

**Response to Information Requests Related to Analysis of
Alternative Sites Huntington Beach Desalination Project**

(HBDP) Part 1

**Information Requests for Huntington Beach Desalination Project
(HBDP) Related to Analysis of Alternative Sites**

July 29, 2016

Table of Technological and Environmental Information for Alternative Sites

State and Regional Water Board staff drafted the table below and entered information related to technological and environmental factors affecting the feasibility of identified alternative sites from the documents that Poseidon submitted with the Water Code section 13142.5(b) determination request for the HBDP. This table includes blank fields and targeted questions for Poseidon to populate and answer. This additional information will assist staff in thoroughly evaluating alternative sites for the HBDP in a step-wise fashion. To further facilitate staff's review, please include references to where responses to the table can be found, including the title of the report or study and section and subsection, if applicable. Staff recognizes that Poseidon's prior submittals may include some of the information requested in the table below and that staff may have missed this information during its initial review. Staff appreciates Poseidon's assistance in identifying any missing information. Staff will use information provided in response to this table to narrow down and identify the alternative sites that will undergo additional analysis related to economic and social factors affecting feasibility of a particular site.

The "other considerations" column is an optional field that Poseidon can use to identify and describe additional technological and environmental factors that may affect the feasibility of a particular site. For example, if proximity to existing infrastructure for distribution of product water is a technological factor that may limit a site's feasibility, please provide information to support this conclusion. Please limit information in this column to technological and environmental factors affecting a particular site's feasibility, as other factors, including economics and social impacts, will be considered later.

**Information Requests Related to Analysis of Alternative Sites
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Site	Presence of Sensitive habitats							Presence of Sensitive Species (If present, please specify which)	Presence of MPAs (If present, please specify which)	Presence of ASBSs
	Kelp beds (Please indicate absence or presence)	Rocky substrate (Please indicate absence or presence)	Surfgrass beds (Please indicate absence or presence)	Eelgrass beds (Please indicate absence or presence)	Oyster beds (Please indicate absence or presence)	Spawning grounds for state or federally managed species (Please indicate absence or presence)	Market squid nurseries (Please indicate absence or presence)			
Property 1A:	Absent (MBC 2016) The Huntington Beach Desalination Plant Alternative Sites Analysis prepared by Dudek on June 11, 2015 in support of the Coastal Development Permit (CDP) application determined that no Areas of Special Biological Significance (ASBSs), kelp beds, surfgrass beds, or eelgrass beds were present within Segment 1, where Property 1A is located per data from the California Department of Fish and Wildlife (CDFW) Marine Region GIS Unit data from 2014 (available at http://www.dfg.ca.gov/marine/gis/downloads.asp).	Present -offshore in a few patchy areas (Shapefile: HAB_SCSR_Predicted Substrate Depth)	Absent (MBC 2016) The Huntington Beach Desalination Plant Alternative Sites Analysis prepared by Dudek on June 11, 2015 in support of the Coastal Development Permit (CDP) application determined that no Areas of Special Biological Significance (ASBSs), kelp beds, surfgrass beds, or eelgrass beds were present within Segment 1, where Property 1A is located per data from the California Department of Fish and Wildlife (CDFW) Marine Region GIS Unit data from 2014 (available at http://www.dfg.ca.gov/marine/gis/downloads.asp).	Present -in Anaheim Bay (Shapefile: HAB_CA_Eelgrass)	Do not exist on open exposed coast of Orange County. Personal Communication with Dr. Danielle Zacherl	All of the Southern California Bight functions as potential spawning habitat for a State or Federally managed species. It depends on the species. Groundfish spawn near rocky and soft-bottom substrate, Coastal pelagics spawn in midwater, Garibaldi spawn on rocky reefs, California Halibut and White Seabass spawn on soft-bottom habitat.	Any sandy habitat between 20-70 m deep with water temperatures of 10-14 °C can be used for market squid spawning	Gastropods: Abalone (multiple species) • Fish: Tidewater Goby • Mammals: Blue whale, fin whale, humpback whale, gray whale, killer whale, sperm whale • Reptiles: Loggerhead sea turtle, green sea turtle, olive ridley sea turtle, leatherback sea turtle https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline	Present – Bolsa Bay State Marine Conservation Area and Bolsa Chica Basin State Marine Conservation Area ²	Absent (MBC 2016) The Huntington Beach Desalination Plant Alternative Sites Analysis prepared by Dudek on June 11, 2015 in support of the Coastal Development Permit (CDP) application determined that no Areas of Special Biological Significance (ASBSs), kelp beds, surfgrass beds, or eelgrass beds were present within Segment 1, where Property 1A is located per data from the California Department of Fish and Wildlife (CDFW) Marine Region GIS Unit data from 2014 (available at http://www.dfg.ca.gov/marine/gis/downloads.asp).
Property 1B	Absent (MBC 2016)	Present -offshore in a few patchy areas (Shapefile:	Absent	Present -in Anaheim Bay (Shapefile:	Absent Do not exist on open exposed coast of Orange	Present, see answer for Property 1A.	See answer for Property 1A.	Gastropods: Abalone (multiple species) • Fish: Tidewater Goby	Present – Bolsa Bay State Marine Conservation Area and Bolsa Chica	Absent

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		HAB_SCSR_PredictedSubstrateWDepth)		HAB_CA_Eelgrass)	County. Personal Communication with Dr. Danielle Zacherl			<ul style="list-style-type: none"> • Mammals: Blue whale, fin whale, humpback whale, gray whale, • killer whale, sperm whale • Reptiles: Loggerhead sea turtle, green sea turtle, olive ridley sea turtle, leatherback sea turtle https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline	Basin State Marine Conservation Area	
Property 1C	Absent (MBC 2016)	Present -offshore in a few patchy areas (Shapefile: HAB_SCSR_PredictedSubstrateWDepth)	Absent Habitat likely not suitable to sustain eelgrass	Present -in Anaheim Bay (Shapefile: HAB_CA_Eelgrass)	Absent Do not exist on open exposed coast of Orange County. Personal Communication with Dr. Danielle Zacherl	Present see answer for Property 1A.	See answer for Property 1A.	<ul style="list-style-type: none"> • Gastropods: Abalone (multiple species) • Fish: Tidewater Goby • Mammals: Blue whale, fin whale, humpback whale, gray whale, killer whale, sperm whale • Reptiles: Loggerhead sea turtle, green sea turtle, olive ridley sea turtle, leatherback sea turtle https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline	Present – Bolsa Bay State Marine Conservation Area and Bolsa Chica Basin State Marine Conservation Area	Absent
Property 1D	Absent (MBC 2016)	Present -offshore in a few patchy areas (Shapefile: HAB_SCSR_PredictedSubstrateWDepth)	Absent Habitat likely not suitable to sustain eelgrass	Present -in Anaheim Bay (Shapefile: HAB_CA_Eelgrass)	Absent Do not exist on open exposed coast of Orange County. Personal Communication with Dr. Danielle Zacherl	Present see answer for Property 1A.	See answer for Property 1A.	<ul style="list-style-type: none"> • Gastropods: Abalone (multiple species) • Fish: Tidewater Goby • Mammals: Blue whale, fin whale, humpback whale, gray whale, killer whale, sperm whale • Reptiles: Loggerhead sea turtle, green sea turtle, olive ridley sea turtle, leatherback sea turtle https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline	Present – Bolsa Bay State Marine Conservation Area and Bolsa Chica Basin State Marine Conservation Area	Absent

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Naval Weapons Station	Absent (MBC 2016)	Present -offshore in a few patchy areas (Shapefile: HAB_SCSR_PredictedSubstrate WDepth)	Absent Habitat likely not suitable to sustain eelgrass	Present -in Anaheim Bay (Shapefile: HAB_CA_Eelgrass)	Absent Do not exist on open exposed coast of Orange County. Personal Communication with Dr. Danielle Zacherl	Present see answer for Property 1A.	See answer for Property 1A.	Gastropods: Abalone (multiple species) • Fish: Tidewater Goby Mammals: Blue whale, fin whale, humpback whale, gray whale, killer whale, sperm whale • Reptiles: Loggerhead sea turtle, green sea turtle, olive ridley sea turtle, leatherback sea turtle https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline	Present – Bolsa Bay State Marine Conservation Area and Bolsa Chica Basin State Marine Conservation Area	Absent
Property 1G	Absent (MBC 2016)	Present -offshore in a few patchy areas (Shapefile: HAB_SCSR_PredictedSubstrate WDepth)	Absent	Absent Habitat likely not suitable to sustain eelgrass	Absent Do not exist on open exposed coast of Orange County. Personal Communication with Dr. Danielle Zacherl	Present see answer for Property 1A.	See answer for Property 1A.	Gastropods: Abalone (multiple species) • Fish: Tidewater Goby Mammals: Blue whale, fin whale, humpback whale, gray whale, killer whale, sperm whale • Reptiles: Loggerhead sea turtle, green sea turtle, olive ridley sea turtle, leatherback sea turtle https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline	Present – Bolsa Bay State Marine Conservation Area and Bolsa Chica Basin State Marine Conservation Area	Absent
Segment 6	Present (MBC 2016)	Present -pretty decent coverage esp dana point area (Shapefile: HAB_SCSR_PredictedSubstrate WDepth) (MBC 2016)	Present a surfgrass hybrid (shapefile: HAB_CA_SurfGrass_Hybrid)	Absent Habitat likely not suitable to sustain eelgrass	Absent Do not exist on open exposed coast of Orange County. Personal Communication with Dr. Danielle Zacherl	Present see answer for Property 1A.	See answer for Property 1A.	Gastropods: Abalone (multiple species) • Fish: Tidewater Goby • Mammals: Blue whale, fin whale, humpback whale, gray whale, killer whale, sperm whale • Reptiles: Loggerhead sea turtle, green sea turtle, olive ridley sea turtle, leatherback sea turtle https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline	Present – Laguna Beach State Marine Conservation Area and Dana Point State Marine Conservation Area	Absent

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Segment 7	Present (MBC 2016)	Present -pretty decent coverage esp dana point/ capo beach area (Shapefile: HAB_SCSR_PredictedSubstrate WDepth)	Present - a surfgrass hybrid. Located on the Point till the wall. (shapefile: HAB_CA_SurfGrass_Hybrid) (LSA 2002)	Absent Habitat likely not suitable to sustain eelgrass	Absent Do not exist on open exposed coast of Orange County. Personal Communication with Dr. Danielle Zacherl	Present see answer for Property 1A.	See answer for Property 1A.	Gastropods: Abalone (multiple species) • Fish: Tidewater Goby • Mammals: Blue whale, fin whale, humpback whale, gray whale, killer whale, sperm whale • Reptiles: Loggerhead sea turtle, green sea turtle, olive ridley sea turtle, leatherback sea turtle https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline	Present - Dana Point State Marine Conservation	Absent
Segment 8	Present (MBC 2016)	Present -pretty decent coverage capo beach area (Shapefile: HAB_SCSR_PredictedSubstrate WDepth)	Absent	Absent Habitat likely not suitable to sustain eelgrass	Absent Do not exist on open exposed coast of Orange County. Personal Communication with Dr. Danielle Zacherl	Present see answer for Property 1A.	See answer for Property 1A.	Gastropods: Abalone (multiple species) • Fish: Tidewater Goby • Mammals: Blue whale, fin whale, humpback whale, gray whale, killer whale, sperm whale • Reptiles: Loggerhead sea turtle, green sea turtle, olive ridley sea turtle, leatherback sea turtle https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline	Absent	Absent
Segment 9	Present (MBC 2016)	Present -pretty decent coverage wheeler north reef (Shapefile: HAB_SCSR_PredictedSubstrate WDepth)	Absent	Absent Habitat likely not suitable to sustain eelgrass	Absent Do not exist on open exposed coast of Orange County. Personal Communication with Dr. Danielle Zacherl	Present, see answer for Property 1A.	See answer for Property 1A.	Gastropods: Abalone (multiple species) • Fish: Tidewater Goby • Mammals: Blue whale, fin whale, humpback whale, gray whale, killer whale, sperm whale • Reptiles: Loggerhead sea turtle, green sea turtle, olive ridley sea turtle, leatherback sea turtle https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline	Absent	Absent

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