Johnsson, took a number of photographs of areas within the proposed project footprint. Several of those photographs showed areas of what appeared to include wetland vegetation as well as ponded or standing water. Weather records showed only minimal rainfall in Huntington Beach during that month (less than 0.20"), suggesting that the photographed areas were likely wetlands, not just water ponding from a recent rainstorm.

Then, in June 2009, Dr. Jonna Engel, a Commission staff biologist, visited the site along with representatives from Poseidon and AES. The visit focused on areas within the proposed project footprint that were occupied in part by the three large tanks formerly used to store fuel oil and within partially bermed areas around those tanks. The tanks had been retired and the surrounding areas only partially maintained since the mid-1990s. Dr. Engel identified several

wetland indicators in the vicinity of each of the tank areas, including obligate plant species[43] and secondary indicators of wetland hydrology, including soil cracks, salt crust, and water marks. Dr. Engel then requested that Poseidon conduct a wetland delineation to identify the type and extent of any wetland areas at the site.

In May 2010, the City issued its Draft SEIR for the proposed project, which did not identify wetlands at the proposed project site. The draft document included a December 2009 technical memorandum from Poseidon's consultant that concluded there were no jurisdictional wetlands on site. In a June 2010 comment letter on that draft document, Commission staff stated that the document's description of site conditions was not consistent with conditions identified during the previous year's site visit, that the document's conclusions regarding the non-presence of wetlands were based on a delineation approach the Commission had specifically rejected the previous year for a nearby proposed project, and that the document therefore likely did not adequately or accurately portray the status of wetlands at the site. Staff recommended the City address these shortcomings in the Final SEIR.

In the Final SEIR, however, the City again stated that the site did not include wetlands, as the site did not provide wetland hydrology and the species of vegetation recognized as indicators of wetlands under the Coastal Act were not growing as hydrophytes. The City included in that Final SEIR a Jurisdictional Determination memo from Poseidon and the Wetland Data Sheets Poseidon had provided that described conditions at 18 locations within the three tank areas in the project footprint.[44] Those Data Sheets showed that all 18 sampled sites met the primary indicator the Commission uses to determine the presence of hydrophytic vegetation, while 14 of the 18 sites additionally met a secondary indicator for hydrophytic vegetation (see additional details below in the Analysis section). For all the sites, however, Poseidon stated that the vegetation was not growing as hydrophytes due to the lack of hydrology. For some sampling locations, Poseidon stated that a site met the wetland vegetation criterion due solely to the presence of facultative species, which are equally likely to be in wetland or non-wetland areas. It also noted that wetland hydrology may be supported within one tank area because AES had occasionally pumped stormwater into that area, though it was no longer conducting that practice. The SEIR also stated that its conclusions regarding the lack of wetlands on site were based on applying the Commission's jurisdictional determination methods. The City's CDP, issued shortly after it certified the Final SEIR, did not evaluate the project's potential direct wetland impacts.

Shortly after the City's September 2010 certification of the SEIR and issuance of its CDP, the Commission determined at its November 2010 Substantial Issue hearing that additional on-site evaluation was needed to make a conclusive wetland determination. Commission staff requested another site visit to evaluate site conditions and the potential presence of wetlands; however Poseidon did not grant permission until July 2012, when Dr. Engel again visited the site and found that the areas she had previously identified as exhibiting wetland indicators had recently been disked and all vegetation removed. The grading and vegetation removal was apparently

[43] Obligate plant species are those which are found almost always (i.e., 99% of the time) within wetlands.

[44] Although the EIR stated that the "Jurisdictional Determination" memo was based on data collected during six site visits, the Wetland Data Sheets provided were for just three dates – May 13, September 10, and October 19, 2009.

conducted by the power plant owner and is the subject of a separate enforcement action by Commission staff.[45]

Wetland Delineation

To determine the presence of hydrophytic vegetation, the Commission uses procedures and methods provided in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*.[46] This document describes several hydrophytic vegetation indicators, with the primary indicator being based on dominance of vegetation types and the secondary indicator being based on a "prevalence index" of vegetation types.[47] Regarding the test for dominance, Poseidon's Wetland Data Sheets showed that vegetation at each of the sampled sites met the test, as each consisted of at least 50% obligate (OBL), facultative-wet (FACW), and facultative (FAC) species. As stated in the Arid West Supplement, "[i]f the plant community passes the dominance test, the vegetation is hydrophytic and no further vegetation analysis is required." In this instance, vegetation at each sampled location met this test.[48]

In addition, although the dominance test was met and no further analysis is necessary, Poseidon's Wetland Data Sheets also show that 14 of the 18 sampled sites met the prevalence test, in that they showed a prevalence index of 3.0 or less, which is the threshold used to determine whether the vegetation is hydrophytic. For that situation, the Arid West Supplement states "if the plant community satisfies the prevalence index, the vegetation is hydrophytic. No further vegetation analysis is required." In the absence of a positive dominance test (which is not the case here), reliance on the prevalence test also requires the presence of at least one indicator for hydric soil and of wetland hydrology. As noted above, Dr. Engel identified secondary indicators for hydrology at the sites on her first site visit, which bolsters the evidence of the presence of

[45] Development including, but not limited to, removal of wetland vegetation and grading, has taken place without benefit of a coastal development permit. Although development has taken place prior to submission of a permit application, consideration of the application by the Commission has been based solely upon the policies of the City of Huntington Beach's LCP and Chapter 3 of the Coastal Act. Commission review and action on this permit does not constitute a waiver of any legal action with regard to the alleged violation(s), nor does it constitute an implied statement of the Commission's position regarding the legality of any development undertaken on the subject site without a coastal permit, or that all aspects of the violation(s) have been fully resolved.

[46] U.S. Army Corps of Engineers, *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*, ERDC/EL TR-O8-28, ACOE Wetlands Regulatory Assistance Program, Washington D.C., September 2008.

[47] As stated in the Federal Manual, "[a]n area has hydrophytic vegetation when, under normal circumstances: (1) more than 50 percent of the composition of the dominant species from all strata are obligate wetland (OBL), facultative wetland (FACW), and/or facultative (FAC) species, or (2) a frequency analysis of all species within the community yields a prevalence index value of less than 3.0 (where OBL = 1.0, FACW = 2.0, FAC = 3.0, FACU = 4.0, and UPL = 5.0)."

[48] The Corps of Engineers recently updated the plant list that assigns vegetation species into different categories of wetland or upland plants. Commission staff reviewed the updated list and found that the results of the dominance and prevalence tests shown on the 2009 Wetland Data Sheets were the same with the new plant categories. See Wetland Plant List for the Arid West at:
http://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/AW_Region_Draft_Final.pdf

wetlands. In addition, photographs from the initial January 2009 site visit show extensive areas of vegetation, including some species identifiable as hydrophytes, and ponding within the areas sampled by Poseidon's wetland consultant. Poseidon's Wetland Data Sheets also provided some soil test data and stated that the soils did not meet the Commission's hydric soils parameter.[49] However, the positive results of the vegetation test described above are sufficient to categorize the sampled areas as wetlands.

Based on the information provided in Poseidon's Wetland Data Sheets and technical memorandum, Dr. Engel's observations during her initial site visit, site photographs taken during Dr. Engel's and Dr. Johnsson's site visits, the sampled areas within the project footprint exhibited at least one, and in some cases, two, of the parameters that indicate the presence of wetlands. The project is therefore subject to LCP policies related to wetland protection and restoration.

Although the property owner in 2012 removed the site's wetland characteristics, the LCP still requires mitigation for the wetlands that were removed without a permit. As stated in LCP Policy C 7.2.7, "[a]ny areas that constituted wetlands or ESHA that have been removed, altered, filled or degraded as the result of activities carried out without compliance with Coastal Act requirements shall be protected as required by the policies in this Land Use Plan." In this case, Commission staff identified wetland characteristics on the site, requested that AES and Poseidon conduct a wetland delineation, and alerted the City to the likely presence of wetlands; yet the site was graded and vegetation removed without AES or Poseidon seeking or obtaining necessary approvals.

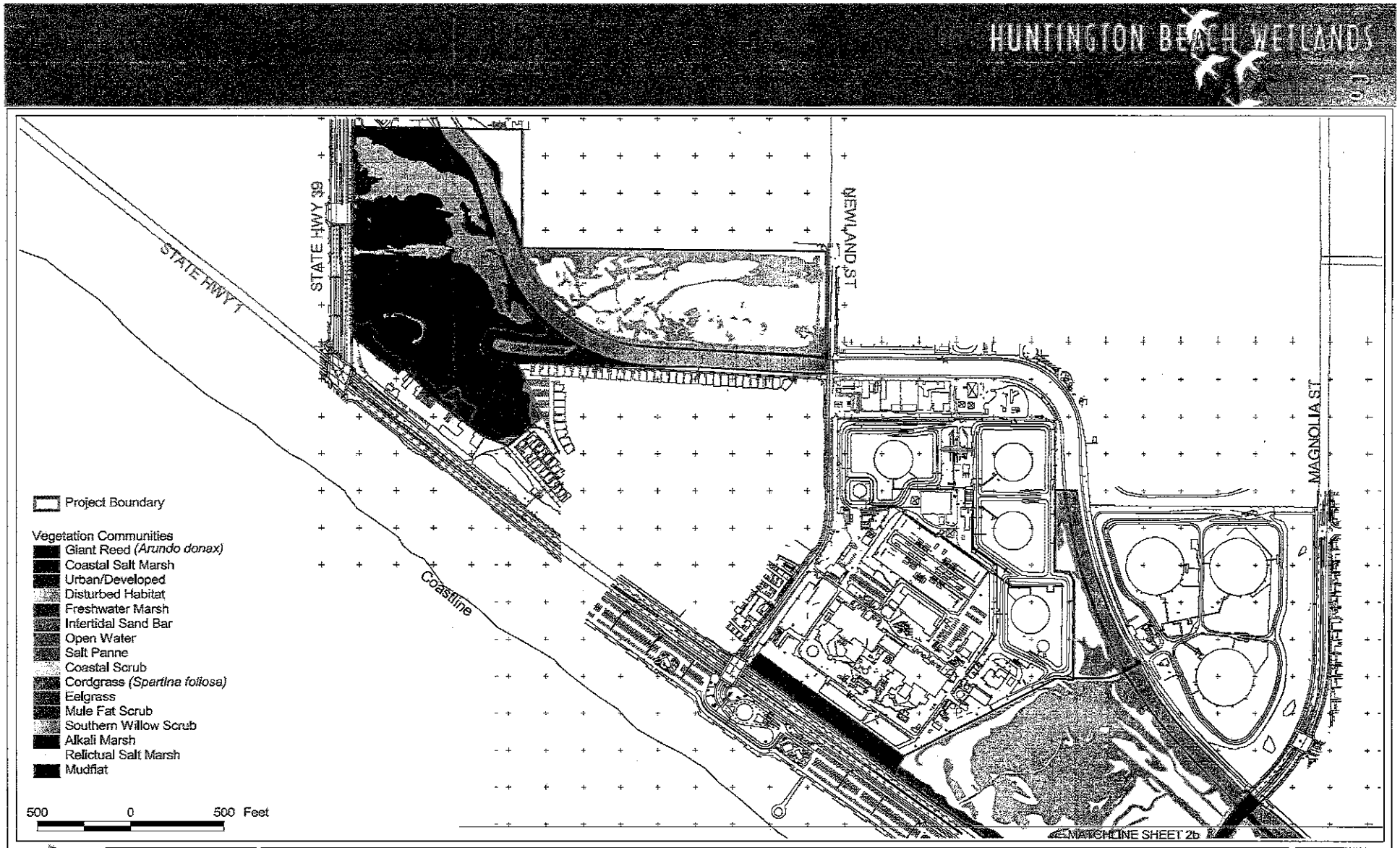
Although neither Poseidon nor AES completed the requested wetland delineation, staff is able to use several documents to reconstruct key site conditions as they existed before the grading and vegetation removal occurred and has calculated a reasonable estimate of the extent and type of wetlands that had been present. First, the Jurisdictional Delineation memo identifies the extent of each containment area in which wetland characteristics could occur – i.e., those relatively level areas within the berms and not covered by the storage tanks – as 2.52 acres in Tank 1, 3.04 acres in Tank 2, and 2.21 acres in Tank 3 (NE) for a maximum possible wetland area of 7.77 acres. All three areas were partially covered by pipes, foundations, internal berms, or other small structures totaling less than an acre, which reduced the potential area that could be considered wetlands. The Wetland Data Sheets identify conditions at 18 locations distributed within those areas in the proposed project footprint – eight sampling locations near Tank 1, four near Tank 2, and six near Tank 3. Poseidon made observations on May 19, 2009 at the eight Tank 1 locations and the six Tank 3 locations, on September 10, 2009 at one of the Tank 1 (NW) locations, and on October 19, 2009 at the six Tank 3 locations. The January 2009 photographs of the site provide visual support of the presence of vegetation and ponding, which is further supported by Dr. Engel's June 2009 field notes from the site.

[49] Poseidon's technical memorandum noted the presence of native soils a few inches beneath the fill, some of which met they matrix color characteristics indicating hydric soils, though they did not have sufficient redoximorphic features (which indicate cyclic wetting and drying of the soil) to meet they hydric soils parameter.

Regarding the Tank 1 area, both the jurisdictional memo and the Wetland Data Sheets state that AES had pumped stormwater into the area, suggesting that at least some of the hydrology supporting wetland vegetation at that site may have been artificial, though the memo noted this practice had not occurred for some time. The Wetland Data Sheets also show that area as having the most upland (UPL) status plant species overall – that is, six of the 27 species (22%) identified in that area were UPL, whereas the other two areas included just one UPL species. Two of the eight sampling points within this area had UPL cover of 30% and 40%. Additionally, all the sampling stations within the Tank 1 area also had Prevalence Index figures of 3.0 or greater, which would represent either the upper bounds of wetland vegetation or indicate upland vegetation areas. This suggests that although this area met the vegetation parameter, at least some of the area exhibited upland characteristics and some of the wetland species may have been supported by artificial hydrology, so would not be considered wetlands under the Coastal Act. Even so, a small part of that area, as characterized by Sampling Points NW6 and NW7, were covered primarily by FACW species – 35% and 92%, respectively, suggesting the existence of wetland conditions at that location, so these locations are included in the total wetland acreage described below.

For the other areas around Tanks 2 and 3, all the species and all the vegetation coverage consisted of OBL, FACW, or FAC, and AES and Poseidon did not identify those areas as being supported by artificial hydrology. The Wetland Data Sheets also show that all the sampling points in these areas met the additional vegetation parameter of having a Prevalence Index of 3.0 or less. Because those areas meet the vegetation parameter and are not supported by artificial hydrology, they are considered wetlands under the Coastal Act.

Based on the above-described evidence, as well as review of aerial photographs of the site taken during different years and seasons, staff estimates that about 50% of the area near Tanks 1, 2 and 3 met the wetland vegetation parameter before it was graded and the vegetation removed. Therefore, direct wetland impacts of the proposed project total approximately 3.5 acres.

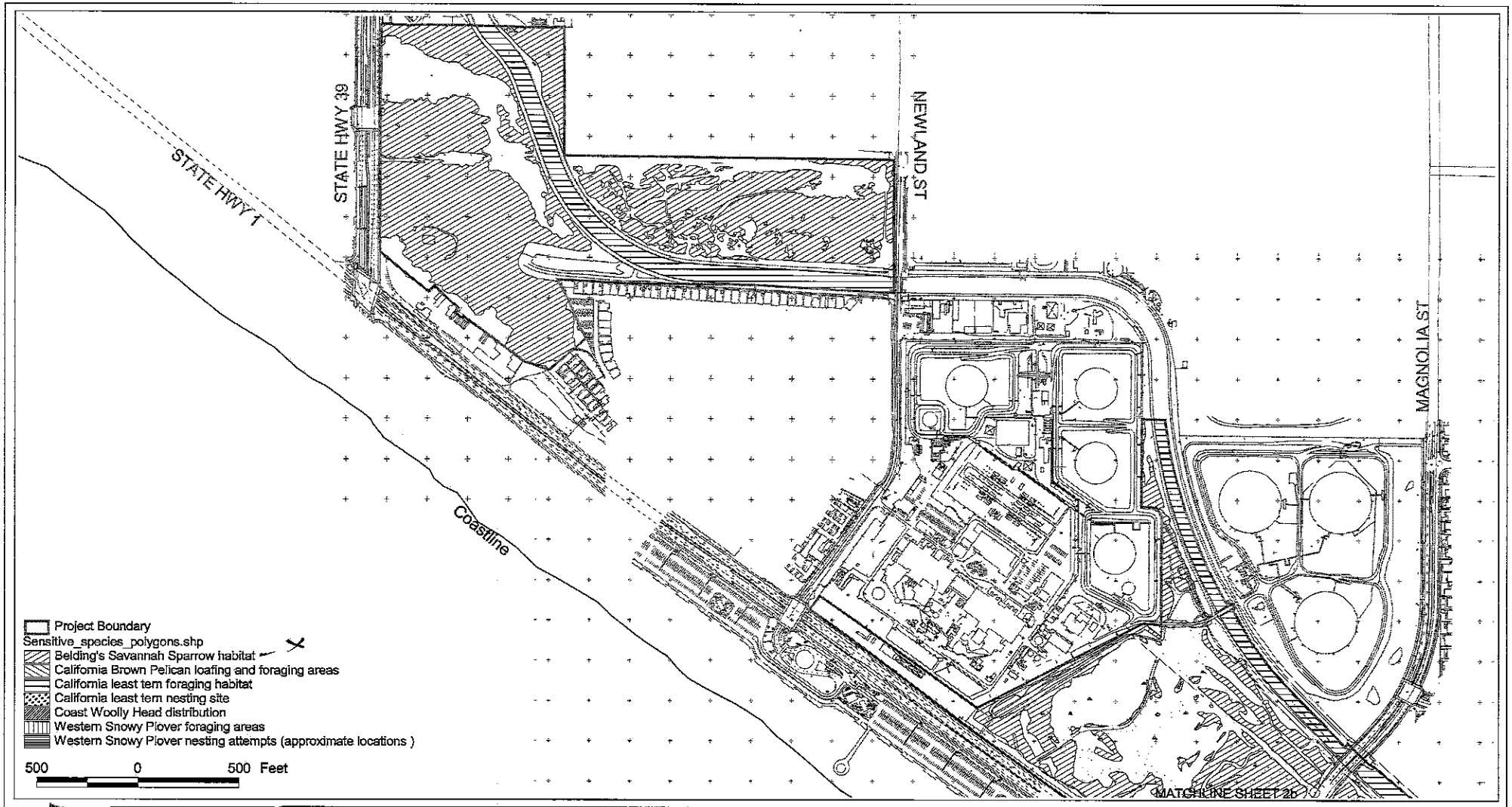


Huntington Beach Wetlands
Vegetation Communities
Western Portion

Figure 2a

Merkel & Associates, Inc.

04-001-01



Huntington Beach Wetlands
Sensitive Species Habitats
Western Portion

Figure 4a

Merkel & Associates, Inc.

AES Huntington Beach Generating Station

AES Huntington Beach Energy Project -70 dBA limit

40

50

60

0 300 600 Feet

N

AES Huntington Beach Energy Project
Noise Contours
AES Huntington Beach Energy Project
Huntington Beach, California

CH2MHILL

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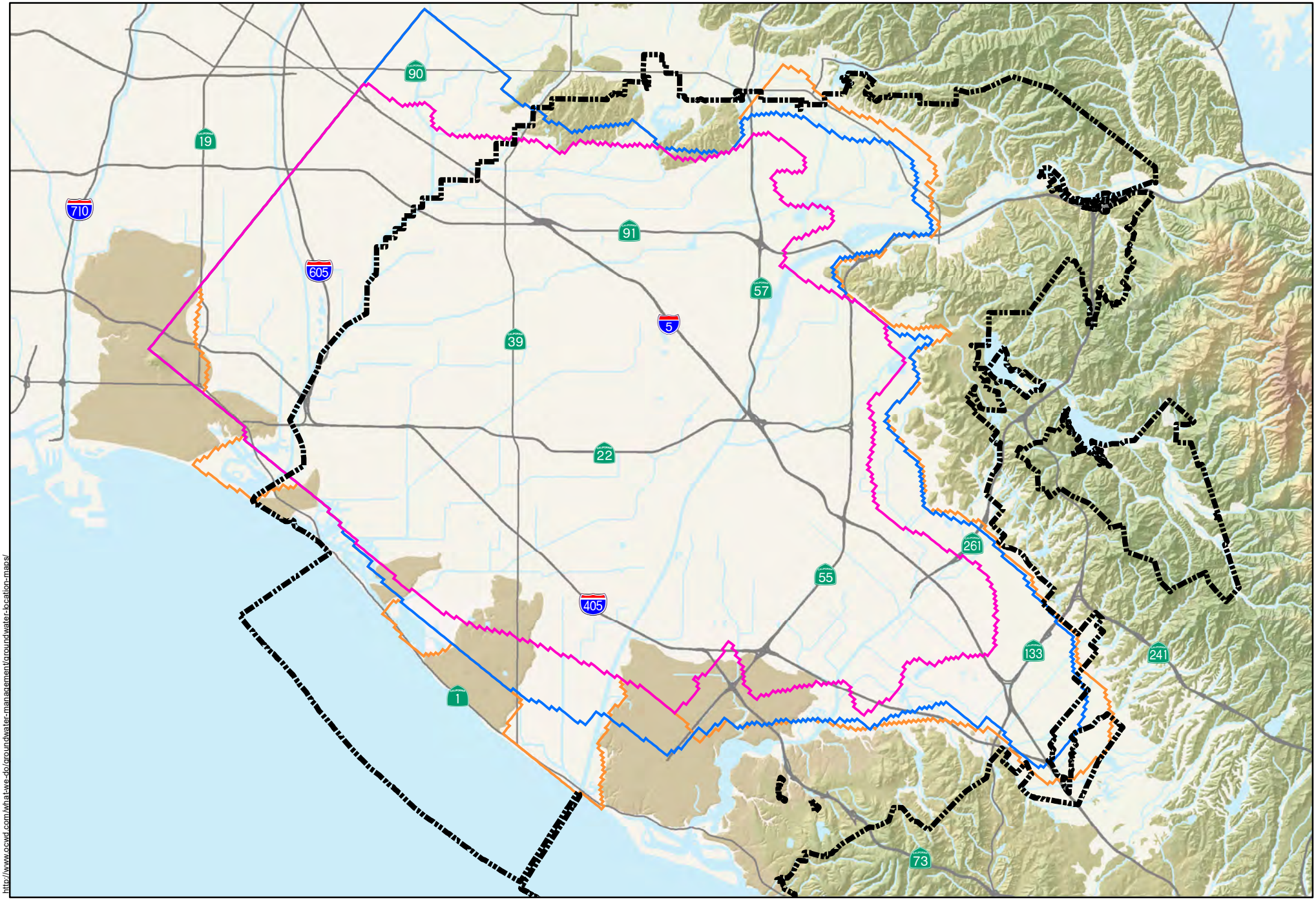

http://www.ocwd.com/what-we-do/groundwater-management/groundwater-location-maps/

N
W E
S

Shallow Aquifer | Principal Aquifer | Deep Aquifer | OCWD Service Boundary

0 10,000 20,000 Feet

Orange County Water District
Three-Layer Basin Model Extent
Date Prepared: 11/02/15