Response to Comments – Part 1

Responses to Written Comments from the Public

REISSUANCE OF WASTE DISCHARGE REQUIREMENTS FOR THE POSEIDON RESOURCES (SURFSIDE) LLC'S HUNTINGTON BEACH DESALINATION FACILITY

RESPONSES TO COMMENTS RECEIVED ON OR BEFORE JANUARY 21, 2020

Part 1: Public/Agency Comments

Comment Number	Commenting / Agency / Organization
0001	Brett Korte / Azul
0002	Barbara Delgleize / Councilmember City of Huntington Beach
0003	Judy and Art Levine
0004	Pat Riley
0005	Glenn Brooks
0006	Glenn Howland
0007	Larry McNeely
0008	Barbara Mourant / Irvine Ranch Water District
0009	Robert Faiella
0010	Gino Bruno
0011	Mark Tonkovich
0012	Paul Weghorst – Irvine Ranch Water District
0013	Penny Kyle
0014	Jason Pyle
0015	Jordan Brandman/Director, Orange County Water District
0016	Pat Riley
0017	Patrick Brenden / Council-member City of Huntington Beach
0018	Mike Posey / Council-member City of Huntington Beach
0019	Dan Silver / Endangered Habitats League
0020	Steve Knutsen
0021	Scott Cooper

Comment Number	Commenting / Agency / Organization
0022	Lynn Friedman
0023	Brett Korte / UCI Law Environmental Law Clinic, Representing Azul
0023a	Michael Damasco / UC Irvine School of Law's Environmental Law Clinic, representing Azul
0024	Hildy Meyers
0025	Kaitlyn Kalua / California Coastkeeper Alliance
0025a	Sean Bothwell / California Coastkeeper Alliance
0026	Jim Madaffer / San Diego County Water Authority
0027	Forest Earl / Surf City Voice
0028	Guadalupe Heredia
0029	Ray Heimstra / Orange County Coastkeeper
0030	Ann Tarkington
0031	Joslin de Diego
0032	Taylor Haug
0033	Steven Ferrell
0034	Meg Watson
0035	Dan Jamieson / Roxanne McMillen
0036	Mark Dixon
0037	Sandra Fazio
0038	Jill Cagle / OCWISE
0039	Darrell Neft
0040	William Dickinson
0041	Paula Hulse
0042	Shawn Olson
0043	Dorothy Riley
0044	Kenneth Killian
0045	Lynn Friedman
0046	Steve Southern
0047	Ron Smith

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0048	John Gordon
0049	Audrey Prosser
0050	Christine Martin
0051	Vanessa & Jeff Webster
0052	Dan Silver / Endangered Habitats League
0053	Lena Hayashi
0054	Michael Durgerian
0055	Christine Padesky
0056	Pat Riley
0057	Lisa Rodman / Agua Hedionda Lagoon Foundation
0058	Scott Mirtle
0059	Litta Cecchi-Bash
0060	Cathy Green / Orange County Water District
0061	Eugene Huettner
0062	Jay Drake
0063	Cathy Cavecche / OC Taxpayers Association
0064	Donna Specht
0065	Brett Korte / Azul
0066	Anna Ferree
0067	Bill Yarchin
0068	Craig Wagner
0069	Randy Baker
0070	Chris Yates / U.S. Depart. of Commerce National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service West Coast Region
0071	Barbara and Steve Noffsinger
0072	R Lindsey
0073	Steve Bullock, David Fleming, Tracy Hernandez / Los Angeles County Business Federation (BizFed)
0074	Leslie Cochrane

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0075	Jeanie Petrocella
0076	Jeanne Whitesell
0077	Flossie Horgan
0078	Nora Pedersen
0079	Ron Miller / Los Angeles-Orange County Building and Construction Trades
0080	Vicky McGavack
0081	Timothy Stripe / Grand Pacific Resorts
0082	James Gosnell / Gosnell International
0083	Roy McCord / Irvine Valley College
0084	Frank Caruso
0085	Matt Hall Mayor / City of Carlsbad, Rebecca Jones Mayor / City of San Marcos, Judy Ritter Mayor / City of Vista
0086	Rich Tonti / Pacific Paradise Pools
0087	Dirissy Doan / Orange County Realtors
0088	Lori Shaw
0089	Laurie Davies / Association of California Cities- Orange County
0090	Richard and Sharon Schact
0091	Mark Goodman
0092	Denise Jordan
0093	Nichole Pichardo
0094	Debbie Workman
0095	Bethany Webb
0096	Bonnie Benton
0097	William Workman
0098	John Wammes / Water Works, Inc.
0099	Jim Ure
0100	Barbara and Steve Noffsinger
0101	Valli Febbraro

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0102	Jeff Rokos
0103	Ernie Courter
0104	William Butts
0105	Dallas Weaver / Scientific Hatcheries
0106	Terrell Koken
0107	Marinka Horack
0108	Armida Brashears
0109	Tyler Diep / Assembly member, California State Assembly
0110	Mikel Hogan / Residents for Responsible Desalination
0111	Stefanie Tellez
0112	Shirley Bursvold
0113	Long Pham
0114	Jeanie Petrocella
0115	Steven LaMotte / Building Industry Association, OC Chapter
0116	Toni Atkins / CA Senate President pro Tempore
0117	Geri Von Freymann
0118	Mary Clarke
0119	Chiyu Hu
0120	Jim Niswander
0121	Laura Tezer
0122	Tibor Farkas
0123	Dan Bosch
0124	Susan Hughes
0125	Linda Minko
0126	John Scott
0127	Stephen Billard
0128	Lynette Kent
0129	Art Brown

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0130	Oliver Monus
0131	David Lowe
0132	Mary Jo Baretich / Residents for Responsible Desalination Board
0133	Mark Lopez / Orange County Farm Bureau
0134	Katie Greer
0135	Deb Janus
0136	Milt Dardis
0137	Steve La Motte / South Orange County Economic Coalition
0138	Reuben Franco / Orange County Hispanic Chamber of Commerce
0139	David Ellis
0140	Donald Slaven
0141	Daniel R. Ferons / Santa Margarita Water District
0142	Yvette Arango and Ed Arango
0143	Craig Peterson
0144	Kaelyn Jenkins
0145	Lisa Ohlund / East Orange County Water District
0146	Greg Carrow
0147	Diane Feinstein / United States Senator
0148	Kelly E. Rowe / Board Member, Orange County Water District
0149	Dave Hamilton / Residents for Responsible Desalination (R4RD)
0150	Michael Wellborn / Friends of Harbors, Beaches and Parks
0151	Rob Hayashi
0152	Rob Hayashi
0153	Vito Bica
0154	Victor Cao / California Apartment Association
0155	John Kerry
0156	Bertha Sterling

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0157	Tim Florio
0158	Lancy Dyer
0159	Kaitlyn Kirkup
0160	Shawn Dewane / Mesa Water District
0161	Robert Sulnick
0162	Barbara Boxer / Former U.S. Senator
0163	Valerie Nera / California Chamber of Commerce
0164	Jesse Ben-Ron / Orange County Business Council
0165	Kevin Fockler
0166	Tyler Diep / Assembly member, California State Assembly
0167	James Parkinson
0168	Oscar Rodriguez
0169	Keith Bohr / Former Huntington Beach Mayor Diane Feinstein
0170	Charles Falzon / Amigos de Bolsa Chica
0171	David Maricich
0172	Tracy McNiven
0173	Rhona Villanueva
0174	Scott Maloni / Poseidon Resources LLC
0175	Gary Germo
0176	Eric Gillies / California State Lands Commission
0177	Tom Luster / California Coastal Commission
0178	Chris Cagle
0179	Sean Bothwell - Ca Coastkeeper Alliance
0180	Michael Posey /Council-member City of Huntington Beach
0181	Duane D. Cave / Moulton Niguel Water District
0182	Wendy Ridderbusch / CalDesal
0183	Ronald Gilbert

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0184	Jeremy Crutchfield / San Diego County Water Authority
0185	Ray Heimstra / Orange County CoastKeeper
0186	Diane Thompson / Huntington Beach Chamber of Commerce
0187	George Lambert
0188	Yvonne Gonzalez Duncan / California League of United Latin American Citizens
0189	Zeke Hernandez / League of United Latin American Citizens
0190	Dave Simpson
0191	Timothy Reilly
0192	Andrea Leon-Grossman / Azul Suzanne Denbow Environmental Law Clinic, UC Irvine
0193	Elizabeth Taylor and Mandy Sackett / Surfrider Foundation
0194	Sam Ross / Visit Carlsbad A Desalination Marketing Organization
0195	Timothy Karpinski
0196	Timothy Stripe / Grand Pacific Resorts
0197	Brad Coffey / The Metropolitan Water District of Southern California
0198	Allan Bernstein / Orange County Water Independence Sustainability and Efficiency (OCWISE) 16K signatories
0199	Surfrider Foundation / 1K signatories
0200	Scott Walker, Bjarne Nicolaisen, Douglas Hawkins, Ronald Magnuson, William Clow, Gerald Crain, Doug Klick, Linda Cordero, Allan Leader, Larry Greenfield, Charles Hyde, Sevada Mkrdichian, Sue Taylor, Eric Pivaroff, Mark Blair, George Ludwig, Joe Tipton, Don Logan, David Schuman
0201	Scott Bamsey, Sachin Chawla, Benjamin Medina, James Woods, Stefanie Tellez, Rob Hayashi, Robert Brislin, Fernando Morales, Elena Galkina, Stefanie Tellez, Eleanora Robbins, Victor Gruber, Dennis Vannote, Jack Allen, Roger Quintal, William Lochrie, Richard Lefrancois, Jim Bieber, Linda Ohlsen, Ray Herrera, Vickie Bakki, Zachary Macquarrie, Stefanie Tellez
0202	Dan Hytrek, Rita Tayenaka, Leatrice Yarborough, Larry Dick, Sharon Larson, Stefan Heitzmann, Stephen Sharp, Don Macallister, Brian Mitchell, John Joyce, Robert Kramer, Claude Bouchard, Carla Stark, Candice Golden-Gelegotis, Barbara Chu, William Nichols, Richard Troesh, Paul Gaca
0203	Kileigh Phillips, Ted Stearns, Jeffrey Sotingco, Kenneth Hegemann, Steven Teachout

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0204	Ronald Gilbert, Gary Petersen, James Masologites, Coury McKinlay, Joseph Petrone, Kristy Selleck, Nicholas Lines, Ed Puccetti, Vitold Tchaikovsky, Geri Ditto, Bob Kelly, Andrea Maglidt, Robert Condon, Anastacio Villanueva, Gary Evereklian
0205	Ronald Gilbert, Eric Thomas, Jonathan Summers, Betsy Buckner, Edward Ramaekers, James Ping, Judith Farkas, Thomas Polkow, Tom Corbett, Claude Bouchard, Terry Cincotta, Susumu Miyashiro, Steve Amundson, Herb Kleeman, Claude Bouchard, Eric Johnson, Eugene Verin, William Leinheiser, Carl Gardner, Judith Farkas, Dan Bosch
0206	Paul Renfrow, Jamene Utt, Martha Peckham, Hector Avalos, Donna Miller, Jonathan Dietrich, Steven Spear, Luis Medina, Diana Apodaca, Susan Osmanski, Karem Elhams, Jennifer Mcgraw, Jay Toci, Joshua Golden, Elias Sebhatu
0207	Lori Jones, Jesse Wu, Bjarne Nicolaisen, Vince Vasquez, Robert Brislin
0208	Peter Hollub, Alex Benedettini, Frank Lograsso, Edward Heins, Roger Carr, Howard Wynn, Sean Eyre, Michael Crevda, Linda Pappoff, Michael Ball, John Perry, Randal Neal
0209	Lawrence Neumeister, Elizabeth Foley, Mathilda Sarh, Tjoanhouw Lim, Scott Mcanally, Karen Cornell
0210	George Nierlich, Anji Clemens, Thomas Lepper, Sherri Butterfield
0211	Marvin Cruse, Charles Babiracki, Bonnie Jeffrey, Gary Yudin
0212	Victor Heman, Tim Day
0213	Linda Ohlse, Bjarne Nicolaisen, Robert Brislin
0214	Sean Bothwell / California Coastkeeper Alliance
0215	Lynn Schaulis
0216	Lauren Lloyd
0217	Keith Bohr / Board Member, Bolsa Chica Conservancy

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0001	Brett Korte Azul	Dec 03, 2019	On behalf of Azul, the UC Irvine Environmental Law Clinic respectfully requests that the Regional Board extend the written comment deadline for Poseidon's Draft Waste Discharge Requirements (Order No. R8-2020-0005, NPDES No. CA8000403), and Water Code § 13142.5(b) Conditional Determination until the Regional Board's public hearing scheduled for March 27, 2020. In the alternative, Azul requests that, at minimum, the written comment deadline be extended through February 28, 2020.	At the December 6, 2019 Santa Ana Water Board workshop, the Board considered the request to extend the comment period and decided to extend the written comment period to January 21, 2020. In addition to written comments, the Santa Ana Water Board has heard oral comments at multiple workshops for the proposed Facility and it will take oral comments at the hearing for the Tentative Order.
0002.01	Barbara Delgleize Council-member City of Huntington Beach	Dec 05, 2019	Base your decision on the 10+ years of project investigation. Please keep in mind that the City of Huntington Beach last approved the Project in 2010, and like your staff, found numerous alternatives to be infeasible and/or unacceptable to the City, including subsurface seawater intakes.	The Santa Ana Water Board is not bound by the City of Huntington Beach's approval of the project or its findings regarding the feasibility of subsurface intakes or other aspects of the project that fall within the purview of Water Code section 13142.5(b). Santa Ana Water Board staff have evaluated the documents submitted by the Discharger, reports of neutral third-party reviewers, and comments from other agencies and the public to develop the Tentative Order and to make appropriate revisions to the order.

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0002.02			This is a project that has undergone significant improvements since the Regional Board last amended the permit in 2012. I am immensely excited about the permit conditions that requires Poseidon to ensure the sustainability of the Bolsa Chica wetlands for the next generation.	Comment noted. See response to comment 0017.02 regarding the proposed Bolsa Chica mitigation.
0002.03			From a drinking water perspective, this project -according to the Orange County Water District- is the largest single source of new, climate resilient drinking water supply available to the county. This project will bring water, jobs and tax revenue to our community. And best of all, from the Regional Water Board's perspective, it is 100 percent compliant with the California Ocean Plan and the new desalination amendment.	Desalination is one water source that water supply agencies may consider as part of their water supply portfolio. Comments regarding the creation of jobs and revenue do not concern water quality and are not otherwise relevant to the Santa Ana Water Board's consideration of the Tentative Order. The purpose of the Tentative Order is to regulate the discharge of pollutants from the Facility to the Pacific Ocean to protect water quality and beneficial uses and to impose requirements related to the best available site, design, technology, and mitigation feasible to minimize the intake and mortality of marine life in accordance with Water Code section 13142.5(b) and the California Ocean Plan's provisions for seawater desalination facilities.

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				The Santa Ana Water Board's finding that the Facility complies with the Ocean Plan is conditioned on the Discharger's submittal of a final Marine Life Mitigation Plan (MLMP) that provides specific details regarding the Discharger's plans to mitigate for project impacts. To satisfy the condition, the Discharger must submit a final MLMP and obtain the Santa Ana Water Board's approval of the MLMP in accordance with Attachment K to the Tentative Order.
0003.01	Judy and Art Levine	Dec 04, 2019	It's not a matter of if, but when the next serious drought will occur. Water conservation is an important piece of the puzzle; we are taking up turf and planting drought tolerant plants, but we must be proactive in developing new sources of water.	Desalination is one water source that water supply agencies may consider as part of their water supply portfolio.
0003.02			I also support this plant because it will take an underutilized and ugly piece of industrial property and turn it into a facility that generates tens of millions of dollars in local property tax.	The comment does not concern water quality and is not otherwise relevant to the Santa Ana Water Board's consideration of the Tentative Order. The purpose of the Tentative Order is to regulate the discharge of pollutants from the Facility to the Pacific Ocean to protect water quality and beneficial uses and to impose requirements related to the best available site, design, technology, and mitigation feasible to minimize the intake and mortality of marine life in accordance with Water Code section

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				13142.5(b) and the California Ocean Plan's provisions for seawater desalination facilities.
0004.01	Pat Riley	Dec 05, 2019	Questions for Santa Ana Regional Board Members and California Coastal Commission and Other Parties Concerned. How many videos have you seen of underwater brine disposal outflow pipes from large desalinization plants?	Santa Ana Water Board staff has reviewed videos, documents and reports regarding underwater brine disposal and its impacts on the marine environment. The Ocean Plan has specific requirements that the proposed Facility must meet to protect all forms of marine life to the maximum extent feasible. The State Water Board developed the Ocean Plan requirements for seawater desalination facilities based on recommendations from multiple scientific expert review panels and the requirements set forth the best available methods for brine discharges from desalination facilities. While the Ocean Plan's preferred technology for minimizing intake and mortality of all forms of marine life resulting from brine discharge is to commingle the brine with wastewater to dilute the brine, wastewater is not available for dilution for the brine discharge from proposed Facility (see Finding 27 of Attachment G to the Tentative Order). The use of a multiport

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				diffuser is considered the next best method for disposing of brine when the brine cannot be diluted by wastewater and when there are no live organisms in the discharge. The multiport diffuser must be engineered to maximize dilution, minimize the size of the brine mixing zone, minimize the suspension of benthic sediments, and minimize mortality of all forms of marine life. As discussed in Findings 15, 16 and 28 of Attachment G to the Tentative Order, the Discharger redesigned their proposed diffuser to further minimize mortality to marine life caused by shearing-stress, while still maximizing dilution. The Discharger's new design is based on recommendations from Dr. Phil Roberts, an independent expert who reviewed the Discharger's original diffuser design. In accordance with the Ocean Plan, the discharge for the proposed Facility may not exceed a daily maximum of 2.0 parts per thousand (ppt) above natural background salinity throughout the water column with no vertical limit, measured no further than 100 meters horizontally from the discharge point.

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				Additionally, the Discharger must mitigate for all impacts to marine life resulting from operation of the Facility. The Discharger has proposed to restore and preserve significant portions of the Bolsa Chica wetlands to offset those impacts they cannot avoid from the construction and operation of the proposed Facility.
0004.02			How many independent studies have you read regarding long-term effects of brine and chemical disposal waste?	During the development of the desalination provisions to the Ocean Plan, State Water Board staff reviewed over 250 independent studies and technical reports. Furthermore, multiple expert panels (which can viewed here: https://www.waterboards.ca.gov/water_issues/programs/ocean/desalination/) were convened to investigate the impacts – both long-term and short-term – on marine life from desalination facilities. Finally, as required by Health and Safety Code section 57004, the desalination provisions to the Ocean Plan underwent neutral, rigorous scientific peer-review. Also See response to comment 0004.01 and the analyses contained in Attachment G.3 and G.4.
0004.03			What prevents declining photo plankton death and other small marine organisms to include baby fish to be sucked up into the desalinization plant? A screen? and when that screen becomes plugged with	The Ocean Plan states that the Santa Ana Water Board shall require that surface water intakes be screened. In order to comply with the Ocean Plan and reduce entrainment of all forms of marine life

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			seaweed and fish etc who's going to clean it? Will Poseidon just remove the screen after it gets approved? Who's going to monitor it? you? I've been informed the screen is only 1% effective. Not good.	(including small fish and plankton), the Discharger must screen all surface water intakes with a 1.0 mm or smaller slot size wedgewire screen when the desalination facility is withdrawing seawater and the through-screen velocity must not exceed 0.15 meters per second (0.5 feet per second) at any time. Screens must be functional while the Facility is withdrawing seawater. The wedgewire screens for the proposed Huntington Beach desalination facility will be self-cleaning screens with rotating brushes and will be composed of stainless steel. Additionally, as discussed in SLC's 2017 FSEIR, the Discharger must use divers to regularly inspect the screens and to manually clean the screens as needed using a boat- or land-based air burst system to ensure that the screens remain free of debris and fully operational. Regarding the effectiveness of the wedgewire screens: Modeling data have demonstrated that even though wedgewire screens may preclude a small portion of the larval population from entrainment, a

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				significant percentage of the population (e.g., all of the smaller sized organisms) can still pass through the screen slots. The portion of organisms that are not entrained because of the wedgewire screen is relatively small compared to the number of organisms in the water resulting in only an approximately one percent (1%) reduction in entrainment mortality between screened and unscreened intakes. Small slot-sized screens and low intake velocity rates significantly reduce impingement and protect larger (greater than 1mm head size) larval, juvenile and adult fish from entrainment. According to the SLC 2017 SEIR, the proposed surface intake will be modified to add a manifold with four 91-inch-diameter, 1-millimeter slot cylindrical wedgewire screens. Screen lengths would be about 26 feet, each with an effective screening area of approximately 105 inches. The wedge wire screens would be spaced approximately 3.8 feet from each other to maximize the sweeping velocities between screens to sweep debris and organisms away from the intake area, which will assist in reducing entrainment of marine organisms.

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				Additionally, the Discharger must mitigate for all impacts to marine life resulting from operation of the Facility. The Discharger has proposed to restore and preserve significant portions of the Bolsa Chica wetlands to offset those impacts they cannot avoid from the construction and operation of the proposed Facility.
0004.04			How many large desalinization plants have you visited, toured and studied extensively?	The Santa Ana Water Board's understanding and consideration of the Tentative Order does not require the board members to have toured or extensively studied desalination facilities. However, one member of the Santa Ana Water Board toured the City of Santa Barbara Charles E. Meyer Desalination plant and two other board members toured the Poseidon Resources Claude "Bud" Lewis Carlsbad desalination facility. Santa Ana Water Board staff have also provided the Santa Ana Water Board several briefings on desalination facilities.
0004.05			Do you know how much fossil fuel is needed per year to power the proposed HB Poseidon desalination plant?	The fossil fuels needed for the proposed Facility were analyzed in the 2010 Final Subsequent Environmental Impact Report (2010 FSEIR) prepared by the City of Huntington Beach and supplemented by the analysis in the 2017 Final Supplemental Environmental Impact Report (2017 FSEIR)

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				prepared by the State Lands Commission. The proposed Facility would not directly use or store fossil fuels on-site, but it would require the use of electricity generated by the combustion of fossil fuels. (2010 FSEIR, pp. 4.12-19, 4.12-21.) It is estimated that the Facility will use approximately 265,888 megawatt hours of electricity per year. (See 2017 FSEIR, p. 4-126.) The Discharger prepared an Energy Minimization and Greenhouse Gas Reduction Plan to bring its total GHG emissions from the construction and operation of the Facility to zero. The Discharger must implement the plan to mitigate the GHG impacts of the Facility. (See 2017 FSEIR, p. 4-127 and Appendix G to the FSEIR.)
0004.06			Do you know the total annual operating costs of the proposed HB Poseidon desalination plant?	The Ocean Plan requires the Santa Ana Water Board to consider project life cycle cost, which includes cost of operating, in assessing feasibility of subsurface intakes. In accordance with the Ocean Plan, the Board considered project life cycle cost along with the other required factors to determine the feasibility of subsurface intakes. See Section 2 of Attachment G.1 to the Tentative Order. The Board also considered operational costs in its

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				consideration of the best available site for the surface intake. See Section 3 of Attachment G.1 to the Tentative Order.
0004.07			Isn't it true the government EPA etc. is basically offering a credit card to Huntington Beach (Orange County) for building this billion $ plus desal plant? Who will be paying off the credit card?	This comment is not relevant to the Santa Ana Water Board's consideration of the Tentative Order. See response to comment 0003.02.
0004.08			Who would manage the Huntington Beach Poseidon desalination plant? A company from Israel?	The Tentative Order names Poseidon Resources (Surfside) LLC as the Discharger for the Huntington Beach Desalination Facility. The authorization to intake ad discharge under Order is not transferable, except after notice to the Santa Ana Water Board.
0004.09			Do you know how much the Carlsbad desalination plant sold for? (to the foreign hedge fund investment group)	This comment is not relevant to the Santa Ana Water Board's consideration of the Tentative Order. See response to comment 0003.02. For additional information regarding the Carlsbad facility, please contact the San Diego Regional Water Quality Control Board.
0004.10			The Poseidon plant would only encourage more growth and less conservation, how many more people does Orange County need? Another million 5 million? another 10 million?	The potential growth-inducing impacts associated with the Facility were analyzed in the 2010 Final Subsequent Environmental Impact Report (2010 FSEIR) prepared by the City of Huntington Beach and supplemented by the analysis in the 2017 Final Supplemental Environmental Impact Report (2017 FSEIR) prepared by

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				the State Lands Commission. The analysis in the 2010 FSEIR concluded that the Facility would not cause significant growth-inducing impacts in Orange County, but it could cause significant growth-inducing effects outside of Orange County. (See 2010 FSEIR, § 5.2; see also pp. 1-12, 1-29 to 1-30.) The analysis in the 2017 FSEIR concluded that the project changes analyzed would not have additional growth-inducing impacts to those analyzed in 2010. (2017 FSEIR, pp. 6-4 to 6-5.)
0004.11			The issues of brine toxicity due to increased salinity and added anti-fouling chemicals has been documented at desal plants. How close are the outdated intake and the outfall pipe away from each other in Huntington Beach? Could toxic brine discharge affect the resulting desal production water?	The modifications to the discharge structure and operations/maintenance are detailed in response to comment 0004.01. These modifications will reduce the velocity of the intake and enhance the mixing of the brine discharge. The intake and the outfall structures are located approximately 1,840 feet and 1,500 feet offshore, respectively. The intake structure will be equipped with a battery of four wedgewire screens and the outfall structure will be retrofitted with a 14-port linear diffuser to provide rapid mixing of the brine with seawater and minimize the brine mixing zone. The distance between the intake structure and the outfall diffuser is approximately 300 feet; however, it is not anticipated that the brine plume will reach the intake structure at a sufficient

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				concentration to impact the production of potable water by the facility and/or create a non-compliance issue for the discharge of the brine. According to the brine plume dilution modeling provided by the Discharger (Appendix NNNNN), the salt concentration of the brine plume will be diluted to approximately 35.5 parts-per-thousand (ppt), 2 ppt above the ambient seawater salinity, within 130 feet from the effluent diffuser of the outfall structure, therefore, a short-circuiting condition between the outfall and the intake structure will be avoided. Furthermore, the Discharger will be required to meet final effluent limits that include salinity and chronic toxicity that would be impacted if short-circuiting occurs and the Discharger will be required to conduct receiving water monitoring to verify that short-circuiting is not taking place. Proper enforcement remedies would be taken if numeric and/or narrative effluent limits or receiving water limits were exceeded due to a short-circuiting condition. As for the production water from the Facility, should it be directly distributed as a

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				drinking water source, the State Water Resources Control Board, Division of Drinking Water (DDW) will regulate it through the issuance of DDW permits. The Santa Ana Water Board has provided the Discharger's reports to DDW for their consideration when reviewing permit applications for the Facility. If the Facility production water is used to recharge the groundwater basins, then the Santa Ana Water Board will have regulatory authority over the quality of the water that is used for recharge within the Region. Finally, should some brine discharge be taken up by the intake, it will only affect the efficiency of the reverse osmosis process and should not affect the quality of the product water.
0004.12			It's obvious that the massive amounts of energy used in desalination contribute to climate change-causing greenhouse gas emissions, possibly exacerbating the local drought conditions that require use of desalination in the first place.	See response to comment 0004.05. Additionally, in accordance with section VI.C.4 of the Tentative Order, the Discharger must also prepare a Climate Change Action Plan that includes the steps that the Discharger is taking or is planning to take to address greenhouse gas emissions attributable to the Facility's operations and discharge process.
0004.13			How far is the outflow pipe at low tide? I believe the outflow pipe should be	The outflow (discharge) pipe or the outfall structure is located 1500 feet offshore and

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			extended to a half mile and subsurface intakes be incorporated into the plant assuming this dinosaur pollution project gets passed for special interest Wall Street $ and political crony capitalism.	the inflow (intake structure) is located 1,840 feet offshore at low tide. Both are located approximately 30 feet below the ocean surface and well outside of the tidal zone. The need to extend the outflow pipeline for a half mile or further has not been demonstrated based on the information reviewed. Based on a UM3 brine plume dilution model simulation for deeper waters, if the outfall pipeline were to be extended, the increase in the water column above the (now deeper) outfall structure would result in a higher volume of seawater that would be entrained by the discharge diffuser jets, thus causing an increase in the shear-related mortality. Dr. Peter Raimondi's 2019 Neutral Third Party Review included review of larval data for two sites located 1.2 miles and 2.1 miles offshore (HBGS sampling stations O2 and O4) that had been considered as potential alternative sites to extend the intake (and discharge) pipe into deeper waters (49 feet and 72 feet depth, respectively). However, based on the 2003-2004 larval concentration data available for those sites, Dr. Raimondi concluded that there would be greater impacts at sites further offshore than Station E (located near the existing

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				HBGS intake pipe that is proposed to be retrofitted for the Facility). Therefore, Santa Ana Water Board staff did not further pursue requiring the Discharger to relocate the intake and discharge structures into deeper waters offshore of the proposed Facility. As discussed in Attachment G.1 to the Tentative Order, the use of slant wells for the supply to the Huntington Beach Desalination Plant (HBDP) is not technically feasible based on the modeling that predicted impacts to OCWD's seawater barrier, to the inland freshwater aquifer, and wetland areas, surf infiltration galleries were technically infeasible due to scale, public access constraints, and effects form the beach re-nourishment program, and seafloor infiltration galleries were economically infeasible (Section 2 of Attachment G).
0004.14			Is there video evidence showing the integrity of the concrete intake and outflow pipes and Huntington Beach? Could they be cracked or broken due to earthquakes and old age?	The Discharger is required to install and use a diffuser for its discharge. To address potential structural integrity issues, prior to the installation of the diffuser, the Discharger must contract with a California registered structural or civil engineer to inspect the outfall and prepare an integrity

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				assessment report. The Discharger must submit the report to the State Lands Commission for approval of the feasibility of using the pipeline based on structural integrity, the remaining service life of the pipeline with the diffuser and increased salinity in the pipeline, and a schedule for periodic inspections to ensured continued structural integrity. (2017 FSEIR, p. 4-7.) The Discharger submitted the report entitled, “AES Huntington Beach Desalination Plant, Intake and Discharge Pipeline Integrity Assessment Inspection and Report,” dated March 18, 2019 (part of Appendix RRRRR), which includes findings regarding the integrity of the intake and outfall structures and associated pipelines and determines that both intake and discharge pipeline have at least 40 years of service life remaining. Also, the Discharger’s contractor recommended that integrity inspections be conducted every 10 years, that some minor repairs be done to the grouted seams between the pipelines and the intake and outfall structures, and that when the end of the 40-year service life approaches the Discharger may extend the service life of the pipelines for an additional 50 years by slip lining the interior of the pipelines with new HDPE pipe. The

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				inspection of the interior of the pipelines and structures was conducted using divers and a remotely operated underwater vehicle (ROV) that recorded video images of the interior.
0004.15			What is the operating sound volume of the proposed Poseidon plant? The AES is 47 decibels at normal operating volume at the corner of Magnolia and Banning, according to general Manager speaking at South Huntington Beach gathering. Will the neighboring communities be bombarded with much louder NOISE POLLUTION and will their property values and tourism revenues drop because of it?	Potential noise impacts associated with the operation of the Facility were analyzed in the 2010 Subsequent Environmental Impact Report prepared by the City of Huntington Beach. As discussed in the 2010 FSEIR, “the primary operational components [of the Facility] that would emit noise are the intake pump station, the [reverse osmosis] system, the membrane cleaning system, and the product water pump station.” (2010 FSEIR, p. 4.5-14.) With the implementation of mitigation measures, the 2010 FSEIR analysis concluded that operational noise levels would be less than significant (i.e., less than the applicable exterior noise standards for the City of Huntington Beach—55 dBA between 7 a.m. and 10 p.m. and 50 dBA between 10 p.m. and 7 a.m.). To mitigate noise levels associated with outdoor pumps, the Discharger must locate outdoor pumps within enclosed structures with setback and screening as needed and monitor noise levels to ensure compliance with the City’s noise ordinance. If noise levels exceed the applicable

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				standards, the Discharger must implement additional noise attenuation measures to meet the standards. (2010 FSEIR, p. 1-8 to 1-9, 4.5-16.)
0004.16			Does desalination eliminate ALL radiation from nuclear accidents like Fukushima?	The State Water Resources Control Board, Division of Drinking Water (DDW) regulates drinking water quality through the issuance of permits. The Discharger will need to obtain a permit from DDW and meet DDW's drinking water standards prior to delivery that would include regulations for radiation levels, if needed. If Orange County Water District (OCWD) uses the product water to recharge the groundwater basin, OCWD would need to obtain a permit for the injection from the Santa Ana Water Board. The Santa Ana Water Board would then have regulatory authority over the quality of the water that is used for recharge and could address water quality issues related to the injection. Any permit issued for the injection must be consistent with the Santa Ana Water Board's Water Quality Control Plan for the Santa Ana River Basin, which includes radioactivity water quality objectives for groundwater.

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0004.17			An environmental analysis conducted under CEQA (California Environmental Quality Act) or NEPA (National Environmental Policy Act) should include an assessment of the cumulative impacts of not only the proposed project, but also other proposed projects (and existing facilities) in the area. These impacts would include the cumulative entrainment/impingement bioregion impacts, cumulative energy consumption impacts, cumulative growth-related impacts, and cumulative wastewater & urban runoff impacts, among others. This is especially important in areas where existing air quality, water quality or ecosystem health is already compromised"	The cumulative impacts of the Facility and other projects in the area were analyzed in the 2010 Final Subsequent Environmental Impact Report prepared by the City of Huntington Beach and supplemented by the 2017 Final Supplemental Environmental Impact Report prepared by the State Lands Commission. (See 2010 FSEIR, pp. 5-16 to 5-35; 2017 FSEIR, pp. 4-68 to 4-69, 4-81, 4-94 to 4-95, 4-106, 4-116, 4-128 to 4-129, 4-136 to 4-137, 4-151 to 4-152, 4-157 to 4-158, 4-163 to 4-164.) The cumulative impact analyses included an assessment of the issues raised in the comment.
0004.18			I strongly suggest this Poseidon desalinization plant be tabled or put on hold for 3 years so some more research can be done, so the general Orange County residents can be educated about the pros, cons, alternative options. Identified options that are more affordable should be drafted and employed. Furthermore, it should be put on the ballot so Orange County residents can actually vote on this very important matter with the facts not just	The Santa Ana Water Board has thoroughly reviewed the NPDES renewal application and the request for a Water Code section 13142.5(b) determination for the proposed Facility and is prepared to act on the portion of the project that is within its purview. The Santa Ana Water Board does not have the authority to place the project on the ballot for a county-wide vote.

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			slick Poseidon special interest wall street propaganda.	
0004.19			Alternatives to desalination operations include the recycling of local wastewater—processing and purifying sewage back to drinkable standards. In addition to being more environmentally friendly, this process costs roughly half the amount of desalination. Other options include improving stormwater management and harvesting, farmers utilizing drip irrigation, or offering rebates to consumers purchasing water efficient appliances.	The Santa Ana Water Board understands that there are alternatives to supply water to Orange County; however, desalination is one water source that water supply agencies may consider as part of their water supply portfolio. The decision regarding appropriate sources for water supply lies with the water supply agencies (such as Orange County Water District, Municipal Water District of Orange County, and cities), not the Santa Ana Water Board. The Board is considering the pending application for the NPDES permit and request for a Water Code section 13142.5(b) determination for the Facility, not whether the Facility is the best option for local water supply.
0005.01	Glenn Brooks	Dec 04, 2019	One expert on the subject contends that Orange County has a basin aquifer with 60,000,000 acre feet of water, which equates to centuries of water use without any other water inputs, not Metro water, not GRWS water, not Santa Ana River flows - just the basin aquifer.	See responses to comments 0004.19, 0177.11, 0177.12, and CCKA I.D.
0005.02			Salt has a market value of $60-$80/ton*. If this project makes 50MGD of product water, that is 7,000 tons of salt per day and that seems to be $490,000 of	This comment is outside the scope of the Santa Ana Water Board's jurisdiction. See response to comment 0003.02.

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			potential gross revenue. Furthermore, the demand for salt is growing. One report expects a 3.7% growth rate or $4.7 billion. Even raw brine is worth $10/ton. That's $70,000/day for selling brine. Is this developer even trying to align value and cost?	
0005.03			Underground salt vaults or insulated tanks above ground can store waste heat from the desalination process to generate steam (to evaporate the brine?!?). Using a Combined Cycle Gas Turbine (CCGT), very common technology nowadays, would generate electricity to offset the enormous energy required by reverse osmosis. COST is one thing, but think of all the fossil fuel that won't be burned, all the greenhouse gas that won't be generated. Almost half the cost of reverse osmosis is energy. Why won't the developer use common, off-the-shelf CCGT technologies and innovate reverse osmosis desalination. Rate payers deserve better than this form of negligence.	The use of a combined cycle gas turbine is outside of the scope of the Santa Ana Water Board's jurisdiction See response to comment 0003.02. See also response to comment 0004.05 regarding the Facility's consumption of fossil fuels.
0005.04			The 2015 Ocean Plan Amendment provides ample footing to make this project developer come back with solutions to resolve the violations in its proposal. California outlawed "Once	See responses to comments 0004.13 and CCKA I.C.

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			Thru Cooling" and yet the developer thinks a WAIVER is owing because subsurface intake is a technology too expensive for this developer's 12% IRR.	
0005.05			The marine life at this location has been suffering for decades cooling the AES power plant. The Ocean Plan took 10 years to formulate and the SARWQCB has the charge to protect the it. The loss of restored, recovered, renewed local marine life today will be a regional loss to marine life in a few short years and will continue to compound the ripple effects on the larger balance of the marine life ecology.	On May 4, 2010, the State Water Resources Control Board (State Water Board) adopted a Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (OTC Policy), regulating the use of seawater for cooling purposes at coastal power plants in California. Under the Policy, plant operators are required to implement specific reductions in water intake flow rate at once-through cooled power plants. Affected power plants must meet assigned compliance dates set forth in the Policy. At present, the Policy requires the Huntington Beach Generating Station (HBGS) to achieve compliance no later than 12/31/20. However, the Policy includes provisions allowing for revisions to compliance dates in order to address grid reliability concerns. A proposed amendment to the OTC Policy that may affect the compliance date applicable to HBGS is currently under consideration by the State Water Board. For further information on the proposed amendment, please consult the State Water Board staff responsible for Policy

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				implementation: (https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/). The OTC Policy contains separate requirements for mitigation of marine life impacts associated with those power plants operating with OTC systems after 10/1/15, with those requirements continuing in effect until each power plant comes into compliance. The Santa Ana Water Board reviewed the proposed Facility to determine whether it complies with Water Code section 13142.5(b) and the implementing provisions of the Ocean Plan. As discussed in Attachment G, the proposed Facility complies with Water Code section 13142.5(b). As required by Water Code section 13142.5(b), the Discharger must mitigate for all marine life impacts associated with the Facility (see detailed discussions in Attachments G.1 and G.4).
0006	Glenn Howland	Dec 04, 2019	Has the Board adopted Bioassay Protocols and Chemical testing methods for their use in monitoring complex effluent ocean discharges for the brine discharge associated with the HB Desalination Unit.	As discussed in the Fact Sheet (Attachment F to the Tentative Order, section IV.C.4.b.), the State Water Resources Control Board is currently developing new Toxicity Provisions that incorporate the Test of Significant Toxicity (TST), but they have not yet been adopted. Although the State Board Toxicity

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				Provisions will be applicable to Inland Surface Water and Enclosed Bays and Estuaries, U.S. EPA has concluded that the TST is a superior approach for addressing statistical uncertainty for all waters when used in combination with U.S. EPA's toxicity testing methods, U.S. EPA recommends that the TST provisions be implemented in federal permits issued by EPA Region 9; therefore, the Order implements U.S. EPA's TST approach for evaluating compliance with WET. The required toxicity testing implementing the TST approach for the proposed facility is discussed in Attachment E of the Tentative Order
0007	Larry McNeely	Dec 04, 2019	I was a water treatment engineer and I find this expensive option out of line considering all the other options. When we ignore all the better options only to support a private for-profit investment scam who have influenced our decision makers with campaign support and have bought mailers to spread their false information. It is now time to look at the facts and options. We as a community Huntington Beach do not support this fiasco.	See the response to comment 0004.19.
0008.01	Barbara Mourant	Dec 04, 2019	Irvine Ranch Water District (IRWD) understands that Poseidon and Orange	As noted in the comment, OCWD has executed a non-binding term sheet for the

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	Irvine Ranch Water District		County Water District (OCWD) have executed a non-binding term sheet for the purchase of product water from the Huntington Beach Desalination Plant (HBDP). Without firm commitments from retail groundwater agencies to accept deliveries of the HBDP product water (and OCWD has acknowledged that it has not received any firm commitments), OCWD will have to resort to recharging into the groundwater basin nearly all of the HBDP product water it purchases. This approach will force all of the groundwater producer agencies to accept and pay for water that many agencies have no need for; agencies that have no need for the water produced by HBDP should be allowed to opt-out of this supply.	purchase of the product water. At the workshop on May 15, 2020, OCWD also acknowledged that it has not received firm commitments from other agencies to purchase the product water and that if they cannot find agencies to buy the product water then they will inject the water into the groundwater basin. OCWD also indicated that they are still searching for buyers and have not decided how to use the desalinated water from the Facility. Accordingly, it is too speculative to guess how OCWD will use the desalinated water. Moreover, the Santa Ana Water Board does not have the authority to require OCWD to provide opt-out options for its member agencies.
0008.02			Investigations commissioned by IRWD quantified significant water quality impacts to the local groundwater basin as a result of recharge of “single pass” RO treated seawater, in violation of the State Water Resources Control Board Anti-Degradation Policy (Resolution No. 68-16). To reduce the impact of HBDP product water recharge, one of IRWD’s consultants recommends a “second pass” RO process would need to be	Agree—any produced desalinated water that is to be used for recharge must not adversely affect the beneficial uses of the Orange County groundwater basins and must meet water quality objectives. High concentrations of boron in irrigation water could adversely impact citrus and other crops. A second pass RO treatment process is currently not part of the project description

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			implemented. Specifically, to avoid water quality impacts to IRWD's recycled water system, it would require an 80% second pass RO treatment, resulting in a 127-MGD intake and a 77-MGD brine discharge. And to avoid additional boron accumulation in the local groundwater basin would require a 100% second pass RO treatment, resulting in a 131-MGD intake and an 81-MGD brine discharge. Neither the significant water quality impacts resulting from the recharge of the single pass RO treated water, nor the significantly increased flow rates through the HBDP intake and brine discharge facilities resulting from an 80% or 100% second pass RO treatment. Until the HBDP treatment process is refined, the HBDP cannot be evaluated by the Regional Board for an NPDES permit.	and was not included in the Discharger's Report of Waste Discharge or permit application. The Santa Ana Water Board can only act on and analyze potential impacts of the project as currently proposed. OCWD informed the Santa Ana Water Board that they have not decided how they will use the desalinated water. If OCWD decides to use the water to recharge the groundwater basin, OCWD will need to obtain a permit from the Santa Ana Water Board for the injection. However, the permitting of the injection of the desalinated water is not currently before the Board.
0008.03			IRWD recommends that the Regional Board defer consideration of an order to renew the NPDES permit for the HBDP until such a time the following have been accomplished: • Water agencies interested in purchasing the water produced by the HBDP have committed to purchase and take delivery of this water;	Which water agencies ultimately purchase the water produced by the Facility is not relevant to the Facility's tentative NPDES permit requirements or the Santa Ana Water Board's analysis of whether the Facility complies with Water Code section 13142.5(b).

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			• OCWD has developed a plan for distributing water from the HBDP and water supply integration studies have been completed based on the distribution method(s); • Water quality specifications for the HBDP product water have been identified that are compatible with the selected distribution option and that avoid water quality impacts; • A preliminary design of the HBDP has been completed that complies with the identified water quality specifications; • Final HBDP intake and brine discharge flow requirements have been identified; and • A new or subsequent Environmental Impact Report is prepared and certified by the water agencies that have committed to purchase and take delivery of the product water, that evaluates the final HBDP intake and brine discharge flow requirements.	How OCWD distributes the water produced by the proposed Facility is not relevant to the Facility's tentative NPDES permit requirements or the Santa Ana Water Board's analysis of whether the Facility complies with Water Code section 13142.5(b). If OCWD decides to use the desalinated water to recharge the groundwater basin, they will need to obtain a permit from the Santa Ana Water Board for the injection. The Board will consider the water quality impacts of recharge at that time and impose appropriate requirements to protect water quality. A subsequent Environmental Impact Report is not required. The City of Huntington Beach certified a Final Subsequent Environmental Impact Report for the proposed Facility in 2010. The Discharger later made changes to the intake and outfall design to comply with the Ocean Plan's desalination provisions. The State Lands Commission analyzed those changes in a Final Supplemental Environmental Impact Report that it certified in 2017. During the Santa Ana Water Board's review of the proposed Facility, the Discharger made further changes to the diffuser design

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				for the outfall based on a third-party reviewer's assessment of their proposed design. The changes are not substantial and do not involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects that would require major revisions to the previous EIRs. As such, the Santa Ana Water Board prepared an addendum to the address the minor changes to the diffuser design. Further, environmental analysis of OCWD's possible use of product water for recharge would be too speculative at this point as OCWD has informed the Santa Ana Water Board that it has not decided how they will use the product water. If OCWD decides to use or distribute the product water in a manner that differs from that analyzed in the 2010 Final Subsequent Environmental Impact Report, OCWD will need to prepare the appropriate CEQA documentation for such changes. Also, see responses to comments 0004.18 and 0008.04. With respect to the comment that consideration of the order should be postponed because "Final HBDP intake and

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				brine discharge flow requirements have not been identified" - this is not correct. The Tentative Order does have specified intake volume and discharge volume requirements. Intake volume requirements are specified in Section IV.B of the Tentative Order and discharge volume requirements are specified in Section III.C of the Tentative Order.
0008.04			Should the Regional Board decide to proceed with an NPDES permit for the HBDP, it should require a more complete anti-degradation analysis to determine that the project meets the "maximum benefit" test under the State Water Resources Control Board Anti-degradation Policy. This complete analysis should include a degradation analysis of groundwater due to recharge of the product water and a degradation analysis of the ocean that includes intake and brine discharge flow scenarios associated with a two-pass RO system that will be needed to avoid water quality impacts. The Regional Board should also include a requirement for routine monitoring of boron in the seawater intake, brine discharge and product water. This will allow maintaining a mass balance of boron that will assist	A two-pass RO system is not currently being proposed by the Discharger and is not addressed by the proposed permit. If there are any significant design or internal operational changes to the Facility, then the permit and Water Code section 13142.5(b) determination would need to be amended. As discussed in the Tentative Order, Fact Sheet (Attachment F), an antidegradation analysis has been conducted that evaluated the potential for degradation of the receiving water resulting from the brine discharge. Effluent limitations ensure that there will be no degradation of water quality in the receiving water. (See also response to CCKA comment IV.B, Point 3.) OCWD has not determined how it will use the potable desalinated water from the proposed Facility. If OCWD decides to use

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			in avoiding impacts to the Basin and retail agency water supplies.	the desalinated water to recharge the groundwater basin or for the Talbert Barrier, they will need to obtain amended waste discharge requirements from the Santa Ana Water Board for the injection. The Santa Ana Water Board would then conduct the antidegradation analysis for impacts to the groundwater due to recharge. The project currently pending before the Santa Ana Water Board, however, does not involve the injection of desalinated water to recharge the groundwater basin or any other discharge to groundwater. The Tentative Order requires influent monitoring (see Attachment E); however, boron was not one of the constituents to be monitored. We agree that it is appropriate to include boron and have added boron to the influent monitoring requirements (see Tentative Order, Attachment E, Table E-2). Boron has also been added to the effluent monitoring requirements (see Tentative Order, Attachment E, Table E-3). DDW will establish the monitoring requirements for the product water through its permitting process. Comments concerning monitoring requirements for product water should be directed to DDW.

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0008(A)	Irvine Ranch Water District (Appendix A)		Thomas Harder and Company Technical Report on Evaluation of Potential Effects of the Proposed Seawater Desalination Project (Hydrogeologic Modeling)	Appendix A was considered in the responses to comments 0008.01 to 0008.04 above.
0008(B)	Irvine Ranch Water District (Appendix B)		HDR Report on Potential Effects of the Proposed Seawater Desalination Project (Salt Balance Modeling)	Appendix B was considered in the responses to comments 0008.01 to 0008.04 above.
0008(C)	Irvine Ranch Water District (Appendix C)		Trussel Technologies Technical Memorandum on Boron Mitigation for Seawater Desalination (Boron Removal Modeling)	Appendix C was considered in the responses to comments 0008.01 to 0008.04 above.
0009	Robert Faiella	Dec 04, 2019	As a longtime resident of Huntington Beach, I am completely against the de-sal plant!! We don't want it in our community and we will let everyone know we are against it.	Comment noted.
0010	Gino Bruno	Dec 03, 2019	The Orange County Water District manages an enormous groundwater basin that contains over 60 million acre-feet of fresh groundwater beneath the northern two-thirds of the county. That's enough water for almost 480 million people to live on comfortably for a year. OCWD captures Santa Ana River flows in large percolation ponds to regularly recharge the basin. OCWD has managed the Orange County groundwater basin very conservatively, only allowing pumping about 300,000	See responses to comments 0004.19.

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			acre feet per year, about 0.5% of basin storage. Pumping down the groundwater basin a mere 5%, or 3 million acre- feet, is enough of a water supply for 10 years, without any other outside sources of water to replenish the basin. With this affordable, local and reliable water supply already in the bank, why is Orange County entertaining a proposal for 56,000 acre feet of desalted ocean water a year at triple the cost of other sources? OCWD already uses up to 30 million gallons a day from its Ground Water Replenishment System. It is the largest wastewater purification project in the world that can treat up to 100 million gallons a day, at a fraction of the cost of desalination. When needed in the distant future, OCWD, as a public non-profit agency, will surely be able to build and operate a suitably designed and lower-cost alternative than what Poseidon Project is prematurely proposing today.	
0011	Mark Tonkovich	Dec 03, 2019	I cannot attend the meeting but want to express my opposition to Poseidon.	While there may be other water supply options, it is not for the Santa Ana Water Board to choose water supply projects. The

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			There are better and less costly solutions.	local and regional water agencies are responsible for determining how to meet their water supply demands. See also response to comment 0004.19.
0012	Paul Weghorst – Irvine Ranch Water District	Dec 05, 2019	(correction to an attachment for comment 0008)	The Santa Ana Water Board acknowledges receipt of your corrected attachment to the IRWD comment letter.
0013	Penny Kyle	Dec 07, 2019	Please deny permits for the proposed Poseidon project. I am a citizen of Huntington Beach and am against this project.	Comment noted. A response is not required as the commenter does not identify reasons for denying the permit.
0014.01	Jason Pyle	Dec 07, 2019	When the SEIR was accepted by the Huntington Beach City Council in 2010, there was a limit placed on the project that it not increase noise more than 5 decibels above ambient, at the nearest residential property and further, the City Council required a letter from Poseidon where Poseidon identified that the noise concern was valid and that the Noise Study was incomplete.	The City of Huntington Beach analyzed the noise impacts of the Facility in the 2010 Final Subsequent Environmental Impact Report (2010 FSEIR) and responded to the commenter's comments on the draft SEIR regarding noise impacts. The Discharger must comply with the mitigation measures for noise as set forth in the 2010 FSEIR. (See response to comment 0004.15.) Additionally, the State Lands Commission analyzed noise impacts related to the changes to the Facility's intake and outfall in the 2017 Final Supplemental EIR and imposed additional mitigation measures to mitigate noise impacts related to the offshore construction for the intake and discharge modifications. (See 2017 FSEIR, Applicant Proposed Measure 5, p. 4-9 to 4-10.)

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				Finally, the Santa Ana Water Board analyzed noise impacts related to changes in the diffuser in the Addendum and concluded that the noise impacts would the same as those analyzed in the 2017 FSEIR.
0014.02			Since the EIR and SEIR was competed significant changes have taken place in the immediate area that will bring new legal challenges to Poseidon. The Magnolia Marsh Lands and the Brookhurst Mash Land revitalization projects have been completed and there is more indigenous wildlife than when the 2010 SEIR was done.	The 2010 Final Subsequent Environmental Impact Report prepared by the City of Huntington Beach included consideration of the restoration of Brookhurst Marsh and Magnolia Marsh that was in progress as part of the existing environmental setting and analyzed potential environmental effects on the wetlands. (See 2010 FSEIR, pp. 1-27 to 1-28, 4.3-2, 4.6-4, 4.7-1, 4.9-2 to 4.9-8, 4.9-17, 4.9-23, 4.9-47, 5-24, and 6-37.) The 2017 Final Supplemental Environmental Impact Report prepared by the State Lands Commission also considered Magnolia Marsh and Brookhurst Marsh as part of the existing environmental setting and considered potential environmental effects to the wetlands in relation to aesthetics and recreation. (See 2017 FSEIR, pp. 4-71 to 4-72, 4-75, 4-79 to 4-80, 4-154 to 4-157.) The 2010 FSEIR listed the wildlife species known to exist in the project area. (2010 FSEIR, p. 4.9-3 to 4.9-4.)

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				The commenter does not identify a new significant environmental effect or a substantial increase in the severity of previously identified significant effects that would warrant the preparation of a subsequent or supplemental EIR.
0014.03			AES power generation facility was approved by the CEC to build Two completely new Power Generating Plants. The new Generating Plants will have different noise impacts, different geological positioning and will be under construction for the next 7 years. One of the two plants is now up and running. The Magnolia Tank Farm has been sold and is scheduled to be thousands of family homes that will be located 25 yards from the proposed Poseidon Project site. The proposed Poseidon Project will have Significant Impacts to the Residential Homes, specifically noise, that will be impossible for Poseidon to overcome. The construction of the New AES plant, and the construction of homes was never factored into Poseidon's EIR. Given the significant changes in the area since the Original EIR was done and the fact that Poseidon is now proposing completely different operational systems,	The 2017 Supplemental EIR prepared by the State Lands Commission considered the AES power generation project and the Magnolia Tank Farm redevelopment project in the analysis of cumulative impacts. (See 2017 FSEIR, pp. 3-6, 3-7 to 3-8.) See response to comment 0014.01 regarding noise impacts and mitigation measures the Discharger must implement.

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			it would only be prudent and responsible to require a new EIR to be argued in Court.	
0014.04			The new water reclamation system is now up and running at the HB / Fountain Valley Sanitation Facilities and will produce over 120 million gallons of fresh water at a fraction of the cost to the Rate Payers. The need for the water produced by Poseidon is now questionable at best if not even needed.	The Ocean Plan, chapter III.M.2.b.(2) requires that “the identified need for desalinated water” be “consistent with” an applicable urban water management plan (UWMP) prepared in accordance with Water Code section 10631, or other water planning documents if an UWMP is not available. The Discharger, Orange Water County Water District, and the Municipal Water District of Orange County (MWDOC) have submitted information that adequately identifies a need for the 56,000 AFY of desalinated water that will be produced by the proposed Facility. This identified need for the desalinated water is consistent with MWDOC’s 2015 Urban Water Management Plan. See Attachment G.2 to the Tentative Order. The Santa Ana Water Board’s review of the need for the desalinated water is not based on whether there are other water supply options available to meet local demand. It is up to the relevant water planning agencies

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				to choose among their water supply options to meet water demand.
0014.05			The Noise Study conducted by Poseidon only compared the anticipated noise levels to City Noise Ordinance standards and not on the comparison between current ambient noise and new operation noise which will have potential impacts on threatened and endangered wildlife in the neighboring marshes and the Wetlands and Wildlife Care Center. Further, Poseidon has ignored the cumulative impacts of the operation of both the AES energy facility and the Poseidon desal facility and possible cumulative impacts of construction at the AES energy facility as it changes out its once-through-cooling process and the construction of the Poseidon desal facility.	See responses to comments 0004.15, 0014.01, 0014.02, and 0014.03.
0015.01	Jordan Brandman Director, Orange County Water District	Dec 09, 2019	One of the barriers to developing all new water supplies, including seawater desalination, has been capital costs; however, this WIFIA credit assistance program will help reduce the cost of building the project. Consistent with the water purchase terms between OCWD and Poseidon, the benefits of the lower-cost financing will accrue to the ratepayers in the form of lower-cost	This comment is not relevant to the Santa Ana Water Board's consideration of the Tentative Order. See response to comment 0003.02.

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			water and help pave the way for a new, locally controlled droughtproof supply of drinking water for Orange County.	
0015.02			Project construction will create 700 jobs over four years.	This comment is not relevant to the Santa Ana Water Board's consideration of the Tentative Order. See response to comment 0003.02.
0015.03			The drinking water that would be produced by the Huntington Beach Seawater Desalination plant is identified in the Orange County Water District's Groundwater Management Plan as the largest local supply available to Orange County. The water produced will be climate resilient and 100% carbon neutral.	Orange County Water District's 2015 Groundwater Management Plan lists the Huntington Beach Ocean Desalination Plant as a recommended project that would increase water supply by up to 56,000 acre-feet per year. Additionally, the State Lands Commission's Final Supplemental Environmental Impact Report stated that the Facility, "will be carbon neutral, an outcome that would be achieved through the purchase of offsets and reductions achieved by reduced use of other water supplies." (See 2017 FSEIR, p. 4-124.).
0016	Pat Riley	Dec 9, 2019	The two minutes I was allowed to speak at the Huntington Beach City Hall was not sufficient for me to communicate my report about Poseidon. I would appreciate it if the board and others concerned about this issue would watch my presentation	Receipt of comment acknowledged. However, responses to the video link are not provided as it is not a written comment. The two-minute time limit for oral comments was imposed on all speakers (with some limited exceptions) at the December 2019 workshop. It would be unfair and inappropriate to allow commenter additional time via the video comments. Responses to

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			https://www.youtube.com/watch?v=XJLWv2VEU9w&feature=youtube	the written comments from this commenter are provided above. See responses to comments 0004.01 to 0004.19.
0017.01	Patrick Brenden Council-member City of Huntington Beach	Dec 4, 2019	I have reviewed the Tentative Order prepared by staff and find it to be robust and consistent with the prior approvals issued to the project by the City of Huntington Beach.	Comment noted. Under provisions of the Ocean Plan, the proposed Huntington Beach Desalination Facility is a new facility that must undergo a new review to assess compliance with Ocean Plan requirements for desalination facilities that went into effect in 2016. In considering compliance with the Ocean Plan, the Santa Ana Water Board is not bound by the City's prior approvals.
0017.02			The proposed project has changed significantly – and for the better - since the City's last approval in 2010 and the Regional Board's 2012 permit amendment. Today, the proposed facility will use almost 20% less seawater than previously permitted to produce the same 50 million gallons per day of drinking water, implement state-of-the-art seawater intake and discharge technology authorized under the California Ocean Plan, and maybe most notably the project now includes the long-term preservation and enhancement of the Bolsa Chica Wetlands.	See responses to comments 0004.01 and 0004.03 regarding intake and discharge technology. The Discharger has proposed to restore and preserve significant portions of the Bolsa Chica wetlands to offset those impacts they cannot avoid from the construction and operation of the proposed Facility. In accordance with Attachment K to the Tentative Order and the Discharger's Marine Life Mitigation Plan, the Discharger must complete restoration and preservation tasks and actions that should ensure the long-term viability of the Bolsa Chica wetlands.

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0017.03			The Bolsa Chica mitigation plan proposed by Poseidon and incorporated into the permit by your staff is an urgent matter. Absent the implementation of this plan there is no identified long-term funding sources to ensure this valuable coastal habitat is preserved and enhanced in the future.	Long-term sources of funding are needed to ensure that the inlet to Bolsa Chica remains open and properly functioning. See response to comment 0080.03.
0017.04			The desalination project now qualifies as providing multiple public benefits - a climate resilient, drought- proof drinking water supply and an environmental enhancement project that will enhance the largest coastal wetlands complex in the Southern California Bight and one of the state's critical Marine Protected Areas.	Comment noted.
0017.05			Numerous agencies including the City of Huntington Beach and Regional Board have previously found the environmental effects of the proposed desalination project to be insignificant and/or capable of being mitigated. At the same time the local and regional benefits of this project are indisputable. Please approve your staff-prepared permit amendment this coming March without further delay.	The analyses in the 2010 Final Subsequent Environmental Impact Report and the 2017 Final Supplemental Environmental Impact Report both concluded that there were significant and unavoidable impacts associated with the Facility. The City of Huntington Beach and the State Lands Commission adopted statements of overriding considerations with their approvals of the project. While the commenter asserts that the benefits of the project are indisputable,

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				there are other commenters who have raised concerns about the project.
0018.01	Mike Posey Council-member City of Huntington Beach	Dec 4, 2019	The City of Huntington Beach has issued permits and entitlements to the planned desalination facility on several occasions over the year. I am pleased to see that after all these years that the City's determination that the facility can be built and operated in an environmentally responsible manner is being upheld by the Regional Board.	The Santa Ana Water Board has not acted on the Tentative Order yet. Further, the adoption of the Tentative Order would not function to "uphold" actions taken by the City of Huntington Beach. The scope of the Santa Ana Water Board's review is limited to the discharge of pollutants from the Facility to the Pacific Ocean and whether the Facility uses the best available site, design, technology, and mitigation feasible to minimize the intake and mortality of all forms of marine life. See also response to comment 0017.01.
0018.02			The Regional Board's Tentative Order includes a vast investigation of project alternatives (i.e., project site, design, size, seawater intake and discharge technology, mitigation), just like the City did almost ten years ago, and the permit amendment correctly authorizes the operation of a project that complies with all local, state and federal laws and regulations.	The Tentative Order does not make findings on whether the project complies with other laws or regulations that are not specified therein or otherwise required for the Santa Ana Water Board's analysis. See responses to comments 0017.01 and 0018.01.
0018.03			I want to commend your staff on their excellent work. I concur with the Regional Board staff's determination that issues commonly raised by desalination opponents about the cost of water and	Comment noted. Staff make recommendations to and provide analyses for the Santa Ana Water Board, but they do not make determinations or findings. See

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			preferred alternative supplies are beyond the regulatory scope of the Regional Board and beyond the intent of the State Water Board's recently adopted desalination regulations.	response to comment 0014.04 regarding the Board's scope of review on need.
0018.04			It's important for the Regional Board to know that as a condition to the aforementioned City-issued permits, Huntington Beach, at its sole option, can receive up to 3,360-acre feet per year of desalinated water at a 5% discounted price off the rate its pays for imported water. This will allow the city's water ratepayers to save money and access over 10% of its demand from a locally controlled, climate-resilient water supply.	The City's option to receive up to 3,360 acre-feet/year of the desalinated water is discussed in the analysis of the need for the desalinated water. (Attachment G.2 to the Tentative Order)
0018.05			The vast majority of the 200,000 constituents that I represent support the proposed desalination plant as do I. I strongly encourage you to approve the amended and renewed permit in March and avoid and further delay in the implementation of this project.	Comment noted.
0019	Dan Silver Endangered Habitats League	Dec 11, 2019	Please reject this desalination plant. Water conservation can supply all the water needed, without the adverse marine effects and the huge energy consumption.	See responses to comments 0004.19 regarding water supply options; 0004.01, 0004.03, 0022.04, and 0036.01 regarding marine impacts; and 0004.05 regarding energy consumption.
0020.01	Steve Knutsen	Dec 11, 2019	I feel very strongly that the Poseidon Project should be defeated. Here are	See responses to comments 0004.19, 0031.02, and 0032.01.

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			just a few of the reasons why Poseidon would be such a bad project: -Extravagantly expensive - over a billion dollars cost for plant -Ratepayers would have to pay for all the Poseidon water for 30 years whether it's needed or not, guaranteed by the contract Poseidon proposes -Poseidon desal water costs 3 to 4 times more than the water we have now	
0020.02			-Environmentally destructive - would create a dead zone in ocean in surrounding area -Endangered Least Terns and other wildlife would be threatened since their fishing area in wetlands and ocean would be badly damaged by pollution.	As stated in Finding 16, the new linear diffuser will meet water quality standards within 130 feet of the discharge. This rapid mixing and efficient dilution will prevent the formation of a dead zone in the area around the discharge. See responses to comments 0004.01 and 0035.04. Also see section 4.1 of the State Lands Commission's certified 2017 final SEIR.
0020.03			-Energy-intensive use of electricity to run the plant - we don't need the greenhouse gases it would cause	See responses to comments 0004.05 and 0004.12.
0020.04			-Water is not needed here since Orange County has a large aquifer which provides 70% of our water needs -the rest is imported water and is 3 times cheaper	See responses to comments 0004.19, 0014.04, and 0032.01.

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0020.05			-Carlsbad Poseidon has failed to deliver all the water to San Diego County they promised by contract due to repair delays -Carlsbad Poseidon has paid million of dollars in fines for polluting the area -Conservation is a much more productive and inexpensive solution.	See responses to comments 0004.09. However, commenter 0026 (San Diego County Water Authority) discusses their experience with Poseidon related to the Carlsbad desalination plant in their comment letter. See also response to comment 0173.02. See response to comment 0004.19 regarding supply alternatives.
0021	Scott Cooper	Dec 11, 2019	Please do not allow build the building of this plant in our neighborhood. There is no reason to add this “high cost” unnecessary eye sore to our city in my neighborhood.	See responses to comments 0004.19 and 0022.04.
0022.01	Lynn Friedman	Dec 11, 2019	Let us solve our water issues with a less intrusive, destructive and expensive program. There are many that have been shown to not only equal to what Poseidon claims to be able to accomplish in giving water, but that explain and answer the questions that are asked of them. Poseidon is not something we want in our beaches- it is bad for the marine life, ugly, expensive and asks us to pay these big sums without even supplying us answers to the questions asked of them. They have not given information asked of them by city council members.	See response to comment 0004.19 regarding water supply alternatives. See response to comment 0032.01 regarding cost of the water. See responses to comments 0004.01, 0004.03, 0022.04, and 0036.01 regarding marine life impacts.

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0022.02			The Poseidon facilities running now do NOT have good track records, constantly in violation.	See responses to comments 0168.02 and 0193.07.
0022.03			If in the future, should other programs fail, let's bring them back to the negotiating table. Then they need to prove answers and show what improvements they have made in the interim.	The Santa Ana Water Board is considering the project as proposed in the Discharger's application. The Santa Ana Water Board has thoroughly reviewed the NPDES renewal application and the request for a Water Code section 13142.5(b) for the proposed Facility, the documents the Discharger submitted in support of its application, and the comments from the public, and is prepared to act on the portion of the project that is within its purview. See response to comment 0004.19 regarding alternative supply options.
0022.04			I have lived here all my life and I and my family love the beauty of our neighborhoods and beaches. Do NOT allow Poseidon to build a desalinization plant here.	The proposed desalination facility will be built adjacent to the existing AES generating station in an industrial zoned area of Huntington Beach and will use the generating station's existing intake and discharge, such that there are unlikely to be additional impacts to local beaches or the community. Construction impacts, including building the facility and modifying the intake and discharge to meet the Ocean Plan's requirements to minimize impacts to all forms of marine life, will be temporary impacts.

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				The Discharger must mitigate the construction and operational impacts to marine life by completing preservation and restoration activities at the Bolsa Chica ecological reserve. The ecological reserve provides habitat for resident threatened and endangered species and recreational opportunities for the local community.
0023.01	Brett Korte UCI Law Environmental Law Clinic, Representing Azul	Dec 13, 2019	On behalf of Azul, the UC Irvine Environmental Law Clinic respectfully reiterates its request that the California Regional Water Quality Control Board, Santa Ana Region (Regional Board) extend the written comment deadline for Poseidon's Draft Waste Discharge Requirements (Order No. R8-2020-0005, NPDES No. CA8000403), and Water Code § 13142.5(b) Conditional Determination through, at a minimum, February 28, 2020.	See response to comment 0001.
0023.02			Additionally, as stated at the December 6, 2019 workshop, Azul requests that the Regional Board hold another public hearing at a date well before the adoption hearing, now scheduled for April 3, 2020. Azul believes that additional opportunities for comment are necessary to allow for adequate public participation.	The Santa Ana Water Board held a second workshop (via the virtual application Zoom) on the Tentative Order on May 15, 2020. The workshop provided the public with another opportunity to participate and comment on the Tentative Order. Additionally, the Board heard informational items on the proposed Facility as staff was developing the Tentative Order during four different board meetings on

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				February 9, 2018, February 8, 2019, March 22, 2019 and June 14, 2019. There have been ample opportunities for the public to participate and comment on the proposed Facility. The public will have another opportunity to make oral comments when the Board holds the hearing for the Tentative Order.
0023.03			Finally, as requested in the Regional Board's Notice of Public Workshop and Notice of Public Hearing, the oral comment presented by Certified Law Student Michael Damasco on behalf of Azul at the December 6, 2019 workshop attached herein.	Comment noted.
0023a	Michael Damasco, UC Irvine School of Law's Environmental Law Clinic, representing Azul (Summary of oral comments made at the Dec 6, 2019 Regional Board	Dec 6, 2019	(From Attachment provided): Azul has two requests. One, that the Board extend the deadline to submit written public comment to February 28. And two, that the Board provide an additional opportunity for the public provide oral comment at a hearing held well ahead of the adoption hearing. The public notice for the draft Order and Determination was delivered less than two weeks ago, and worse, today's workshop is the only listed opportunity for oral public comment before the	See responses to comments 0001 and 0023.02.

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	public workshop)		adoption hearing. That does not honor the resolution to partner with communities and promote public participation that the Board just committed to. Extending the written comment deadline through the adoption hearing, and providing at least one additional opportunity for oral testimony will allow for a more appropriate level of public input. There are - of course - substantive concerns to be raised.	
0024.01	Hildy Meyers	Dec 14, 2019	Poseidon proposes the most expensive of all water options for Orange County, which would make water less affordable for low income households in Orange County. Water is a human right and should not be privatized or priced beyond the means of low-income people.	See responses to comments 0004.19 and 0032.01 regarding water supply alternatives and cost of the desalinated water See response to comment 0188.01 related to the human right to water.
0024.02			In the process of pursuing this boondoggle, Poseidon has bought off nearly every politician in Orange County and beyond.	This comment is not relevant to Santa Ana Water Board's consideration of the Tentative Order See response to comment 0003.02.
0024.03			Poseidon proposes the use of outdated technology which is highly energy intensive, and therefore contributing to the climate crisis and ocean level rise. The discharge of wastewater will further	The commenter has not identified which technology is considered to be outdated. As required by the Ocean Plan, the proposed intake would be screened with

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			damage the environment, as will using the outmoded ocean water intake.	1mm wedgewire screens. See response to comment 0004.03. The 1mm wedgewire screens are the best technology currently available for surface intakes. The discharge of brine will be accomplished through a multiport diffuser which – when wastewater for commingling is unavailable – is the best available technology. See responses to comments 0004.01, 0036.01, 0082.04, 0168.02 and CCKA IV.A. See response to comment 0004.14 regarding the use of the existing intake and discharge pipelines As for the use of reverse osmosis to remove salt from seawater, this technology is the proven technology to desalinate seawater. The Discharger is also required to provide compensatory mitigation for impacts to marine life caused by the construction and operation of the facility. See response to comment 0017.02. Additionally, see response to comment 0004.05 regarding energy use and response to comment 0177.09 regarding climate change and sea level rise.

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0024.04			Poseidon has a poor track record and is not a good corporate citizen. They should not be allowed to damage the environment in order to use outdated technology to privatize unneeded water in Orange County.	See response to comment 0024.03 regarding the proposed technology and responses to comments 0014.04, 0055.01, and CCKA I.D. regarding the need for the desalinated water.
0025	Kaitlyn Kalua California Coastkeeper Alliance	Dec 16, 2019	The document provided supports California Coastkeeper Alliance's concern regarding Board Member Kris Murray's participation in matters concerning the Draft Waste Discharge Requirements for Poseidon-Huntington Beach Desalination Facility (Order No. R8-2020-0005, NPDES No. CA8000403), and we respectively request that Board Member Murray recuse herself from Regional Board actions with respect to this project.	The Santa Ana Water Board received the recusal request and will respond to the commenter in a separate letter.
0026.01	Jim Madaffer San Diego County Water Authority	Dec 19, 2019	The San Diego County Water Authority ("Water Authority") has a strong interest in making sure that discussions about the Carlsbad facility are based on fact. To this end, I want to address the following faulty impressions created by some stakeholder comments during your meeting: Comments were made at the workshop that the Carlsbad Desalination Plant is experiencing serious performance	Comments from the San Diego County Water Authority are acknowledged.

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			issues. The Water Authority strongly contests such comments. Since start-up in December 2015, the state-of-the-art desalination facility has provided San Diego County with over 57 billion gallons of high-quality, locally controlled and climate resilient drinking water. During the state-imposed mandatory reductions on water use that took place during 2016, California regulators certified the Carlsbad Desalination Plant as a "drought-resilient" water supply. This certification provided San Diego County with relief from water restrictions and helped protect the regional economy. In fact, this past May the San Diego Regional Board approved the long-term operation of the Carlsbad facility, making it the first plant to be permitted by the Water Boards under the new Ocean Plan Amendment regulations.	
0026.02			Like any complex water supply project, efforts to optimize the Carlsbad plant performance resulted in temporary shortfalls in production that are expected to occur during the initial years of startup and operation of any new facility. I'm pleased to report that these startup challenges have been resolved to the	See response to comment 0026.01.

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			Water Authority's satisfaction, the temporary shortfalls didn't impact our ability to meet regional water needs, and - contrary to the comments made at the workshop that the plant continues to be plagued with performance problems - the Carlsbad plant has produced and delivered 99% of the water requested by the Water Authority in the contract year that started July 1, 2019. In recognition of this outstanding performance, Fitch Ratings recently upgraded its rating on the 2012 construction bonds for the Carlsbad plant, which directly translates to lower cost of water for the Water Authority.	
0026.03			Comments were made at the workshop that the Water Authority has recovered significant “financial penalties” from Poseidon for non-performance. Such comments reflect a lack of understanding of the Financial protections in place for San Diego County ratepayers. Under our Water Purchase Agreement with Poseidon, the Water Authority only pays for water that is delivered, and Poseidon pays the debt service on the desalinated water delivery pipeline in proportion to any undelivered water. Thus, the so- called "financial	See response to comment 0026.01

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			penalties" are pipeline debt service payments made by Poseidon during the plant optimization period in accordance with the terms of the Water Purchase Agreement.	
0026.04			Comments were made at the workshop that the Carlsbad Desalination Project is experiencing serious environmental compliance issues with respect to the chronic toxicity limit established for the plant discharge. The plant has never discharged “toxic brine” to the Pacific Ocean or been shut down due to permit violations. These statements significantly misrepresent the environmental compliance record for the Carlsbad plant. The citation conditions were self-reported and were administrative in nature and did not result in water quality issues or cause harm to ocean plants or animals. The toxicity incidents that Poseidon self-reported are an artifact of an <u>error</u> in the toxicity monitoring and reporting requirements in the original discharge permit adopted by the San Diego Regional Water Board for Carlsbad	See response to comment 0026.01.

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			plant operations. The toxicity monitoring protocol in the previous permit failed to take into consideration the pre-dilution of the brine that is required under the permit prior to discharge. The San Diego Regional Water Board was aware of this problem from the onset of plant operations in 2015 and advised Poseidon to conduct testing on one sample in accordance with the permit requirements, and on a second sample that has been adequately diluted prior to discharge. Samples analyzed without consideration of predilution failed toxicity tests 30% of the time. The samples that were adequately diluted consistently passed the toxicity test, demonstrating that the plant operations did not cause toxic conditions in the ocean, and that violations were an artifact of the testing procedure in the permit. In May of 2018, the San Diego Regional Water Board adopted a revised permit for the Carlsbad plant that corrected the error in the toxicity testing requirements.	
0026.05			Comments were made that desalinated water could harm potable water quality. Not only does water produced at the	The Santa Ana Water Board acknowledges that the potable water from the Carlsbad Desalination Plant provides improvements

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			Carlsbad Desalination Plant provide increased local control and climate resiliency to the San Diego region's water supply, a recent study found it is also improving overall water quality. Since desalinated water was introduced into the region's water supply in late 2015, water hardness has decreased, along with the total dissolved solids and chlorides. The salinity and chloride concentrations of water produced at the Carlsbad Desalination Plant are only about half those of imported water. As a result, the current water supply is helping to prolong the lifespans of many household appliances, improve manufacturing and other industrial operations and support local agriculture. Since the Carlsbad Desalination Plant has lowered the regional water supply's salinity levels, water recycling facilities have observed a pass-through benefit of decreased salinity levels in their recycled water supplies, as well.	to the potable water quality in the San Diego County. The potable water quality from the water supplies in Orange County are not the same quality as in San Diego County. In some areas the water quality from the proposed Huntington Beach Desalination Plant will have higher salt concentration then other Orange County sources and therefore, these areas will not necessarily have the same positive impacts as noted in your comment. However, the potable water from the proposed Facility will be required to meet the water quality standards set to protect beneficial uses associated with the discharge.
0026.06			At a cost of a 0.8 cents per gallon for production and delivery, the Carlsbad facility is proving to be cost competitive with the development of	This comment is not relevant to the Santa Ana Water Board's consideration of the Tentative Order.

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			other new local supplies. At the end of the 30-year water purchase agreement with Poseidon, the Water Authority assumes ownership of the desalination facility. In October, the Water Authority authorized the ownership transfer of the Carlsbad facility conditioned upon Poseidon Water continuing in its plant management role. By any metric, the Carlsbad Desalination Plant has been a tremendous success, it is a critical part of our region's infrastructure and we anticipate many more years of productive partnering with Poseidon.	
0027.01	Forest Earl Surf City Voice	Dec 17, 2019	The OCWD Board of Directors majority has consistently and relentlessly pushed the proposed publicly subsidized $1 billion ocean desalination plant for Huntington Beach proposed by Poseidon Water, a subsidiary of Brookfield Assets, a huge multinational corporation. They have done so through biased public hearings, biased studies that were specifically precluded from considering alternatives and whether a real need for the project exists or not, and through illegal secret meetings held with Poseidon representatives calling the	The allegations regarding OCWD proceedings are not relevant to the Santa Ana Water Board's consideration of the Tentative Order. Regarding alternative water supply and need, see responses to comments 0004.19, 0014.04, and 0055.01.

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			shots (as revealed in articles I wrote for the Surf City Voice).*	
0027.02			The Poseidon project would produce 56,000 AF of water a year and replace an equal amount of cheaper water the OCWD currently imports to refill the Santa Ana River groundwater basin to safe levels after (often excessive) depletion caused by groundwater production by its 19 agencies or "producers." But the price of Poseidon's water would be 3 to 4 times greater than the imported water, which would be freed up for use by other districts outside of OCWD jurisdiction—those districts will be subsidized by OCWD at the rate of the price difference.	See responses to comments 0004.19 and 0032.01.
0027.03			This video (https://www.youtube.com/watch?v=3lqdT-bBIaI) was taken on Dec. 6, 2019 at a public workshop held in Huntington Beach by the Santa Ana State Regional Water Quality Control Board which will vote in April on whether to issue needed permits for the project. A quorum of 8 out of 10 OCWD board members attended the meeting and several of them stood with Poseidon during its 20 minutes of time allotted by the Regional Board to make its case for the project.	This comment is not relevant to the Santa Ana Water Board's consideration of the Tentative Order. The Santa Ana Water Board does not have the authority to consider allegations regarding violations of the Brown Act.

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			OCWD president and vice-president Vincent Sarmiento and Cathy Green (respectively) spoke of the supposed benefits of the Poseidon project, often with dishonest and misleading claims, as if the passage of a contract between the company and OCWD was a done deal, pending approval of state permits. The collection of OCWD board members at the Regional Board meeting, acting no less as an official arm of Poseidon Resources during the company's allotted time, raises ethical and legal questions about impartiality and Brown Act violations, such as holding in effect its own public meeting (within the Regional Board's meeting) without notice, public comments, etc. Watch as Scott Maloni, Poseidon's VP for marketing, kicks project-opponent/OCWD board director Kelly Rowe off of the podium platform, stating (as reported to me), "You're not going to speak on my time" and then brings paid Poseidon lobbyist Barbara Boxer to the podium.	
0027.04			Could it be any clearer who the OCWD BOD really represents? It seems that from now on it would be more appropriate to refer to the Orange	See response to comment 0027.03.

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			County Water District as the Poseidon Water District of Orange County.	
0028.01	Guadalupe Heredia	Dec 18, 2019	I understand the importance of having a reliable source of water, especially in Southern California where more than half of the water supply is imported. Governor Edmund G. Brown signed the Assembly Bill 685 states that "Every human being has the right to safe, clean, affordable, and accessible water. With this in mind, the proposed Desalination plant is not the solution for reliable water for the residents of Orange County. Orange County has a groundwater basin that supplies water to more than 2.4 million residents and is the least expensive source of water. There are alternatives to a desalination plant in Orange County that are economically and environmentally feasible. For example, expanding groundwater recharge, conservation, and stormwater capture.	See responses to comments 0004.19 and 0055.01 regarding alternative supply options; and 0032.01 regarding cost of desalinated water.
0028.02			The desalination plant is expensive, bad for the environment, and is not sustainable. A UCLA study determined that the Poseidon desalination plant can double or triple water cost for rate players. The high rates would directly affect the low-income households by	See responses to comments 0032.01 regarding costs; 0004.01, 0004.03, 0017.02, 0022.04 and 0036.01 regarding marine life concerns; 0004.05 regarding energy use; and 0015.03 regarding carbon neutrality.

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			worsening water affordability concerns in Orange County. The desalination plant will impose threats to marine life and is very energy intensive. Two gallons of water are needed to create one gallon of water.	
0028.03			The Municipal Water District of Orange County conducted an independent assessment on the feasibility of regional water supply strategies and found that the Poseidon Desalination Plant ranked last. There is no need for a Poseidon desalination plant in Orange County. In fact, Orange County has relatively few reliability deficiencies compared to the rest of California. Alternative forms of water projects should be implemented, and desalination plants should be a last resort measure.	See responses to comments 0004.19 and 0055.01 regarding alternative water supply options; 148.09 regarding the 2018 MWDOC Reliability Study, and Attachment G.2 to the Tentative Order.
0029	Ray Heimstra Orange County Coastkeeper	Nov 25, 2019	Given the long timescale in developing this permit, and the complex, technical nature of the project, we respectfully request an extension to submit public comment on the draft permit published by your Board on November 22, 2019. We request an extension to internally review and to consult with technical third-party experts to properly assess the technical components of this draft	See response to comment 0001.

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			permit. We have patiently and diligently waited two years for the release of this draft permit. Specifically, we are asking for a full 60-day comment period to prepare and submit comments on the draft permit.	
0030.01	Ann Tarkington	Dec 04, 2019	There are plenty of other nearby sources of water we have available that cost far less. • OCWD manages a 60+ million acre-feet groundwater basin. That's enough water for almost 480 million people to live on comfortably for a year. • OCWD captures Santa Ana River flows in large percolation ponds to regularly recharge the basin. OCWD has managed the Orange County groundwater basin very conservatively, only allowing pumping about 300,000-acre feet per year, about 0.5% of basin storage. • This groundwater basin provides huge comfort to know we will not be short of good fresh groundwater supplies to maintain our great economy and quality of life, even in a long-term drought emergency situation. • Pumping down the groundwater basin a mere 5%, or 3 million acre-feet, is enough water supply for 10 years,	See responses to comments 0004.19

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			without any other outside sources of water to replenish the basin.	
0030.02			• With this affordable, local and reliable water supply already in the bank, why is Orange County entertaining a proposal for 56,000-acre feet of desalted ocean water a year at triple the cost of other sources? No wonder only insignificant 3,000-acre feet of Poseidon's water has purchase agreements from prospective water agencies. • OCWD already uses up to 30 million gallons a day from its Ground Water Replenishment System. It is the largest wastewater purification project in the world that can treat up to 100 million gallons a day, at a fraction of the cost of desalination.	See responses to comments 0004.19, 0032.01, 0055.01, 0089, 0148.03, and 0149b.06.
0030.03			• Why should we reward this private, for-profit company and expect anything other than the same poor performance they've delivered here and in other parts of the country? • When needed in the distant future, OCWD, as a public non-profit agency, will surely be able to build and operate a suitably designed and lower-cost alternative than what Poseidon Project is prematurely proposing today.	The Santa Ana Water Board is required to act upon the permit application that is currently before it. If OCWD submits an application for a desalination facility in the future, the Santa Ana Water Board will review their application for compliance with applicable laws and regulations. See responses to comments regarding other facilities operated by the Discharger 0079.03, 0091.06 and 0193.07.

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0031.01	Joslin de Diego	Dec 04, 2019	This project has been proven to be a bad deal for our community for the following reasons: more expensive water, loss of ocean micro wildlife, acidification of the ocean, and the list goes on.	See responses to comments 0004.19 and 0032.01 regarding cost of the desalinated water and alternative water supplies; see responses to comments 0004.01, 0004.03, 0017.02, 0022.04, and 0036.01 regarding marine life impacts; and see response to comment 0177.13 regarding ocean acidification.
0031.02			Additionally, the term of contract is incredibly long for an outdated technology, more expensive water and a system that will ruin our local beach water.	The tentative NPDES permit for the Facility will be for a term of 5 years. The Santa Ana Water Board is not a party to the Term Sheet and has no authority to negotiate the length of any contract between OCWD and the Discharger or the price of the water. See also response to comment 0032.01 regarding cost of the desalinated water. Reverse Osmosis is a proven, effective technology to remove salinity from seawater to produce potable water, and the project includes mitigation for the estimated impacts to marine life from the brine disposal (see response to comment 0017.02). See response to comment regarding impacts to water quality, 0033.01.
0031.03			No, to Poseidon.	Comment noted.
0032.01	Taylor Haug	Dec 04,2019	As a HB resident, the cost of water will go up.	The impacts the Facility will have on the cost of water are still uncertain and are not

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				within the purview of the Santa Ana Water Board. OCWD has informed the Santa Ana Water Board that the cost of water for this project will result in about a $3 to $6 monthly increase per household. Comments related to the cost of water are more appropriately directed to OCWD.
0032.02			Additionally, the OCWD only uses .5% of the water stored in the basin. There is plenty of water to go around for Southern California, and I'd hate to see proposal go to fruition.	It is up to OCWD to manage the various sources of water available. The Santa Ana Water Board cannot direct how the District manages the groundwater basin or their various sources of water.
0033.01	Steven Ferrell	Dec 9,2019	I feel it is not right for a private company to have access to Pacific Ocean water intake and discharge unknown amounts of byproduct.	The amount of intake and discharge and the chemical and physical characteristics of the brine discharge have been estimated from similar projects (such as the Carlsbad desalination facility) and from modeling that has been commonly used for these types of discharges. Further, the Tentative Order includes effluent limits to protect beneficial uses of Ocean Waters (Section V of the Tentative Order) as well as extensive Monitoring and Reporting requirements that implement federal and state requirements and ensures that effluent limitations are met (Attachment E to the Tentative Order).

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				Also, see responses to comments 0004.01 0004.03, 0004.11, 0033.01, 0036.01, 0035.06 and 0050.
0033.02			I think the impact to ocean life and plants can hurt us for generations.	The proposed desalination facility has been designed to reduce impacts to all forms of marine life and the Discharger is required to offset impacts that cannot be avoided or reduced by appropriate mitigation. See responses to comments 0004.01, 0004.03, 0017.02, 0022.04, and 0036.01.
0033.03			The cost of using old technology is way too costly and will be forced on public when there are other options to replenish our aquifer.	See responses to comments 0004.19 and 0024.03.
0034	Meg Watson	Dec 23, 2019	Please make sure this project is really worth all the sacrifices we who live in the neighborhoods will be making: noise, pipes, stored ground water, heavy traffic, damage to homes along pipe route. Chance of student crossing danger, And the fact that we would feel better if we were dealing with a respected successful Desalination company with excellent results which are reportable to all of us.	As discussed in the 2010 Final Subsequent Environmental Impact Report (2010 FSEIR), the project construction will have a less than significant effect on traffic with the implementation of mitigation measures. (2010 FSEIR, pp. 1-21 to 1-23.) The Discharger must prepare a traffic management plan before beginning construction to ensure that the project does not substantially increase traffic or congestion. The Discharger must also prepare a traffic control plan before removing materials to minimize disruption due to heavy duty trucks and comply with street use requirements and obtain appropriate local permits. (2010 FSEIR, pp.

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				4.9-58 to 4.9-60.) Additionally, as discussed in the 2017 Final Supplemental Environmental Impact Report, the modifications to the intake and discharge infrastructure will not impact traffic. (2017 FSEIR, p. 4-12.) Damage to homes is not a reasonably foreseeable result of the construction of the delivery pipelines. (See 2010 FSEIR.) See responses to comments 0004.15 and 0014.01 regarding noise impacts; 0026.05, 0079.03, and 0193.07 regarding the Discharger's track record.
0035.01	Dan Jamieson Roxanne McMillen	Dec 30, 2019	Originally, Poseidon planned to use discharge water from the AES power plant to dilute Poseidon-produced waste brine. That dilution source will not be available, nor will alternate dilution sources. The resulting discharge of concentrated brine without dilution will result in a toxic plume that will settle on the ocean floor. Hence, the proposed site fails to use best mitigation measures as originally contemplated.	As commenter notes, wastewater is not available for dilution. In the absence of a dilution wastewater source, the use of a multiport diffuser for the brine discharge is the next best available technology feasible. As discussed in the Fact Sheet (Attachment F to the Tentative Order, Section IV.C.7), the diffuser would achieve rapid mixing of the discharge to meet the salinity receiving water limitation within a distance of 100 meters (328 feet) of Discharge Point 001 as required within Section III.M.3.b.(2) of the Ocean Plan. See also Attachment G, Finding 28.

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				See responses to comments 0004.01 and 0036.01. Additionally, the Discharger must mitigate for all impacts to marine life caused by the discharge. See response to comment 0017.02.
0035.02			OCWD's claim that just 3.8 MGD of subsurface intake could impact the freshwater aquifer is suspect and the Board should evaluate carefully the OCWD staff's ability to make such a prediction, and the conflicts inherent in relying on any OCWD analysis. If subsurface intake could indeed impact the fresh-water aquifer, as claimed by OCWD staff (whose board is pushing the Project), this is further evidence that the Project is too big to operate at the proposed site.	OCWD did not make the claim that 3.8 MGD could impact the freshwater aquifer. That figure was based on the results of the fifth round of groundwater modeling performed by the Discharger's consultant, Geosyntec. OCWD specified that up to 1,000 acre-feet of freshwater per day could be withdrawn from the freshwater inland aquifer without having a significant impact on their seawater intrusion barrier wells . To account for the information provided by OCWD, the fifth round of groundwater modeling factored in a maximum-allowable withdrawal from the inland aquifer of 1,000 acre-feet per day to assess the feasibility of slant wells. Based on OCWD's maximum-allowable withdrawal figure, the model output indicated that the Discharger would be able to use approximately 3 slant wells to extract 3.8 MGD without impacting the seawater barrier system for the inland aquifer (i.e., without exceeding OCWD's withdrawal threshold).

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				Considering the critical need to protect the seawater barrier system, and the limited production volume that could be supplied by a small-scale slant well system, it will be necessary to utilize a surface water intake system for over 96% of the combined intake for the Facility.
0035.03			Subsurface intakes, the best technology, were rejected in part simply due to the size of the proposed Project, and the unknowns of subsurface intake at the scale proposed by Poseidon. Simply propose a grandiose scheme big enough to negate use of best practices should not be justification for not using best practices. For a project of this size, test wells rather than modeling should be used to evaluate whether subsurface intakes are practical.	A reduction in the intake volume for the Facility would not change the 3.8 MGD maximum threshold for protection of OCWD's seawater intrusion barrier (which was based on OCWD's figure of 1,000 acre-feet per year). Test wells would be the most accurate way to demonstrate the actual capability of slant wells for seawater extraction. Installing wells of any type is costly and requires long-term access to property for drilling and sampling the wells. In addition, it can take a significant length of time to acquire coastline property or obtain access to private property, followed by obtaining permits for coastline development/modification, public comment on coastal usage impacts, mobilizing the drilling equipment, and finally drilling and developing the test wells.

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				"Test" wells are not expected to be retained for permanent use but are instead experimental wells for the purpose of gathering data. Therefore, when sufficient hydrogeologic information is available, it is logical and economical to utilize models in lieu of installing wells. In most environmental settings, hydrogeologic models have emerged as a widely accepted, robust, and technically sound method for predicting and visualizing more detailed hydrogeologic conditions (including production capacity) regardless of the size of the project.
0035.04			The tentative order does not appear to address the benefit to marine organisms of AES no longer taking in and discharging ocean water. This benefit to marine life will be lost under the Project's intake plan and the 60-million-gallon per day toxic brine plume that will shear marine life and settle onto the ocean floor, creating an estimated 400-plus acre dead zone.	The proposed facility has been designed to reduce impacts to the maximum extent feasible and to offset any impacts to marine life that cannot be avoided or reduced through appropriate mitigation (see response to comment 0017.02). Section VIII.D of the permit contains the requirements for determining the baseline conditions. This would include evaluating the cessation of OTC operations by AES. See also response to comment CCKA III.A. AES has a separate permit (R8-2014-0076) that incorporates requirements to comply with the State Water Board's OTC Policy.

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				The OTC Policy includes separate interim mitigation to address marine life impacts resulting from operation of a once-through cooling water intake system. Those requirements remain in effect until the power plant comes into compliance with the OTC Policy. See also responses to comments 0004.01, 0004.03, 0022.04, and 0036.01. With respect to the comment on the brine discharge creating a dead zone, the discharge structure will be retrofitted with a multi-port diffuser that has been designed to promote rapid mixing of the brine plume with seawater to reduce the salt concentration of the brine plume to within 2 parts per thousand (ppt) above ambient seawater salinity as required under the Ocean Plan. Also, the multi-port diffuser design will minimize the size of the brine mixing zone to limit the lateral extent of impact of the brine plume on the ocean floor to within 130 feet from the diffuser structure. and meet Ocean Plan requirements. The modelling of the diffuser operation is detailed in Attachment G to the Tentative Order, Findings 14-17 and 28 and in the

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				discharger's submissions – Appendix BBBBB and NNNNN. In addition, as detailed in Finding 28 of Attachment G to the Tentative Order, the Santa Ana Water Board hired an Independent Reviewer, Dr. Phillip Roberts to evaluate the diffuser design. Based upon Dr. Roberts' analysis, the Discharger redesigned the diffuser that demonstrated that rapid mixing would occur, and the Ocean Plan salinity requirements would be met. See also response to comment 0055.02.
0035.05			The Ocean Plan requires that alternative sites be evaluated in order to determine the best site feasible to minimize the intake and mortality of all forms of marine life. Here, the tentative order fails. As noted by Board staff, equipment needed to study mortality at the various alternative sites failed during testing. In addition, surprise data errors, discovered by the consultant and unknown to Staff and the Coastal Commission, forced the consultant to make a series of statistical leaps about alternative site mortality. The Board cannot accept this flawed mortality study.	Attachment G.1 to the Tentative Order includes an evaluation of Discharger's proposed sites and alternative onshore and offshore sites. This thorough evaluation supports the finding that the proposed onshore location for the Facility and the proposed offshore locations for the intake and discharge pipelines are the best available sites feasible to minimize intake and mortality of all forms of marine life. The neutral third-party reviewer of both the proposed offshore location for the intake and alternative sites was Dr. Peter Raimondi, the foremost expert in the field at evaluating impacts from surface intakes for

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				both power plants and desalination facilities. As noted by the commenter, the current meter failed during the 2003-2004 sampling event. However, current meter data collected by OCSD's brine outfall (located approximately 1.3 miles downcoast from the existing AES intake) were available for 1999-2000 and 2007-2008, which bracketed the 2003-2004 sampling event. Dr. Raimondi recommended using the average of these two sets of current meter data in the ETM/APF calculations. Studies of the currents in the Southern California Bight have shown that coastal dynamics along the inner shelf/nearshore zones along the San Pedro Shelf, where six of the seven potential intake stations (U4, U2, E, O2, D2, D4) are located, indicate no difference in current structure between them (see Attachment G.1 to the Tentative Order, Section 3). OCSD's outfall is located between stations D2 and D4. Dr. Raimondi did not find specific data "errors" but noted that there were limitations to the 2003-2004 data because those data were collected specifically to assess impacts from AES's operational intake

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				located adjacent to Station E. Larval length data are used to assess the age of the larvae, which is needed to determine how long they may be vulnerable to entrainment. There were insufficient larval length data for any of the stations, except for Station E (see detailed discussion in Attachment G.1 to the Tentative Order, Section 3). The statistical methods that Dr. Raimondi proposed to use in lieu of the “Empirical Transport Model/Area of Production Foregone” (ETM/APF) analysis are well known and commonly used methods that can be used to determine potential impacts when sufficient data are not available to use the more intensive ETM/APF analysis. While application of the ETM/APF analysis would be preferable, Dr. Raimondi’s review provided an objective and thorough analysis of the available data. In addition, the Ocean Plan does not require entrainment studies or calculation of potential marine life mortality using the data intensive ETM/APF analysis (Chapter III.M.3.b.(1-7). The Ocean Plan does require entrainment studies and performance of a robust ETM/APF analysis to calculate marine life mortality that may occur as a result of the operation of a surface intake (Chapter

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				III.M.2.e,(1)(a). Dr. Raimondi concluded that there were sufficient information in the 2003-2004 dataset to calculate a robust ETM/APF for Station E, the proposed location of the surface intake for the Facility (Attachment G.3 to the Tentative Order).
0035.06			The Board will also consider socio-economic factors in its analysis. In my view, large industrial operations on the coast are a thing of the past (power plants, for example). Adding a brand new large industrial operation on the coast will impact beach goers, pedestrians, bicyclists, residents, anyone traveling near the coast, and recreational and commercial fishing activity. Working-class recreational anglers, for example, cannot afford travel to Catalina or multi-day offshore trips, and tend to rely on local waters for recreation and fresh fish.	See response to comment 0022.04. Impacts to tourism and recreation are additionally covered in the 2017 FSEIR certified by the State Lands Commission. The Tentative Order identifies beneficial uses of the receiving water. Attachment G.1 of the Tentative Order explains the process used to evaluate the best site available feasible to minimize impacts to marine life as required in chapter III.M.2.b of the Ocean Plan. In Section 1 of Attachment G.1 there is a flow chart that covers the evaluation process to narrowing the sites using the criteria detail in the Ocean Plan. This process includes many factors for comparative purposes that include social and economic factors. These factors are cover are covered in Sections 2 and 3 of Attachment G.1 of the Tentative Order. Based on all of the information gathered and evaluated the Santa Ana Water Board finds that the Facility is the best site available feasible to minimize impacts to

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				marine life. – the Pacific Ocean in the Fact Sheet, Table F-4 and Table F-5 (Attachment F). Among the identified uses are recreation (contact and non-contact), commercial and sportfishing. The Tentative Order, Section IV, includes effluent limits to protect these uses as well as a monitoring and reporting program to ensure effluent limitations are met (Attachment E to the Tentative Order). See also responses to comments 0004.11, 0033.01, 0036.01 and 0050.
0035.07			The Project will cause consumer water costs to rise, impacting low- income people the most. As a result, for socio-economic reasons, the proposed order fails.	See response to comment 0032.01 regarding cost of desalinated water; see response to comment 0188.01 regarding impacts on low-income populations.
0035.08			There can be no argument that desalination fits within relevant urban water management plans. How could it not? A local source independent of drought conditions is a no-brainer for any water plan. But the question is, at what cost to marine life? On this question, the Project fails. As the MWDOC 2018 water reliability study notes, Poseidon is at the bottom of the list in terms of new supply projects. (The MWDOC 2018 reliability study, covering	See responses to comments 0004.01, 0004.03, 0017.02, 0022.04, and 0036.01 regarding marine life concerns. To address the comments related to the MWDOC 2018 reliability study, please see responses to comments 0148.09 and 0149b.08.

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			the years from 2014-15 to 2040, reported that total direct and indirect water demands were projected to increase just 3.27%, from 499,120 AFY to 515,425 AFY. That's a total of 16 AFY. It remains unclear why OCWD is proposing to pay a large premium to Poseidon to produce 56,000 AFY.	
0036.01	Mark Dixon	Jan 08, 2020	While I am not a scientist, I have carefully studied numerous peer-reviewed articles, projections and analyses on the subject and am deeply disturbed about the effect upon the marine environment resulting from high concentrations of salt on the Huntington Beach shoreline.	In accordance with the Ocean Plan, the Tentative Order includes receiving water limitations and effluent limitations for the discharge from the Facility. Under the Tentative Order, the discharge from the Facility may not exceed a daily maximum 2 parts per thousand (ppt) above natural background salinity measured no further than 100 meters horizontally from the discharge point. (Tentative Order, § V.A.1.) Additionally, the salinity of the discharge from the Facility may not exceed an average daily concentration of 65.5 ppt. (Tentative Order, § IV.A.1.c.) Furthermore, the Discharger is required to complete a compensatory mitigation project for the Facility's impacts to all forms of marine life, including mortality to marine life caused by the high-saline brine. Also, see responses to comments 0004.01, 0035.04, 0054.02, 0055.02, and 0062.02.

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0036.02			Another concern of equal importance is the lack of demonstrated need for the plant. No research, no study, no evidence has established that a desalination plant off our fragile coast is needed. You must know by now that this part of the coast sits upon an aquifer more than adequate to serve the needs of citizens for many decades to come. Moreover, there are other effective and far less costly means to provide water to the area, including Waste Water Reclamation and Recycling and, if you prefer a no-cost alternative: Conservation.	See responses to comments 0004.19 and 0014.04, and Attachment G.2 to the Tentative Order.
0037.01	Sandra Fazio	Jan 08, 2020	By now you know there is a lot of opposition to this planned desalination plant on Huntington Beach's coast. You should reconsider the position favored by staff so far. The salt will be very concentrated in a small area. Even with diffusers. This will create a potential dead zone.	See responses to comments 0004.01, 0036.01, 0054.02, and 0055.02. For comment related to the potential for the creation of a dead zone, see responses to comments 0004.01, 0020.02. 0035.04 and 0055.02.
0037.02			There is no need for the water. Orange County saved more water per day than this plant will produce without really trying at the height of the drought. We	See responses to comments 0004.19 and 0014.04, and Attachment G.2 to the Tentative Order.

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			have not even begun to explore recapturing rain water. And, the Orange County "Tap to Toilet" recycling plant can produce the same amount of water with a lot less side effects and for way less money.	
0038	Jill Cagle OCWISE	Jan 08, 2020	Orange County Water Independence Sustainability and Efficiency (OCWISE) is a diverse, non-partisan coalition. The amended permit that your staff presented in December represents the culmination of literally years of work – three years actually, that is how long the Project permit has been in process. The coalition urges the Regional Board to move forward with a sense of urgency. This is literally the only climate proof source of water available to Southern California. On behalf of the coalition and the generations that will come after us, we must secure new water for Southern California.	Comment noted.
0039	Darrell Neft	Jan 08, 2020	I oppose the Poseidon project. The output is too salty and can negatively affect marine life. The Poseidon project affects the viability of sanitation district projects in recycling waste water. Their current project will result in additional water resources at a lower cost than Poseidon project.	See responses to comments 0004.01, 0036.01, 0054.02, and 0055.02 regarding brine discharge impacts. Orange County Water District has indicated that the desalinated facility will offset their water supply demands from imported water and should not impact the local recycled

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				water programs. See also response to comment 0004.19.
0040.01	William Dickinson	Jan 08, 2020	I believe the reasons that you should vote NO on the Poseidon Desalination plant are very simple and straight forward. The price of the desalinated water is unbelievably expensive. The water supply from it is not needed. Better we should spend the money on water reuse than desalination.	See response to comment 0004.19 regarding alternative water supply options; response to comment 0032.01 regarding the cost of desalinated water; see response to comment 0014.04 regarding need for desalinated water and Attachment G.2 of the Tentative Order.
0040.02			It is not environmentally compatible as it would dump 5 TONS PER MINUTE OF SALT BACK INTO A SMALL AREA OF THE OCEAN.	See responses to comments 0004.01, 0036.01, 0054.02, and 0055.02.
0041.01	Paula Hulse	Jan 08, 2020	Was there not a study that showed how much the ocean will rise in the years to come and wipe out much of the coast line and the projects that depend on the ocean to keep them doing their questionable work?	Section VI.A.2 of the Tentative Order requires the Discharger to protect the Facility to reduce infrastructure vulnerability to sea level rise and climate change. Additionally, under section VI.C.4, the Discharger must prepare a Climate Change Action Plan that includes steps the Discharger is taking or is planning to take to address risks associated with sea level rise. The Discharger will also need to comply with the California Coastal Commission's requirements related to sea level rise. Coastal Commission staff will conduct an extensive review of the potential impacts of sea level rise on the proposed facility if and

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				when Poseidon applies for a Coastal Development Permit.
0041.02			We do not need this project and the area is already in a mess with all the other projects that are being worked on (the Mud Dump.) There is already too much dirt, dust and noise; it will be much worse if you allow this to go further.	See responses to comments 0014.04 and 0055.01 and Attachment G.2 regarding need; 0028.01 regarding industrial area and construction; and 0004.15 and 0014.01 regarding noise. Also see City of Huntington Beach's 2010 EIR and State Lands Commission's 2017 SEIR.
0042.01	Shawn Olson	Jan 09, 2020	I really do not understand why you're building a desalination pump. It's going to wreck the fish and sea life ecosystem even more than it has already been wrecked. Our oceans are dying and we need to be working toward restoring the only ocean that we have. The ocean has also been getting saltier due to climate change; the potential proposed plant will increase the salt content in the water killing more of its sea life.	The Santa Ana Water Board is not building a desalination plant; rather, the Board is reviewing the project to determine the appropriate requirements for the Facility's discharge of pollutants to the Pacific Ocean to protect water quality and reviewing whether the Facility uses the best available site, design, technology, and mitigation feasible to minimize intake and mortality of and impacts to marine life Water Code section 13142.5(b). See responses to comments 0004.01, 0035.04, 0036.01, 0054.02, 0055.02, and 0062.02 regarding brine discharge impacts.
0042.02			Building a plant that is in our backyard that we do not need, is another thing that I should touch on. The water from the plant would not even be for us, HB does not have a water shortage problem. It would likely make the price of water go	The City of Huntington Beach has the option to purchase up to 3,360 acre-feet per year of desalinated water for a 5% discount on the price it pays for imported water. See response to comment 0018.04.

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			up in the area as well to offset the cost of the facility and the cost that it would be to produce expensive water through a plant like that. So it is not a good idea to begin with. The push for the desalination plant is money driven.	See responses to comments 0032.01 regarding the cost of the desalinated water; 0004.19 and 0014.04 regarding alternative water supply options and the need for the desalinated water.
0043	Dorothy Riley	Jan 09, 2020	I am very much against the passage of the above project because of many different ways it could be affecting the marine life and health of our citizens of H.B. who enjoy our waters and beaches every day, especially during the warmer months. I feel it will be just another pollutant added to our waters. Not only to the water here but to our health. Noise and air pollution is not needed here as the residents of South Huntington Beach have been undergoing enough of all of the above for many years already, and has been the cause of many illnesses to date. Some more serious than others. I have developed a chronic cough since living right across from the AES landfill. I have owned by home since 1978 and put up with years of all of the above. Since there is no real evidence that this water is needed according to many of the experts that have been involved, I am convinced that it is not necessary now or in the near future.	See responses to comments 0004.12, 0004.15, 0004.17, 0014.01, 0014.03, 0014.05, regarding cumulative impacts, noise impacts, and air emission impacts from the proposed project. See responses to comments 0004.01, and 0036.01, 0054.02, and 0055.02 regarding brine discharge impacts. See Attachment G.2 of the Tentative Order regarding the need for the water. See Attachment G.1 of the Tentative Order regarding recreational impacts (Section 3)

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0044	Kenneth Killian	Jan 09, 2020	The need for this water simply does not exist when you consider the excellent conservation and underground water storage measures already in place This desal water will place a financial burden on residents for decades to come. Also, the actual cost of the water and project will be far greater than is now presented. This is a certainty with government projects! Huntington Beach is blessed with an amazing environment and incredible beaches! The intake pipe and salt brine waste from this plant will harm HB beaches and ocean. Please, let's not do anything to mess with our beautiful beaches and ocean. Preserving them should be always a top priority!	See responses to comments 0004.19 and 0014.04 regarding alternative water supply options and the need for the desalinated water; 0032.01 regarding the cost of the desalinated water; 0004.01, 0035.04, 0036.01, 0054.02, and 0055.02 regarding brine discharge; and 0004.03 regarding intake pipeline.
0045	Lynn Friedman	Jan 09, 2020	It is irresponsible to build this plant for many reasons, two being that the Carlsbad plant has not only not provided the water it has promised (and it is at a much higher cost than other methods of attaining this water) but has multiple citations this year alone, due to salty, chemical laden brine that is dumped into the sea and harms ocean plants and animals.	See response to comment 0020.05 and 0173.02 regarding the Carlsbad facility. Also see response to comment 0004.01 regarding disposal of the brine and the discharger's required compensatory mitigation. The Santa Ana Water Board is reviewing the project to determine the appropriate requirements for the Facility's discharge of pollutants to the Pacific Ocean to protect water quality and reviewing whether the

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			There are other ways to increase our water supplies without the marine life damage, ugly structures and expense. This is a sham and we hope that you responsibly look at this project beyond the politics.	Facility uses the best available site, design, technology, and mitigation feasible to minimize intake and mortality of and impacts to marine life Water Code section 13142.5(b). See responses to comments 0089, 0148.09, and 0149b.08.
0046	Steve Southern	Jan 09, 2020	When I grew up in the 50s and 60s, there was an incredible abundance of life all along our coasts. Tide pools filled with a variety of wildlife. Now, there's not so much, and this desal plant, like the one in Chile, will kill everything around it. And, it is not even needed.	See responses to comments 0004.01, 0004.03, and 0036.01 regarding marine life impacts; and 0014.04 regarding need for the desalinated water. See response to comment 0171.02 regarding Chilean desalination plants.
0047	Ron Smith	Jan 09, 2020	After reading and listening to all the pros and cons I believe the most sensible to be the one that said **it makes no sense to build this plant now**. I care about the marine life and ocean and what effect this plant will have on it. In the future, if the plant becomes truly needed, it can be built then. By waiting, more time will be given to see if better ways have been developed and/or proven that will have less impact on the marine life and ocean. My understanding is that the water is not needed now especially with the ground water replenish system being developed. In addition, it seems Poseidon is a very costly option that was	The Santa Ana Water Board is reviewing the project as proposed to determine the appropriate requirements for the Facility's discharge of pollutants to the Pacific Ocean to protect water quality and reviewing whether the Facility uses the best available site, design, technology, and mitigation feasible to minimizes intake and mortality of and impacts to marine life Water Code section 13142.5(b). If other desalination projects are proposed in the Santa Ana Region in the future, the Board will consider those projects through its permitting process. See responses to comments 0004.01, 0004.03, 0022.04, and 0036.01 regarding

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			at the bottom of the list for obtaining more water if needed.	impacts to marine life; 0014.04 and 0055.01 regarding need for the desalinated water; and 0032.01 regarding cost of the desalinated water.
0048	John Gordon	Jan 09, 2020	I believe the Poseidon plant will have an adverse effect on local marine life due to salt brine. I believe there are far better ways to use existing water by reclaiming. The track record of desalination and Poseidon is not good.	See responses to comments 0004.01, 0036.01, 0054.02, and 0055.02 regarding brine discharge impacts; 0004.19 regarding alternative water supply options.
0049	Audrey Prosser	Jan 09, 2020	NO to this de-sal plant is not needed. In time the Huntington Beach shoreline will be a salt beach void of birds and sea life just like the Salton Sea. It won't happen overnight but it will be your legacy to your kids. Also it will be an Economic disaster to tourism.	The City of Huntington Beach certified a Final Subsequent Environmental Impact Report in 2010. The 2010 Subsequent EIR analyzed the potential environmental impacts of the Facility. Additionally, the State Lands Commission certified a Supplemental Environmental Impact Report in 2017, which analyzed changes to the Facility's outfall and intake structures (as well as economic impacts to tourism) that were not analyzed in 2010. The Santa Ana Water Board analyzed minor changes to the Facility's diffuser design in an addendum prepared in conjunction with the Tentative Order. The environmental analyses prepared for the project did not show impacts that would result in such conditions, and the commenter did not provide a basis for the

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				comment or data that would indicate that the conditions the commenter cites could occur as a result of the proposed Facility. Also, see responses to comments 0004.01, 0036.01, 0054.02, and 0055.02 regarding brine discharge impacts.
0050	Christine Martin	Jan 09, 2020	Please, please, PLEASE do NOT let this boondoggle get approved. I'm sure you've read the scientific reasons, but just in simple terms we don't need the water, construction will be a nightmare, it will be years because we truly know the damage the brine will cause, and the entire project will probably be obsolete before it's finished.	With respect to the need for the water, see responses to comments 0014.04 and 0055.01. The potential environmental effects of the construction of the Facility and the distribution pipeline were analyzed in the 2010 Subsequent Environmental Impact Report prepared by the City of the Huntington Beach. The potential environmental effects of the construction of the modifications to the intake and discharge pipelines were analyzed in the 2017 Final Supplemental Environmental Impact Report prepared by the State Lands Commission and in the Addendum prepared by the Santa Ana Water Board. The Discharger must implement mitigation measures to lessen impacts to hydrology and water quality (including enrollment in the State Water Board's Construction General Permit), air quality, noise, underground utilities, aesthetics, traffic, biological resources, and cultural resources

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				associated with construction. (2010 FSEIR, pp. 4.9-49 to 4.9-63; 2017 FSEIR, pp. 7-3 to 7-37.) The Tentative Order specifies brine discharge requirements intended to ensure protection of marine life outside the brine mixing zone. See response to comment 0004.01. Further, Attachment E to the Tentative Order, specifies an extensive Monitoring and Reporting Program to evaluate long term impacts to the receiving water from the proposed project. Included in the receiving water Monitoring and Reporting Program are Core Monitoring which focuses on water quality trends and effects of the discharge to the ocean, Regional Monitoring that focuses on regional impacts from the proposed discharge as well as other discharges on a regional basis and Strategic Process Studies that address specific water quality or habitat issues that arise out of results from the Core Monitoring or Regional Monitoring Programs. The Monitoring and Reporting Program also includes requirements for influent water quality monitoring. The Discharger is also required to implement an effluent monitoring program that consists of

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				measurement of a number of water quality constituents and toxicity testing. See also responses to comments 0033.01, 0035.06, and 0036.01.
0051	Vanessa & Jeff Webster	Jan 09, 2020	I want you to hear my loud NO to the Poseidon Plant! We must protect our marine life. There are other less costly and safer ways to ensure that we have water.	See responses to comments 0004.19 regarding alternative water supply options; and 0032.01 regarding cost of desalinated water. Also, see responses to comments 0004.01, 0004.03, 0017.02, 0022.04, and 0036.01 regarding marine life impacts.
0052	Dan Silver Endangered Habitats League	Jan 09, 2020	The Endangered Habitats League opposes this unneeded facility. Our water supply needs can be most cost-effectively met through water *conservation*. Desalination is unnecessary. Furthermore, desalination has significant adverse effects on the marine environment including, but not limited to, salt brine and loss of sea life in intake pipes. Energy use if high, and again, water conservation is the best choice.	See responses to comments 0004.19, 0014.04, and 0055.01 regarding alternative water supply options and need for the desalinated water; 0004.01, 0004.03, 0035.04, 0036.01, 0054.02, and 0055.02 regarding brine discharge and intake impacts; and 0004.05 and 0004.12 regarding energy usage.
0053.01	Lena Hayashi	Jan 09, 2020	Please do not allow Poseidon to build a desalination plant at the AES site. This plan was conceived so many years ago, before the salt-intake cooling technique was curtailed. The expensive and environmentally destructive plant is out of date with the times and needs.	See responses to comments 0005.05 and 0149b.02 regarding the status of the power plant cooling intake and the State Water Board's Once Through Cooling Policy; 0004.01, 0004.03, 0022.04, 0017.02, and 0036.01 regarding technology and

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				environmental concerns; and 0032.01 regarding costs of the desalinated water.
0053.02			Our water reclamation facilities are capturing water and successfully storing it. We can't store any more with Poseidon and yet have to pay for it. I know it is a complicated issue but I have lived in my home in Huntington Beach since 1972 and I have heard the pros and cons and I can't help but feel this is not in the interest of residents and that it is all about power and money.	See responses to comments 0004.19.
0054.01	Michael Durgerian	Jan 09, 2020	This desalination plant for Huntington beach is a bad idea. Not only will it bill us 4 times the water rate but it will pump lots of salt back in the ocean and kill what is left of the sea life by putting too much salt proportional to water in our area. I live by the HB pier and surf and enjoy what is left of the wildlife. I vote and have rentals here too.	See responses to comments 0004.01, 0035.04, 0036.01, 0054.02, 0055.02, and 0062.02 regarding brine discharge and response to comment 0032.01 on costs of desalinated water.
0054.02			I have read this study about what happened in Chile and have been there myself twice. These destructive effects of the salt brine at a desal plant in Chile are bad. It Kills Everything This is how much salt will be concentrated and returned to a small area of the ocean off our coast	The area where the Facility's discharge is permitted to exceed receiving water limits for salinity, known as the brine mixing zone (BMZ), is approximately 1 acre in size. The Discharger must meet receiving water limitations outside of the BMZ. Additionally, the Discharger is required to provide compensatory mitigation for impacts to marine life in the BMZ, as well as any other

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			negatively effecting the marine environment. In the Poseidon/HB case, to desalinate 50MGD of seawater, the process must dispose of 5 Tons per minute of just salt every minute of every day of every year for 30 years. That 5T/minute is only the weight of the salt---not the brine. Do the math: Seawater is 3.4% salt by weight; a gallon of seawater weighs 8.34 lbs.; a gallon of seawater contain 0.284 lb. of salt; therefore, 50MGD would contain 14,178,000 lbs. of salt per day. This works out to 9,486 lbs./minute or about 5 Tons/minute.	operational or construction impacts to marine life. The commenter does not provide enough information regarding the study of desalination in Chile to allow for a response to the study. The California Ocean Plan includes requirements to protect all forms of marine life as well as the marine environment. The Ocean Plan further requires that the owner/operator mitigate for impacts to marine life. The situation at the Chilean desalination facility is irrelevant. The California Ocean Plan has strict regulations for desalination facilities that apply to the proposed Poseidon project to minimize marine life mortality. See response to comment 0171.02. Further, the tonnage of salt that would be discharged from the proposed Facility originates from the ocean itself and the Facility would be returning to the ocean the same salt mass that is withdrawn. The issue of concern that is addressed by the Ocean Plan for desalination facilities, is the <u>salt concentration</u> of the brine that would be discharged into the ocean from the Facility and that concentration is regulated through the Tentative Order.

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				See responses to comments 0004.01, 0035.04, 0036.01 and 0055.02; and see response to comment 0062.02 regarding brine discharge.
0055.01	Christine Padesky	Jan 09, 2020	As a Huntington Beach resident, I have been following this issue for years and it comes down to two questions: 1) Do we need the water; 2) Is this project the best way to meet any unmet future needs. The answer to both questions is no. As to the need, we have extensive reserves in local aquifers and have recycling capacity in the local water treatment plant. If the SARWQB believes we do have unmet future water needs, then good management would suggest you issue an RFP and weigh more than one proposal to meet those needs. The Poseidon plan is old-fashioned (in 2040 or 2050 terms, the soonest any water is likely to be needed) and extremely expensive. Surely in the 20 years since Poseidon appeared on the scene there have been new technological advances that could lead to less expensive and more environmentally friendly proposals.	The scope of the Santa Ana Water Board's review regarding the need for the project is limited to determining whether the local water suppliers (Orange County Water District and the Municipal Water District of Orange County) have adequately identified a need for the 56,000 acre-feet per year that will be produced by the proposed Facility and whether the identified need is consistent with an applicable urban water management plan. See response to comment 0014.04. The Santa Ana Water Board does not have the authority to issue a request for proposals to consider other possible water supplies or to determine the best water supply project to meet supply needs; these are matters that would fall within the purview of the local water supply agencies. See response to comment 0032.01 regarding costs of the desalinated water. See responses to comments 0004.01 0004.03, 0017.02, 0022.04, and 0036.01

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				regarding technology and environmental concerns.
0055.02			I am also worried about the effects of salt water brine produced by Poseidon (https://www.wired.com/story/desalination-is-booming-but-what-about-all-that-toxic-brine/)	See response to comment 0004.01. As described in the Fact Sheet and in the Water Code 13142.5(b) Determination Matrix (Attachment G), the proposed brine discharge technology is the best available technology feasible as required under the Water Code and the Ocean Plan. Dr. Phil Roberts, a neutral third-party expert, assessed the diffuser design that was initially proposed by the Discharger and concluded that it was not the best available technology or design feasible to minimize impact and mortality to all forms of marine life. In accordance with the recommendations of the neutral third-party reviewer, the Discharger modified their diffuser design to promote rapid mixing of the brine to minimize impacts to marine life. Additionally, under the Tentative Order, the Discharger is required to conduct monitoring to verify whether the discharge is complying with effluent limitations and receiving water limitations. See also responses to comments 0004.01, 0035.04, 0036.01, 0054.02, and 0062.02.
0055.03			I realize after so many years of debate you may want to just move this project forward to get it off your desks.	See responses to comments 0014.04 and 0055.01 regarding need for the desalinated water; 0004.01, 0035.04,0036.01, and

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			However, sometimes the best leadership requires saying no to an old idea in order to make room for some new ideas. Since we currently have the ability to meet the county water needs for at least the next two or three decades, we can wait 10 years to see what new technologies develop that will cause less salt brine deposits in our ocean with greater efficiency and lower costs. The best legacy you could achieve as SARWQCB members would be to stop this project and take a pause. The likely result will be better technology for a future-oriented project.	0054.02 0055.02, and 0062.02 regarding brine discharge; and 0032.01 regarding costs of desalinated water.
0056	Pat Riley	Jan 09, 2020	(duplicate of comment 0016)	See response to comment 0016.
0057	Lisa Rodman Agua Hedionda Lagoon Foundation	Jan 09, 2020	As the committed steward of the Agua Hedionda Lagoon, Poseidon Water has steadfastly upheld its promise to preserve and protect our local marine environment here in Carlsbad. Since assuming stewardship last year, Poseidon has taken steps to help ensure the ongoing vitality of this magnificent estuary while also preserving local access to the Lagoon's many recreational attractions. Poseidon Water has also proven to be a great neighbor, and we're proud to have such an important regional resource like the	Comment noted. The Discharger's mitigation project for the Carlsbad facility is not relevant to Santa Ana Water Board's consideration of the Tentative Order. Under the Tentative Order, the Discharger will be required to mitigate for the Facility's impacts on marine life by completing mitigation projects at the Bolsa Chica Wetlands.

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			Carlsbad Desalination Plant contributing to the Agua Hedionda Lagoon's health and longevity. The Agua Hedionda Lagoon encompasses more than 400 acres of marine, estuarine and wetlands habitat teeming with hundreds of fish, invertebrate and bird species. Today, Poseidon Water maintains the periodic dredging of the lagoon which ultimately improves its overall environmental health and allows it to realize the life-sustaining benefits of an open connection to the Pacific Ocean. This stewardship also helps maintain the lagoon's tidal circulation, which is critical to the biological operations of the Carlsbad Aquafarm and Hubbs-Sea World Fish Hatchery, and provides extra sand to keep local beaches beautiful and sandy for visitors to enjoy.	
0058	Scott Mirtle	Jan 09, 2020	As a graduate of Huntington Beach High School, a life long citizen of Orange County and child of the ocean, I would greatly like to encourage you to find alternative methods for water supply other than the Poseidon Project. The salt brine that gets distributed back into the ocean will cause too much harm to the	See responses to comments 0004.01, 0035.04, 0036.01, 0054.02, 0055.02, and 0062.arge; 0004.19 regarding alternative supply options.

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			local ecosystem. I can point to numerous scientific reports and I'm sure you can find counterpoints, but if I'm right and you're wrong the environment will suffer.	
0059	Litta Cecchi-Bash	Jan 10, 2020	We do not want the spending of so much money on the above when we do not need the water and it will contribute to kill our marine life and environment. I oppose a project that has been proven a failure in Carlsbad.	See responses to comments 0014.04, and 0032.01 regarding the need and cost for the water; 0004.01, 0004.03, 0017.02, 0022.04, 0035.04, and 0036.01 regarding marine life impacts; and 0006 and 0193.07 regarding the Carlsbad facility.
0060.01	Cathy Green Orange County Water District	Jan 10, 2020	I want to highlight, the importance of this project to the District and that this is not a new development and is not without significant consideration and documentation. In fact, in 2010, the District signed a Memorandum of Understanding with Poseidon for the consideration of the purchase of water from the proposed desalination Project. As the sole remaining Board member from that time period - you will remember I addressed you then on behalf of the District. In 2013, the District hired a financial advisor to evaluate the financial feasibility of District purchasing the full 50 MGD of drinking water to be produced by the facility. And in 2015, the District's Board of Directors voted to approve a non-binding Water Purchase	The Santa Ana Water Board considered the Term Sheet in its assessment of whether the water supply agencies adequately identified a need for the desalinated water. However, as noted by the commenter, the Term Sheet is not binding on either party and is not an enforceable agreement to purchase water from the Facility. At the May 15, 2020 workshop, OCWD provided additional information in support of the need for the water and stated that negotiations with Poseidon to purchase the water will commence once the Facility receives it's permit. See responses to comments 0014.04 and 0055.01 regarding the need for desalinated water. Also please see revisions to Attachment G.2 to the Tentative Order.

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			Agreement Term Sheet for the purchase of 50 million gallons per day of drinking water from the proposed project. The Term Sheet was approved by the Board after numerous public meetings and review and amendments to the Term Sheet were proposed by a 30-member Citizens Advisory Committee. The term sheet was then updated in July 2018. All this history speaks to the conclusion reached by your staff that the project complies with the California Ocean Plan and specifically meets an identified need for desalinated water.	
0060.02			It is the District's mission to provide the cities and retail water districts it serves with a reliable, adequate, high-quality water supply at the lowest reasonable cost in an environmentally responsible manner. The Huntington Beach Project meets that test. Seawater desalination is the only source of water that is 100% climate resilient.	Desalination is one water source that water supply agencies may consider as part of their water supply portfolio.
0061	Eugene Huettner	Jan 10, 2020	As a long time resident and taxpayer of Orange County I am opposed to approval of this plant in Huntington Beach. The plant poses many hazards to the environment as well as an ineffective use of energy which will have	See responses to comments 0004.19, 0032.01 regarding alternative water supply options and cost of the desalinated water; 0004.01, 0004.03, and 0036.01 regarding marine life concerns; and 0004.05, 0004.12,

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			an impact on atmospheric carbon which we can ill afford. We should be doing more to recycle water rather than support paying much, much more for water from a for-profit company. I urge you to oppose this misadventure for our sake and the sake of our future families.	and 0015.03 regarding energy use and carbon emissions.
0062.01	Jay Drake	Jan 10, 2020	I strongly oppose the Poseidon desalination plant in Huntington Beach. The plant, intake pipes and salt brine deposits will be harmful to the marine environment, sea life and water quality.	See responses to comments 0004.01, 0004.03, 0022.04, 0035.04, 0036.01, 0054.02, 0055.02, and 0062.02.
0062.02			As a surfer in Huntington Beach for decades, the water quality is already not good due to runoff from the Santa Ana River and other rivers in the area, non-point source pollution from the streets, as well as industrial and oil activities. Any activities that will further degrade the water quality could have catastrophic and permanent harmful impacts. It will be harmful to surfers, fisherman, tourism, and the local economy. Huntington Beach is known throughout the world for its beaches and ocean quality. This desalinization plant in Huntington Beach will negatively impact Huntington Beach and its economy, beaches and ocean quality.	The Tentative Order includes effluent and receiving water limitations to protect the beneficial uses (such as contact and noncontact recreation and commercial and sportfishing) of the Pacific Ocean and other requirements that the Discharger must comply with to protect water quality and minimize impacts to marine life. Additionally, under the Tentative Order, the Discharger must conduct monitoring to verify whether the discharge is complying with the permit requirements. See also responses to comments 0004.01, 0004.03, 0022.04, 0036.01, 0054.02, and 0055.04 regarding water quality and marine life impacts.

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				As discussed in the antidegradation analysis, the discharge from the Facility will result in a slight increase in salinity, but the change will be spatially localized and confined to the brine mixing zone. Overall, the Facility's operations will not significantly impact water quality and will be protective of water quality objectives and beneficial uses. (Tentative Order, Attachment F, § IV.D.2.) See response to comment 0035.06 regarding impacts to economy and tourism.
0062.03			The need for water sources should be pursued by conservation, water reuse, education and other methods. The need for water should not be pursued by this environmentally and economically harmful desalination plant.	See responses to comments 0004.19 and 0055.01 regarding alternative water sources. See responses to comments 0004.01, 0004.03 and 0036.01 regarding environmental concerns. See response to comment 0032.01 regarding economic concerns.
0063	Cathy Cavecche OC Taxpayers Association	Jan 10, 2020	To date, Poseidon Water has invested tens of millions of dollars over the past twenty years in the regulatory process of the Huntington Beach Seawater Desalination facility. These private dollars protect the taxpayers and ensure that the public water agencies that will decide whether to green-light this project will do so based on need and value and not based on the "sunk-cost" of tax	Desalination is one water source that water supply agencies may consider as part of their water supply portfolio. See response to comment 0017.02 regarding mitigation.

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			dollar investment during the regulatory process. This project will provide a new, drought-proof, climate-resilient water supply for Orange County. Additionally, it will create an infusion of millions of dollars in tax revenue to the local community. And the mitigation Poseidon Water is proposing will ensure the protection and restoration of the Bolsa Chica wetlands at no cost to the taxpayers.	
0064	Donna Specht	Jan 10, 2020	We have been fighting Poseidon for I forget how many years. We just don't want their water. We don't need their water. We do want to protect our marine environment. Poseidon's desal will kill everything. You don't want to go down in history for approving this horrible, destructive idea.	See responses to comments 0014.04 and 0055.01 regarding the need for the water. See responses to comments 0004.01, 0004.03 and 0036.01 regarding environmental concerns.
0065	Brett Korte Azul	Jan 10, 2020	On behalf of Azul, the UC Irvine Environmental Law Clinic again requests that the Santa Ana Regional Water Quality Control Board extend of the deadline for written comments on Poseidon's Draft Waste Discharge Requirements (Order No. R8-2020-0005, NPDES No. CA8000403), and Water Code § 13142.5(b) Conditional	See response to comment 0001.

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			Determination through at least February 28, 2020. Since receiving Azul's last deadline extension request, the Regional Board took a laudable step by sending an Additional Informational Request to Poseidon on January 8. However, the deadline for Poseidon to respond, currently set for January 17, does not allow sufficient time for interested parties to analyze and comment on additional information provided before the written comment deadline of January 21, a mere four days later and spanning a holiday weekend.	
0066	Anna Ferree	Jan 11, 2020	There will be about 5 tons per minute of salt returned to a small area of the ocean off our coast negatively effecting the marine environment. There are better ways to increase our water supply. This article gives some alternatives to desalination.	See responses to comments 0004.01, 0036.01, 0054.02, and 0055.02 regarding impacts of brine discharge. See responses to comments 0004.19 and 0055.01 regarding alternative sources for water supply.
0067.01	Bill Yarchin	Jan 11, 2020	There is simply no need for the water. Not even close. The Orange County Water District's (OCWD) enormous groundwater basin contains over 60 million acre-feet of fresh groundwater. That's 13 times the volume of Lake	See response to comment 0004.19 and 0014.04 regarding need for the desalinated water and alternative water supply options.

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			Shasta, enough water to serve everyone in Orange County for 160 years. OCWD manages this groundwater basin very conservatively, only allowing about 300,000 acre-feet per year to be pumped out of the basin's storage. (= 0.5%). Thus, *for the extended future, Orange County will have abundant good fresh groundwater supplies* for maintaining the economy and quality of life here. Even in a worst-case long-term drought emergency scenario, pumping the basin by 100 times the normal rate, the supply would last over 10 years.	
0067.02			OCWD captures Santa Ana River flows in large percolation ponds to regularly recharge the basin. Imported water supplies are also purchased for routine basin replenishment, at a fraction of what Poseidon's water will cost. That's why that Poseidon's prospective customers – the local water agencies – have virtually no interest in buying its water. So almost all of the Poseidon very expensive desalinated water would be injected into freshwater aquifers, up to 56,000 acre-feet a year. Yet the OCWD	See responses to comments 0004.19 and 0055.01 regarding need for the desalinated water and alternative water supply options; and 0032.01 regarding the cost of the desalinated water.

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			already has water treatment capacity of 112,055 acre-feet a day at a fraction of the cost of desalination. In short: there is simply no need for the proposed desalination plant in Huntington Beach. Not even close.	
0068	Craig Wagner	Jan 11, 2020	It will do too much harm to the environment. And we do not need this very expensive water.	See responses to comments 0004.01, 0004.03, 0017.02, 0022.04, and 0036.01 regarding harm to the environment; 0032.01 regarding cost of the desalinated water.
0069.01	Randy Baker	Jan 12, 2020	Do the math that you are paid by the public to do. Not that math with the numbers that Poseidon's agents have given you and the rest of us. Their version is truly "fake news". Think of the astronomical environmental and financial debt you will be bequeathing to your children and grandchildren if you believe Poseidon's fakery.	See responses to comments 0004.01, 0004.03, 0017.02, and 0036.01 regarding environmental impacts; and 0032.01 regarding the cost of the desalinated water. How the Facility is financed is not relevant to the Santa Ana Water Board's consideration of the Tentative Order. See response to comment 0003.02.
0069.02			Ask your fellow citizens of North San Diego County how satisfied they are with the desalination "deal" they are obligated to pay for. Then ask yourselves why you would want to subject your North Orange County residents to that same kind of obligation.	See responses to comments 0004.09 regarding the Carlsbad facility; and 0032.01 regarding the cost of the desalinated water.
0070.01	Chris Yates U.S. Depart. of Commerce	Jan 15, 2020	Seawater desalination may adversely affect essential fish habitat (EFH) via entrainment and impingement of living marine resources which reduces	The proposed Project may adversely affect EFH (Essential Fish Habitat) via entrainment of marine life. However, the Project is required to comply with Ocean

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	National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service West Coast Region		biological productivity. In addition, the brine discharge may cause shear stress mortality and may be directly harmful to sensitive species and/or reduce habitat quality. The proposed Facility occurs within EFH for various fish species within the Coastal Pelagic Species (CPS), Highly Migratory Species, and Pacific Coast Groundfish (PCG) Fishery Management Plans (FMP). The construction and operation of the Facility would adversely affect EFH by removing ecosystem components (i.e., early life stages of fish and invertebrates), reducing prey availability, and through direct mortality of managed fish species. The majority of taxa affected by the Facility are coastal marine species, some of which are commercially and recreationally important.	Plan Chapter III.M.2.d.(1)(c)vi which requires that "in order to minimize impingement, through-screen velocity at the surface water intake shall not exceed 0.15 meters per second (0.5 feet per second." Furthermore, as noted in Section 8.3.1.2.2 of the Final Staff Report Including the Final Substitute Environmental Documentation (Staff Report) addressing Desalinating Facility Intakes, "maximum intake velocity of 0.5 feet per second (ft/s; 0.15 meters per second) has been shown to protect most small fish (U.S. EPA 1973) and is an appropriate value to preclude most impingement of fish large enough to be unable to pass through the screen. (EPRI 2000)." As such, the Santa Ana Water Board's analysis shows that mortality to marine life from impingement will not occur. Nonetheless, mortality and impacts to marine life will occur via entrainment of planktonic fish and invertebrate larvae by both the intake and discharge from the proposed Facility. See response to comment 0004.01 regarding marine life impacts from the brine discharge, response to comment 0004.03 for marine life impacts and entrainment concerns, and response to

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				comment 0017.02 for mitigation requirements to offset these impacts. Finally, as discussed in the CEQA addendum, a new diffuser was proposed to minimize shearing-related mortality to all forms of marine life.
0070.02			The APF analysis for the Facility utilized 2003-2004 plankton data collection for the AES Huntington Beach Generating Station and included both estuarine and coastal fish and invertebrate taxa. Northern anchovy, which is managed by the CPS FMP, is one of the coastal fish taxa used in the APF analysis. Northern anchovy yielded the highest APF (771.6 acres) of the taxa used in the Marine Life Mortality Report. Northern anchovy are an important prey resource providing forage to many upper trophic level predators, and historically supported a substantial fishery in California. Rock crab yielded the second highest APF (686.4 acres). Rock crab are not federally managed, but they are an ecologically important component of the nearshore environment (Carroll and Winn 1989). Juvenile rock crabs are important prey of numerous invertebrates and many commercially	Agree. As the commenter notes below in comment 0070.03, the APF of a single-species or taxa is of limited importance on its own. It is when multiple (in this case, 12) APFs are averaged together, a meaningful ecological statistic is generated that represents ecosystem-wide impacts. Therefore, impacts to Anchovies, Rock Crabs, and other species not specifically included in this calculation but that are part of the food web, can be accounted for and remedied by a compensatory mitigation project. The APF provides the amount of compensatory mitigation required to replace lost productivity attributable to the Facility's operation and construction.

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			and recreationally important fishes. For example, Love et al. (1987) determined that juvenile yellow crabs were the most important food item for California scorpionfish, which are managed within the PCG FMP.	
0070.03			Although we provide the above two species examples to describe adverse effects to EFH, NMFS recognizes that an underlying assumption in the APF model is that each taxon used in the analysis represents a sample and that the mean of the samples is representative of the true loss rate. Based on Dr. Raimondi's review (Raimondi 2019), Board staff determined that the estimated marine life mortality resulting from the construction and operation of the Facility would be 421.42 acres without a mitigation ratio applied to estuarine or coastal taxa. According to the Desal Amendment, the owner or operator of a desalination facility shall mitigate for the mortality of all forms of marine life identified in the Marine Life Mortality Report. The owner or operator shall demonstrate that the project fully mitigates for intake-related marine life mortality by including expansion, restoration, or creation of habitat based	As stated in the Desalination Amendment Staff Report section 8.5.1.1, "a key assumption in how the APF method has been applied is that the APF for a subset of species is a representative sample of all species present at that location, even those that are not directly measured. If the habitat calculated using APF is created or restored, the habitat will support the species assessed in the analysis as well as other species in the ecosystem that were not assessed. This means that the average APF for a small subset of species (e.g., 10-15 species) is characteristic of the much larger community, even a community comprised of thousands of different types of organisms."

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			on the APF acreage calculated in the Marine Life Mortality Report.	
0070.04			The Board may also apply a mitigation ratio based on the relative biological productivity of the impacted open water or soft-bottom habitat and the mitigation habitat. Board staff recommended that the final APF for impacts to coastal, soft bottom species be adjusted by using a mitigation ratio of 1:5.8. Although NMFS believes the Board's proposed approach informed by Bond *et al.* (1999) is reasonable as a general proxy and starting point for comparing productivity of different habitat types, we believe additional consideration should be given for important fishery species within the water column. The habitat value (651.2) from Bond *et al.* (1999) used by the Board for the affected shallow water, soft substrate habitat was based only on otter trawls. Otter trawls likely underrepresent fish species that are primarily found in the water column. Northern anchovy are an example of a fish species that occur in the water column and likely are not adequately assessed utilizing otter trawls. This is noteworthy given that northern anchovy yielded the highest APF (771.6 acres) of	Finding 50 in Attachment G, and Attachment G.4 to the Tentative Order were revised to adjust the habitat value used to represent the affected shallow water, soft substrate habitat by 30%. Since receiving these comments from NMFS staff, Santa Ana Water Board staff has reexamined the Bond et al 1999 paper. Given the relatively high APF (and, perhaps more importantly, high P_m as noted in comment 0070.01) for Northern Anchovy, Santa Ann Water Board staff recommends a revision to the soft-bottom habitat value. It is critical to understand that the previous comparison of soft-bottom habitat to wetlands habitat contained limitations. As noted in the revisions to Attachment G.4 to the Tentative Order, the soft-bottom habitat value was derived using only otter trawl data. The wetlands habitat value included several gear (sampling) types in shallower water. Therefore, the wetlands habitat value is representative and does not need to be adjusted. However, the soft-bottom habitat value should be adjusted because, as noted in the comment, mid-water column species are

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			the taxa used in the Marine Life Mortality Report. NMFS specifically notes the following quote from Bond *et al.* (1999) that suggests data collected solely by otter trawl may undervalue this habitat type: 'Because fishes in the sublittoral fringe are often widely distributed between the surface and the substrate, evaluation of shallow soft substrate habitats should generally include data from the water column, as well as the bottom fauna. The value of the shallow sand habitat is, thus, best estimated by the combined SONGS [San Onofre Nuclear Generating Station] lampara and trawl data; the primary VRG shallow sand site was surveyed only with otter trawls, resulting in an unrealistically lower habitat value.' If the combined SONGS lampara and trawl data provide the best estimate for the shallow sand habitat, then the use of the corresponding habitat value (1227.2) would yield a productivity scaling mitigation ratio of 1:3.3. Given differences in seascape context, NMFS understands the Board's conclusion that	underrepresented, only one type of sampling gear was used to collect fish, and the type of sampling gear used is designed to primarily collect bottom-dwelling (benthic) species. In addition to the reasons discussed above, Bond et al (1999) states, "Several studies have attempted to compensate for inefficiencies in sampling methods by adding a correction estimate (Stephens, 1978; MEC, 1988). Trawls are considered to have efficiencies of between 30 and 50%, and the Bond Paper further suggests the use of a, "30% contribution as a "rule of thumb" for other habitats." In conclusion, given the underrepresented habitat value for soft-bottom habitat, the related uncertainty regarding this value, and the fact that increasing the value by 30% is recommended in the Bond Paper, the value for this habitat was increased from 651.2 to 846.6 acres. This increase recognizes the habitat value of mid-water column species, while also acknowledging the inherent uncertainty in mixing data sets for similar, but not identical ecosystems. The APF scaling/mitigation ratio has also been revised to reflect this 30% change (from

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			affected shallow sand habitat off Huntington Beach may not be equivalent to the absolute habitat value (1227.2) calculated for San Onofre. Also, NMFS understands the increased confidence in the habitat estimate provided by otter trawl surveys conducted over multiple locations and time periods. However, NMFS does not believe the Board should ignore the habitat value provided by water column species simply because of these seascape differences. Bond *et al*. (1999) found that the synthesized shallow habitat valuation approach utilizing both otter trawls and lampara nets yielded a value 30% higher than that provided by otter trawls alone. Therefore, NMFS recommends the Board utilize this relative difference (30%) to adjust the habitat value used to represent the affected shallow water, soft substrate habitat, which would yield a habitat value of 846.6.	1:5.8 to 1:4.5). This results in an increase from 89.5 acres of mitigation to 109.5 acres of required mitigation.
0070.05			Given the unique importance of the Bolsa Chica ecosystem and the risk of ecosystem decline due to limited funding to maintain and preserve the ecological functions provided by the Bolsa Chica Lowlands Project, NMFS supports the Board's determination that preservation,	Santa Ana Water Board staff worked closely with NMFS staff regarding appropriate methods for assessing the Discharger's proposed mitigation. The comment is correct that the ratio for the maintenance dredging of the ocean inlet (referred to as "preservation") was initially

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			enhancement, and restoration actions at Bolsa Chica are appropriate mitigation activities to offset the adverse effects of the facility on EFH. However, NMFS is concerned by the relatively low mitigation ratio proposed for the preservation component of the mitigation proposal. As described in Appendix G.5, Board staff collaborated with NMFS staff to develop initial estimated values for the Mitigation Ratio Calculator (MRC) (King and Price 2004), which resulted in a mitigation ratio of 4.25:1. However, NMFS staff specifically noted that this ratio was lower than typical preservation action scenarios, and did not account for the fact that the Ports of Long Beach and Los Angeles received mitigation credit for the Bolsa Chica Lowlands Project. Therefore, NMFS staff indicated that Board staff should consider increasing the mitigation ratio to address these issues. In contrast, the Board ultimately lowered the mitigation ratio to 2.92:1. Preservation does not result in a gain of aquatic resource area or functions. Therefore, significant adjustments to mitigation ratios are generally made to	calculated as 4.25. The 4.25 would have resulted in 75 acres (317/4.25) for the preservation actions. Santa Ana Water Board staff subsequently revised this ratio to 2.92. This revision was the result of interagency consultation between Santa Ana Water Board staff and State Lands Commission (SLC) staff. Santa Ana Water Board staff sought SLC input since SLC is the managing agency and landowner at Bolsa Chica. During the interagency consultation process, SLC staff indicated that the “k” parameter in the MRC was too low. The “k” parameter (discussed in more detail in attachment G.5) represents the risk of failure of Bolsa Chica due to loss of funding to maintain the ocean inlet. Initially, “k” was set to 5% resulting in a ratio of 4.25. However, after discussing with SLC staff, “k” was increased to 8% resulting in a ratio of 2.92 to reflect the uncertainty in future funding for dredging of the inlet. NMFS staff has indicated that the Santa Ana Water Board staff’s proposed ratio (317 acres/2.92) is atypically low for preservation actions and recommended that the Santa

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			account for this limitation. NMFS does not currently have a comprehensive mitigation policy and relies, in part, on the mitigation framework provided by the U.S. Army Corps of Engineers (USACE) to inform their permit decisions. NMFS notes that the USACE's South Pacific Division's Standard Operation. Procedure for Determination of Mitigation Ratios suggests that preservation should have a mitigation ratio between 4:1 and 20:1.	Ana Water Board apply the minimum ratio for preservation actions established by the U.S. Army Corps of Engineers in their regional federal guidance as an appropriate minimum preservation mitigation ratio. Based upon regional federal guidance developed by the U.S. Army Corps of Engineers, the minimum ratio for preservation actions is 4:1, which would result in approximately 79 acres of mitigation (317 acres/4). However Santa Ana Water Board staff recommends using the MRC-derived value of R = 2.92 because it represents the best available solution to balance staff's analysis with the analyses by California State Lands Commission, NMFS, and the Discharger. It also is a site-specific calculation, unlike the more general value of 4:1. As noted above, the dredging is a maintenance or preservation action so Santa Ana Water Board staff recommends that the Santa Ana Water Board approve the calculation of 108 acres for Discharger's proposed maintenance dredging at Bolsa Chica. The MRC provides an accurate, project-specific method to evaluate the Discharger's proposed mitigation. By using the MRC, and defining the dredging as

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				"preservation," the resulting 108 acres takes into account not only the benefit of maintaining the Full Tidal Basin (which includes substantial eelgrass habitat), but also acknowledges that the entire Bolsa Chica system requires this dredging to function. It further accounts for the fact that the proposed restoration and enhancement will also require dredging of the ocean inlet. The 108 acres represents Santa Ana Water Board staff's best professional judgment that there is intrinsic value in preserving the Bolsa Chica wetlands. After reviewing these comments, and those of another state regulatory agency – the California Coastal Commission – with discretionary approvals over the proposed project, Santa Ana Water Board staff does not recommend changing the inputs to, and results from, the MRC. As stated previously, the ratio of 2.92 was the result of interagency consultation and represents the best, site-specific, estimate of the mitigation acreage resulting from the proposed activities. (See also response to comment CCKA III.B.) See also response to comment CCKA III.C regarding preservation.

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0070.06			Furthermore, NMFS does not believe the Board has fully accounted for the fact that the Ports of Los Angeles and Long Beach already received mitigation credit for Bolsa Chica Lowlands Project. The Board indicates they do not believe this an issue to address because, other than recognizing previously approved mitigation included as part of California Environmental Quality Act compliance for the Ports, the Board has not separately awarded any mitigation credit or acreage for the Bolsa Chica wetlands to any person or entity as part of any mitigation required as a condition for a regulatory approval. However, the Los Angeles Regional Water Quality Control Board (LA Board) has recognized the Bolsa Chica mitigation credits as a means to address unavoidable loss of marine habitat due to Port landfills, and to mitigate for loss of marine habitat and to comply with the State of California's No Net Loss Wetlands Policy (Executive Order W-59-93) in their findings associated with Clean Water Section 401 water quality certification and waste discharge requirements for Port landfill projects. For example, the LA Board recently cited available Bolsa Chica	As discussed in pages 13 to 15 of Attachment G.5 to the Tentative Order, the proposed mitigation project does not pose "double counting" issues. Although the Ports of Los Angeles and Long Beach received mitigation credit for the dredging of the Bolsa Chica inlet, they do not have a continuing obligation to dredge the inlet or to fund the dredging of the inlet. The dredging of the inlet is necessary to prevent the closure of the inlet and presents a mitigation opportunity of the Discharger. The fact that the Los Angeles Regional Water Quality Control Board may have allowed the Ports to use mitigation credits for work they performed at Bolsa Chica does not change the fact that the Ports have no further obligations at Bolsa Chica. To highlight why this is not double counting, it is helpful to consider a situation where dredging ceased, the inlet closed, and the Bolsa Chica Wetlands collapsed. If a party subsequently proposed to restore the wetlands, it certainly wouldn't be double counting if the party had to repeat work previously performed by the Ports to restore the failed wetlands simply because the Ports had taken certain actions in the past.

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			mitigation credits to address loss of marine habitat in the Port of Long Beach's Pier G Wharf Improvement Project (LA Board Order No. R4-2019-0117).	The proposed mitigation ratio accounts for the previous work performed by the Ports as it appropriately reflects the preservation nature of the dredging.
0070.07			According to the Desal Amendment, the Board may increase the required mitigation ratio for any species and impacted natural habitat calculated in the Marine Life Mortality Report when appropriate to account for imprecisions associated with mitigation. Santa Ana Water Board staff determined that the inlet maintenance dredging would be considered a "preservation" form of mitigation, not "expansion," "restoration" or "creation" as is indicated in the Ocean Plan. Thus, the Board has not precisely followed the Ocean Plan by recommending the preservation action as an offset for marine life impacts. Moreover, the Board does not appear to be fully accounting for permit decisions made by LA Board regarding the continued loss of marine habitat associated with Port landfill projects. As this may be one of the first preservation mitigation actions for estuarine and marine habitats considered by the State of California, NMFS believes the Board	While the proposed maintenance dredging alone does not qualify as "restoration, creation, or expansion," when taken together with the restoration and enhancement components, the proposed mitigation project as a whole falls within the scope of this requirement and complies with Water Code section 13142.5(b) and the Ocean Plan. The Discharger's proposed restoration and enhancement activities cannot succeed without the dredging—the dredging is an essential component of the proposed plan. In addition to supporting the other components of the Discharger's proposed mitigation, the dredging will also preserve the existing conditions that were restored by the Ports. The Ocean Plan also requires the mitigation site to be within the source water body. The Discharger evaluated other potential mitigation project sites within the source water body and concluded that Bolsa Chica was the only site that was available and that presented feasible mitigation opportunities.

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			should re-evaluate their underlying mitigation ratio justification for the proposed preservation action. Specifically, NMFS believes the Board should increase the mitigation ratio to account for the above, and believes that 4:1 should be considered as a minimum preservation ratio for this particular action.	The Santa Ana Water Board concurs with the evaluation. In accordance with Water Code section 13142.5(b) and the Ocean Plan, the Discharger must use the best available mitigation feasible. In a choice between a mitigation project that includes restoration, enhancement, and preservation components and going outside of the source water body to find a mitigation project consisting only of restoration, expansion, or creation actions, the former better mitigates the impacts of the Facility as it would provide mitigation in the same area that will be impacted by the Facility's construction and operation. Furthermore, it is good policy to allocate mitigation acreage for the preservation component of the proposed mitigation project. If the ocean inlet closed and the wetlands stopped functioning, then the restoration of Bolsa Chica, inclusive of the inlet dredging, would undoubtedly fall squarely within "restoration." It would be environmentally irresponsible and wasteful to discourage the preservation of recently restored wetlands by requiring the wetlands to totally collapse before further mitigation

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				action is considered "creditworthy." The dredging of the inlet preserves valuable habitat to marine and terrestrial life and is appropriate to include as part of the mitigation for the Facility. With regard to the recommended mitigation ratio of 4:1, see response to comment 0070.05.
0071.01	Barbara and Steve Noffsinger	Jan 15, 2020	It uses antiquated technology	The Santa Ana Water Board disagrees that reverse osmosis is an antiquated technology. See responses to comments 0024.03, 0031.02 and 0033.03.
0071.02			It destroys marine life with its intake pipe and with the high salt brine export.	See responses to comments 0004.01, 0004.03, 0036.01, 0054.02, and 0055.02.
0071.03			It will produce costly water that we as rate payers will be forced to buy.	See response to comment 0032.01.
0071.04			we certainly don't need especially in Huntington Beach with our excellent reclamation system.	See responses to comments 0004.19, and 0014.04.
0071.05			It will tear up our streets for years!. If they want water in the south county, consider the retired San Onofre plant. Our south east Huntington Beach neighborhood has way too much going on with •magnolia tank farm, •new electrical plant, •old dump site, and •sewer treatment plant. It is too close to the Ascon landfill site with possible	See responses to comments 0022.04 and 0050 regarding construction impacts; 0132.06 regarding the Ascon landfill, 0041.01, and 0177.09 regarding sea level rise and climate change.

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			contamination and with the possibility of ocean rise due to climate change.	
0072	R Lindsey	Jan 13, 2020	Over the last 30 years we have seen a return of species long gone from the area. I surf along this beach and witnessed first hand the return of the brown pelicans, pods of dolphins and the millions of shellfish that fill the sand at low tide. 30 years ago there were no dolphins, shellfish or pelicans, just sand Now Poseidon wants to dump its waste water on them. The currents will carry the brine south in winter, north in summer and the prevailing onshore wind will deliver it to the beach. Conservation is the solution. We have converted our front and back lawns to native plants making a huge reduction in our water bill while providing habitat for the birds and bees. If we can't protect our little corner of the environment from industrialization, how can we save the planet from the larger issues of over population and climate change?	See responses to comments 0004.01, 0036.01, 0054.02, 0055.02, and 0062.02 regarding the brine discharge; 0004.19, 0011, and 0055.01 regarding alternative supply options. The Santa Ana Water Board acknowledges that water conservation is an important aspect of reducing the overall water demand in our region. However, the water demands in the future cannot be met only by water conservation. The water agencies planning documents indicate the need for new sources of reliable water supplies in the future and demand projects rely on water conservation practices. The Santa Ana Water Board do not anticipate that the brine plume will extend a significant distance from the outfall structure due to rapid mixing of the brine plume with the receiving seawater. The Facility's outfall structure will be retrofitted with a 14-port linear diffuser that will promote the rapid mixing and dilution of the brine plume with seawater, which according to brine plume dilution modeling done by the Discharger, would be diluted to a salinity

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				concentration comparable to ambient seawater salinity within 130 feet of the outfall structure. For additional information regarding this topic see responses to comments 0004.11 and 0035.04.
0073.01	Steve Bullock, David Fleming, Tracy Hernandez Los Angeles County Business Federation (BizFed)	Jan 13, 2020	As noted by the Metropolitan Water District of Southern California (MWD) in its letter of support of the project that was sent to the State Lands Commission, MWD's "long-term Integrated Water Resources Plan (IRP) achieves di00versification with an "all of the above" approach (that) includes… developing climate resilient resources such as seawater desalination." MWD has a goal of producing 2.4 million acre-feet of water from local supplies by the year 2040. Over that same time, Southern California is expected to grow by more than three million people. These residents and businesses need access to locally-controlled, droughtproof and climate-resilient supplies of water. The Huntington Beach Seawater Desalination Project checks every one of those boxes.	The Discharger submitted the MWD letter in support of their application package. The letter was considered in the preparation of the Tentative Order.
0073.02			LA BizFed encourages the Santa Ana Regional Water Quality Control Board to	Comment noted.

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			support staff's proposed draft permit and vote to amend and renew the permit for this project, which was first approved in 2006 and unanimously amended in 2012.	
0074	Leslie Cochrane	Jan 13, 2020	Please please....NO Poseidon!!!!!!!	Comment noted.
0075	Jeanie Petrocella	Jan 13, 2020	I don't believe this company is reliable, poor track record. The water is too expensive and is not needed. Finally, there's too much environmental damage and it will be a nightmare for local residents.	See responses to comments 0004.01, 0004.03, and 0036.01 regarding environmental impacts of the proposed project. Additionally, see the responses to comments 0014.04, 0032.01, and 0055.01 regarding the cost and need for the water.
0076	Jeanne Whitesell	Jan 13, 2020	I don't believe this company is reliable, poor track record. The water is too expensive and is not needed. Finally, there's too much environmental damage and it will be a nightmare for local residents.]	This comment is identical to comment 0075. See response to comment 0075.
0077	Flossie Horgan	Jan 13, 2020	I would like to know how the SARWQB will respond to such facts that demonstrate the damage that the outfall from the proposed Poseidon desal plant will produce to the ocean environment. In the Poseidon/HB case, to desalinate 50MGD of seawater, the process must dispose of 5 Tons per minute of just salt every minute of every day of every year	See responses to comments 0004.01, 0036.01, 0054.02, 0055.02 and 0062.02

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			for 30 years. That 5T/minute is only the weight of the salt---not the brine. Do the math: Seawater is 3.4% salt by weight; a gallon of seawater weighs 8.34 lbs.; a gallon of seawater contain 0.284 lb. of salt; therefore, 50MGD would contain 14,178,000 lbs. of salt per day. This works out to 9,486 lbs./minute or about 5 Tons/minute.	
0078	Nora Pedersen	Jan 13, 2020	Please do NOT support the Poseidon project. Salt will be concentrated when it is dumped in the ocean and kill marine life. Secondly, the salt water sucked into the plant will also contain marine life eggs; they will die. The effect on the marine food chain will be devastating.	See responses to comments 0004.01, 0036.01, 0054.02, 0055.02, and 0062.02 regarding brine discharge impacts; 0004.01 regarding intake impacts; and 0070.01 regarding impacts on the marine food chain.
0079.01	Ron Miller Los Angeles-Orange County Building and Construction Trades	Jan 13, 2020	The Huntington Beach Seawater Desalination Plant is the right project in the right place at the right time. As you heard from such authoritative water district manages as the Orange County Water district and the Metropolitan Water District of Southern California, this project is needed to help Orange County reduce its reliance on imported water and become more water independent. This project is needed to help Orange County reduce its reliance on imported water and become more water independent. This project is without	Attachment G.2 analyzes whether the water supply agencies have adequately identified a need for the desalinated water that is consistent with applicable urban water management plans and other relevant water planning documents. See response to comment 0014.04.

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			question the single largest source of new, drought-proof water supply available to Orange County.	
0079.02			In addition to the billions of gallons of new drinking water and millions of dollars in new tax revenue, this project will also result in thousands of new jobs for the hard-working skilled and trained men and women in the building trades. Electricians, Laborers, Pipefitters, Cement Masons and countless other trades men and women will bring this project to fruition on time and on budget. This will also create a pathway for entry into apprenticeship programs in the building and constructions trades for community members that live around the project and result in life long careers in construction.	This comment is not relevant to the Santa Ana Water Board's consideration of the Tentative Order. See response to comment 0003.02.
0079.03			The applicant holds an existing permit; they are simply asking for an amendment and a renewal to that permit. The San Diego Regional Water Quality Control Board granted a similar request to the applicant for its Carlsbad Seawater Desalination plant, which uses the same technology that is proposed for this plant. I ask you to simply follow the science and follow the law and approve the permit as your staff has indicated	To clarify, the pending application is not "simply an amendment" to the previous permit. In 2015, the State Water Board adopted new Ocean Plan provisions that specifically apply to seawater desalination facilities. Applying the framework in the Ocean Plan's desalination provisions, the Santa Ana Water Board must determine anew whether the proposed Facility uses the best available site, design, technology, and mitigation measures feasible to

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			would be the appropriate action for you to take.	minimize intake and mortality of all forms of marine life in compliance with Water Code section 13142.5(b). The comment related to the Carlsbad desalination plant is not relevant to the Santa Ana Water Board's consideration of the Tentative Order. Moreover, the Carlsbad facility does not use the same technology as the proposed facility in the Tentative Order. Instead of wedgewire screens, the Carlsbad facility currently uses traveling screens. Furthermore, the Carlsbad facility does not have a multiport diffuser for diluting brine. Even if the two facilities used the same technologies, the San Diego Water Board's approval of the Carlsbad Facility's permit would not be relevant to the Tentative Order—the Santa Ana Water Board is considering the impacts of and requirements for a different facility in a different water body.
0080.01	Vicky McGavack	Jan 13, 2020	With AES up and running I was so happy that HB will no longer need to use ocean water for cooling, allowing HB to conserve our marine life. Oh but wait!! You are considering to approved the Poseidon project, which is a disaster just	The Santa Ana Water Board must consider the potential effects the proposed Facility's brine discharge will have on marine life to determine whether the Facility complies with Water Code section 13142.5(b) and to establish appropriate waste discharge

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			like the movie. I don't understand why Huntington Beach, who takes such pride as "Surf City" and boasts our wonderful beaches, would consider the destructive effects that desalination (salt brine) will have on our marine life.	requirements to protect the beneficial uses of the Pacific Ocean (including contact and non-contact recreation and marine habitat). See responses to comments 0004.01, 0004.03, 0036.01, 0054.02, 0055.02, and 0062.02.
0080.02			There are other ways to conserve water; landscape changes, appliance and fixture upgrades and leak repairs.	OCWD and MWDOC, as the relevant water planning agencies, have taken into account water conservation actions in developing their water portfolios.
0080.03			Lastly, in the propaganda I received from "HB Desalination Project" (sent from Carlsbad, CA), Poseidon said " Current funding to maintain the ocean inlet at the Bolsa Chica wetlands runs out in 2021 and without the maintenance of this inlet, the future of the wetlands could be at risk. The HB desalination project will provide funding needed to maintain this inlet and protect the Bolsa Chica wetlands for the next generation". I am sure that the Bolsa Chica wetlands leadership can figure out how to pay for an ocean inlet using fund raising and community resources as does the HB Wetlands and Wildlife care center. But apparently on their propaganda even the CA State Lands Commission felt that	The completion of mitigation projects at the Bolsa Chica wetlands is a requirement of the Tentative Order. Santa Ana Water Board staff consulted extensively with staff from the landowner and managing agency, the State Lands Commission (SLC). SLC indicated that funding the ocean inlet dredging is incredibly challenging. Funding is on the order of millions of dollars and may require special approval by the state legislature. SLC staff has stated there is an urgent need to find sustainable, reliable funding of Bolsa Chica from sources other than the State Legislature. See response to comment 0070.07.

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			would be a great selling point. I am not buying it and hope you won't either.	
0081.01	Timothy Stripe Grand Pacific Resorts	Jan 13, 2020	I am writing in support of the critical role desalination plays in supporting the San Diego region's booming tourism industry. Carlsbad Desalination Plant, which provides San Diego County with 50 million gallons of drought-proof water every day. As the largest seawater desalination plant in the nation, the Carlsbad plant provides tremendous benefits for the San Diego region's water reliability and gives local businesses the assurances they need to thrive. Additionally, the plant has boosted the local tourism market by attracting 30,000 visitors since its opening, and the steady water supply it provides has helped enhance the region's economic competitiveness.	This comment is not relevant to the Santa Ana Water Board's consideration of the Tentative Order. See responses to comments 0003.02, 0004.09, and 0079.03.
81.02			Desalination helps provide the reliability our region needs to continue growing and thriving. I thank you for the opportunity to comment on this important matter and hope you will consider the many benefits desalination brings to both our region's economy and local quality of life.	See response to comment 0003.01.

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0082.01	James Gosnell Gosnell International	Jan 13, 2020	Poseidon's proposed desalination plant would have a disastrous impact on California's marine life, ocean water quality and greenhouse gas emission goals.	See responses to comments 0004.01, 0004.03, 0004.05, 0004.12, 0004.17, and 0036.01.
0082.02			The draft Permit disregards the state's desalination regulations and would set a terrible precedent for future desalination projects. The draft permit holds a private company looking to profit off Californian's drought fears to an abysmally low standard for the protection of our precious coastal resources.	The Tentative Order implements the Ocean Plan's desalination provisions and requires the Discharger to use the best available site, design, technology, and mitigation feasible to minimize intake and mortality of all forms of marine life. Additionally, the Tentative Order contains effluent limits and receiving water limits that are protective of beneficial uses in accordance with the Ocean Plan. Finally, the Tentative Order establishes requirements for an individual proposed facility and does not establish precedent for other proposed projects with distinguishable facts and site-specific issues that may be considered by the Santa Ana Water Board or other regional water boards in the future. See also responses to comments 0004.11, 0033.01 and 0035.06. 0082.02, 0096.02 0103.02 and 185.01.
0082.03			Since 2010, the residents of Orange County have dramatically reduced our cumulative demand for freshwater - despite significant population and	See response to comment 0004.19 regarding alternative supply options, and response to comment 0148.09 regarding the MWDOC reliability study.

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			economic growth. The Orange County Water District has expanded Orange County's world-renowned Groundwater Replenishment System by 30 million gallons a day and is set to expand by that size again soon. Now Los Angeles County is planning a similar Groundwater Replenishment System that will contribute 60 million gallons a day to replenish Orange County's groundwater basin. Further, a recent study by the Municipal Water District of Orange County ranked Poseidon's project as the least attractive option for meeting Orange County's water needs.	
0082.04			California state regulations for seawater desalination require projects to utilize sub-surface intakes to avoid impacts to marine life and to mix the brine with the nearby wastewater discharge before disposal to the ocean. The draft permit does not adequately address the absence of these design features in Poseidon's proposal. Instead, Poseidon plans to use outdated and harmful technology.	Attachment G.1 to the Tentative Order analyzed the feasibility of subsurface intakes and concluded that subsurface intakes are not feasible. In regard to the use seafloor infiltration galleries: beach infiltration galleries were found to be technically infeasible due to the hydrogeology on the shoreline; however, seafloor infiltration galleries were found to be technically feasible but not economically feasible. (Attachment G.1 of the Tentative Order, Section 2).

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				In regard to the use of slant well intake systems, the hydrogeologic model run (Run 5) performed by Geosyntec on behalf of Poseidon, used OCWD's maximum allowable extraction rate of 1,000 acre-feet/year from the inland aquifer. This model run predicted that the extraction volume achievable by 3 slant wells (subsurface intakes) would be 3.8 MGD given OCWD's specified maximum extraction rate. This volume of water is extremely small compared to the proposed 50 MGD for the project and the cost of the slant wells compared to the volume of water generated renders them technically infeasible. In accordance with the Ocean Plan, the Discharger must install wedgewire screens on the surface intake pipe and the through-screen velocity may not exceed 0.15 meters per second at any time. Attachment G, Finding 11, of the Tentative Order explains that it is not feasible to mix the brine with wastewater from either the AES generating station or the Orange County Sanitation District's outfall. AES will no longer be using seawater for cooling and will therefore not be generating sufficient

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				wastewater to dilute the desalination plant's brine by the time the desalination facility is built and operational. OCSD has stated that they plan on reusing more of their wastewater for recycled water and will not generate sufficient wastewater for comingling with the proposed facility's brine discharge by the time the desalination facility is constructed and operational. As provided in the Ocean Plan, a multiport diffuser is the next best technology feasible when wastewater is not available to commingle with the brine. Thus, the proposed Facility is required to install and use a multiport diffuser for the discharge. Also, see responses to comments 0004.01, 0004.03, 0024.03, 0036.01, 0054.02, 0055.02, 0062.02, 0168.02, CCKA IV.A, CCKA IV.B and CCKA IV.C.
0082.05			We do not want to perpetuate the industrialization of our coastline. The people of California own our ocean public trust resources, yet Poseidon proposes to profit from taking seawater and converting it to the most expensive water supply available without showing a need for the water. It is your responsibility to protect our public trust resources.	See responses to comments 0004.19 0014.04, 0055.01, and 0089.

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0082.06			We deserve clean water to recreate in, clean air to breathe and a beautiful coastline to enjoy and share with visitors.	See responses to comments 0004.01, 0004.03, 0022.04, 0036.01, 0050, 0054.02, 0055.02, and 0062.02.
0083	Roy McCord Irvine Valley College	Jan 13, 2020	I remember as a kid in New England going out with my Farmer Uncle at night to kill slugs. We coulda just squished 'em. But he had this fancy crystal powder: easy quick cheap. Salt. Grab a pinch of a little salt and toss it on a naked slug and whamo! It writhes up into a tortured ball and …. disappears. Protoplasm. Goosh. Great entertainment for an impressionable ten year old. Nothin' happened to our fingers, tho' the skin did feel a little parched after a night's "fun." Wasn't until bio and chem that I knew what had happened. Osmotic dissolution. Salt sucked the life-water out of the blighters (slugs) So we're gonna pump five tons, 10.000 pounds of salt every minute into our beach front ocean? Maybe the surfers are gonna be ok. Maybe the tourists kids are gonna be ok. Skin. Besides, kids and surfers and moms can just stay away.	See responses to comments 0004.01 0004.03, 0036.01, 0054.02, 0055.02, and 0062.02.

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			They all can read the warning signs we'll put up. But what about all those nameless skinless intricate exquisite sensitive critters out there?	
0084.01	Frank Caruso	Jan 14, 2020	It is beyond my comprehension that this permit process takes this long to complete when we are in the midst of a water shortage issue in California which requires a rapid response. With that said, I encourage you to approve the permit process in an expedited manner for the proposed Huntington Beach desalination plant so that Orange County residents like myself and millions of others can enjoy the many benefits of desalination for decades to come.	The Santa Ana Water Board is responsible for assessing whether any desalination facility proposed in the Santa Ana Region complies with applicable laws and regulations. A significant amount of time was needed to review this complex project and the highly technical documents associated with it. The Discharger submitted approximately 150 documents with well over 10,000 pages in support of their applications. Santa Ana Water Board staff have met with the Discharger many times to discuss their application and supporting documents. The review process also included the engagement of two neutral third-party experts. At the request of the Discharger, staff even delayed presenting a recommendation to the Board to allow time for the Discharger to address deficiencies in their proposal. The preparation of the Tentative Order itself also took a considerable amount of the time and the order is well over 500 pages, thus

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				speaking to the complicated nature of the permitting process for this proposed project.
0084.02			With the passage of water restriction legislative bills such as Assembly Bill 1668 and Senate Bill SB 6060 which allows California to restrict water usage and sets water indoor usage to 55 gallons per day per person, the proposed Huntington Beach plant is even more important than ever! This Plant will produce 50 million gallons of fresh, desalinated water per day while taking important steps to protect and enhance our precious coastal resources.	Comment noted.
0084.03			The plant will provide our region with the water reliability we need to continue growing and thriving by providing us with a water supply that is locally controlled and not dependent on weather for our continually growing County of Orange.	See response to comment 0003.01.
0085.01	Matt Hall Mayor, City of Carlsbad Rebecca Jones Mayor, City of San Marcos	Jan 14, 2020	By producing up to 50 million gallons of water per day, the Carlsbad Desalination Plant provides our region with a critical and reliable water source that is both drought-proof and locally-controlled. Additionally, as the first major infrastructure project in the State of California to eliminate its carbon footprint - the plant represents an important step forward in helping the state protect its	See response to comment 0079.03.

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	Judy Ritter Mayor, City of Vista		environmental resources and achieve its climate goals.	
0085.02			Since its inception, the Carlsbad Desalination Plant has been a tremendous asset to our region. Construction of the Carlsbad plant and the 10-mile conveyance pipeline spanned our three cities and was often in close proximity to homes and businesses. The project team was successful in collaborating with numerous project partners and coordinating and communicating with nearly 25,000 nearby residents and businesses to ensure everyone was kept informed about construction activities. Throughout construction, local businesses were engaged to source critical components of the plant and pipeline, infusing hundreds of millions of dollars into the local economy and enhancing our region's economic competitiveness.	See response to comment 0079.03.
0085.03			Additionally, the project set new environmental standards for how desalination plants can be constructed in California by restoring 66 acres of wetlands in San Diego Bay and planting 5,000 trees in areas damaged by	See response to comment 0057.

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			wildfires – measures that will benefit our region for generations to come.	
0086.01	Rich Tonti Pacific Paradise Pools	Jan 15, 2020	I am a business owner of a swimming pool construction firm and know all too well the challenges California faces with water and its scarcity. The last drought was a tremendous strain on the entire CA economy, our business included.	The concern about drought and water scarcity is noted. Desalination is one water source that water supply agencies may consider as part of their water supply portfolio.
0086.02			I toured the Carlsbad Plant in December 2019 and am beyond impressed with its operations and the prospects of having a sustainable and renewable water supply available in Huntington Beach and to our neighbors in OC. I believe that this proposed Plant is long over due and one of many solutions to make OC less dependent on outside water sources.	Desalination is one water source that water supply agencies may consider as part of their water supply portfolio. See response to comment 0079.03 regarding relevancy of the Carlsbad desalination facility.
0086.03			I believe that this proposed Plant is long over due and one of many solutions to make OC less dependent on outside water sources.	Desalination is one water source that water supply agencies may consider as part of their water supply portfolio.
0087	Dirissy Doan Orange County Realtors	Jan 15, 2020	We have testified and written letters supporting the Huntington Beach Seawater Desalination plant and we continue to support approval of this project. A reliable, drought-proof, and climate-resilient water supply is more critical now and will become more important in the future. Most of us lived through the four-year drought that	Desalination is one water source that water supply agencies may consider as part of their water supply portfolio.

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			resulted in the state imposing water restrictions in order to manage our water use. While water use efficiency is crucial, new local water supplies must also be considered.	
0088.01	Lori Shaw	Jan 15, 2020	I am strongly against this proposed plant for several reasons including the consequences of this project to the marine environment and to the beach I love so much. In addition I am concerned about the amount of damage the salt brine deposits and intake pipes will have on our local beach and marine life.	Please see responses to comments 0004.01, 0004.03, 0036.01, 0054.02, 0055.02, and 0062.02 regarding impacts of seawater intake and brine discharge.
0088.02			We are still reeling from all the changes and tremendous increase in noise from the new Electrical Plant which will be right next door to the Poseidon if it is approved.	See responses to comments 0004.15 and 0014.01.
0088.03			Also I am not convinced about the need for this water in the first place	See responses to comments 0014.04 and 0055.01.
0088.04			and if anyone will be able to afford it after this Project is built because it will end up being so expensive.	See response to comment 0032.01.
0089	Laurie Davies Association of California Cities- Orange County	Jan 15, 2020	Our Groundwater Replenishment System (GWRS) is world renown for being the most technologically advanced Indirect Potable Reuse project on earth. Yet even with GWRS and the county's reduction in water use, Orange County	The analysis of the need for the Facility's water considered the Municipal Water District of Orange County's Urban Water Management Plan and the Orange County Water District's Groundwater Management Plan. Orange County Water District has

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			still imports about half of its drinking water from Northern California and the Colorado River. This supply of imported water is reliant on rainfall and snowpack, which can vary wildly from year to year. Additionally, a natural disaster such as an earthquake, could cut this supply off for months or even years. And our growing populations in other western states further strains the Colorado River water supply. The Huntington Beach Seawater Desalination Plant would be the single largest source of new drought-proof water supply for our county. This project is identified in both the Municipal Water District of Orange County's Urban Water Management Plan and the Orange County Water District's Groundwater Management Plan as a planned future water supply. In other words, local agencies are counting on this project to meet future needs. This project will reduce Orange County's reliance on imported water and has the support of the Metropolitan Water District of Southern California.	indicated that the proposed Facility would decrease reliance on imported water. See response to comment 0014.04.
0090.01	Richard and Sharon Schact	Jan 15, 2020	We are concerned that a desalination plant in Huntington Beach will adversely affect our fragile ocean environment as	See response to comment 0004.19 regarding alternative water supply options; 0004.01,0004.03, 0036.01, 0054.02,

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			well as the recreational aspects of our beach. The salt/brine that would be released seems to be very harmful. We have yet to hear how Huntington Beach will benefit from a desalination plant, yet the plant would seriously harm our environment. It would seem that there are other alternatives to desalination that would benefit us without the cost to our marine life.	0055.02, and 0062.02 regarding intake and brine discharge impacts.
0090.02			Also we assume there will be infrastructure going through Huntington Beach to carry the water.	When the project was analyzed by the City of Huntington Beach in 2010, the Discharger planned to convey the water via a new pipeline and/or the replacement of existing pipelines. The City's 2010 Subsequent Environmental Impact Report analyzed the impacts of the then-proposed delivery system. (See response to comment 0050.) Orange County Water District (OCWD), the expected purchaser of the product water, has since indicated that it does not know what it will do with the desalinated water. Analyzing the impacts associated with OCWD's unknown plans for the water would be too speculative at this time. Comments regarding the distribution of or infrastructure for the product water should be directed to OCWD.

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0091.01	Mark Goodman	Jan 15, 2020	In our view, there are a number of reasons this proposal should be rejected and not move forward. They include: The potential (and very probable) negative effects on the marine environment by both the destruction of marine life sucked into the huge plant intake pipe and the significant amounts of salt brine deposited back into the ocean.	See responses to comments 0004.01, 0004.03, 0017.02, 0022.04, 0036.01, 0054.02, 0055.02, and 0062.02.
0091.02			The questionable need for the water. Many studies have highlighted the various more economical alternatives to desalination. With only some of these utilized to date, they have resulted in alleviating a large portion of potential water shortages.	See responses to comments 0004.19 and 0014.04.
0091.03			The use of the existing large intake pipe for this project is also questionable. The pipe, long used for the AES power plant, will no longer be used for that plant as having been deemed unacceptable by the State of California due to environment concerns. Why this pipe system is somehow acceptable for the Desal plant when not for the power plant is a mystery since the effects on the environment are actually significantly	See response to comment 0004.14.

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			worse in the Desal application (due to the brine).	
0091.04			The cost of the Desal water. The projected cost, as identified in the proposed contract is exceptionally high and appears to be based on some very questionable economics. The length of contract term of 30 years is unreasonable as technologies and other factors could significantly undermine the value of this plant in a short time.	See responses to comments 0004.19, 0031.02, and 0032.01.
0091.05			High energy use. The production of Desal water requires the highest use electrical energy when compared to virtually all other options.	See responses to comments 0004.05 and 0004.12 regarding energy use.
0091.06			The company's track record. The performance of the company in both the Florida plant and Carlsbad plant are not very good with problems ranging from poor plant performance, economics not matching projections to citations for not meeting environmental requirements. There appears to be very little "teeth" in penalties or cost adjustments contained in the proposed contract to protect the community.	The Tentative Order includes effluent limitations and other requirements that the Discharger must comply with to protect water quality and marine life. The Santa Ana Water Board has jurisdiction to enforce the requirements specified in the Tentative Order. If there are violations of the Order, once adopted, the Santa Ana Water Board may take appropriate enforcement actions. The Santa Ana Water Board is not and will not be a party to any contract related to the purchase of the water and cannot negotiate or enforce the terms of any such contract. See response to comment 0031.02.

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0091.07			Effects on the community. Distribution of the plant water will require numerous new piping systems. The installation of these will adversely affect the community due to road closures, increasing traffic, and impact commuting times.	See responses to comments 0034, 0050, and 0090.02.
0092.01	Denise Jordan	Jan 15, 2020	We don't need and may not ever need a desalination plant. I understand we have several cheaper options, we have full aquifers for the next 20 years, and can utilize all the other options if a drought happens to occur.	See responses to comments 0004.19 and 0014.04.
0092.02			The wealthy wall street east coast investors will make billions of dollars off of unsuspecting OC residents by making us pay for the desalination plant with much higher water bills for the next 35 years! I've heard 6-10.-/mo to start!!! We will only get 5% of the water and other cities that will be benefiting from this don't have to pay for it! Other cities residents where they use 80 gallons of water per day will benefit while we in HB are using far less and paying far more unnecessarily!	See responses to comments 0018.04 and 0032.01.
0092.03			On top of all this, it will hurt our environment by killing the fish eggs, fish, and everything else in the ocean and	See responses to comments 0004.01, 0004.03, 0036.01, 0054.02, 0055.02, and 0062.02.

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			create a dead zone with the super salinated water waste and who knows what else they will be spewing into the ocean.	For comment related to creation of a dead zone, see response to comment 0035.04. For comment related to discharge quality, see responses to comments 0033.01, 0050, 0055.02 and 0062.02.
0093	Nichole Pichardo	Jan 16, 2020	I want to express my support for the approval of the Huntington Beach Desalination Plant. I believe that this is a technology that we should harness to ensure that we have plenty of water in the years to come. Although we have had a few lucky years of rainy weather, this will not last. Climate change will surely send California into a drought once again and we need to be prepared.	See response to comment 0003.01.
0094	Debbie Workman	Jan 16, 2020	I feel strongly that this is something that will benefit our community greatly. The effects of climate change are currently threatening Orange County's water supply and we must act now to before it is too late. It's not a matter of if, but when, the next serious drought will occur. Water conservation is an important piece of the puzzle but we must be proactive in developing new sources of water. Seawater desalinization is a viable solution. It will help to alleviate this threat and insure	Santa Ana Water Board staff acknowledge your concern about drought and water supply. Desalination is one water source that water supply agencies may consider as part of their water supply portfolio.

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			that our community's water needs are met. Huntington Beach has a history of being a home to innovative technology and this is an important, innovative opportunity that many HB residents like myself support.	
0095.01	Bethany Webb	Jan 16, 2020	#1 It will negatively hurt our precious coastline.	See responses to comments 0004.01, 0004.03, and 0004.17
0095.02			#2 It will cost us money.	See response to comment 0032.01.
0095.03			#3 We don't need it.	See responses to comments 0004.19 and 0014.04.
0096.01	Bonnie Benton	Jan 16, 2020	PLEASE take all facts into consideration in your final evaluation of this wrong-headed project. There is enough recent information about rising acid levels in coastal ocean water to warrant a denial of their permit at this time.	See responses to comments 0004.01, 0004.03, 0017.02, 0036.01 and 0084.01 regarding impacts to marine life and response to comment 0177.13 regarding ocean acidification concerns.
0096.02			Their financials do not make sense, and the larger issue is this project if approved as it is will set a standard. We all know there are many other projects in planning stages all along the coast in California. The project in Dana Point now seems to be loosing support as well.	See response to comment 0069.01 regarding financing of the project. The Ocean Plan establishes the standards for seawater desalination facilities. The Santa Ana Water Board's decision regarding the implementation of those standards through the Tentative Order is limited to the project-specific facts regarding the proposed site, design, technology, and mitigation. The Board's decision will not have a precedential effect. See responses

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				to comments 0082.02, 0096.02, 0103.02 and 0185.01. Level of support for the Dana Point project is not relevant to the Santa Ana Water Board's consideration of the Tentative Order.
0097.01	William Workman	Jan 16, 2020	First, the staff's proposed environmental protection conditions for use of the proven desalination technology by Poseidon are strong contemporary measures to safeguard the ocean.	Requirements specified in the Tentative Order comply with the Ocean Plan and are intended to minimize impacts to marine life and protect the beneficial uses of the affected ocean waters.
0097.02			Second, Orange County is in a very vulnerable position with regards to its fresh water resources. Not openly discussed is the fact our groundwater basin can be destroyed by an earthquake, toxic spill or act of terrorism. Similarly, the fragile water transport system from Northern California is subject to a major disruption due to an earthquake, toxic spill or act of terrorism. A desalination facility can provide a measure of independence to partly address these two unthinkable occurrences. Thirdly, climate change is real and doing something now to increase water resources is critical. While long term	Desalination is one water source that water supply agencies may consider as part of their water supply portfolio. The Urban Water Management Plan developed by MWDOC as well as the OCWD Groundwater Management Plan take into consideration long-term climate change impacts such as increased seawater intrusion into freshwater aquifers and drought. See Attachment G.2 to the Tentative Order, pp. 6, 10, 13 and 17 for discussion of water agencies' climate change planning efforts.

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			weather forecasts are problematic, it is clear we need to have additional water sources to deal with Southern California's history of regularly occurring droughts. Having a desalination facility will complement our existing water sources. Lastly, secure and ample water resources is primary consideration for Orange County residents' quality of life, jobs, economic health and environmental protection. For all these reasons, it is a very good decision to support the Huntington Beach desalination facility today ... and not have regrets later.	
0098	John Wammes Water Works, Inc.	Jan 15, 2020	I am writing to you regarding the many ways desalination can support the growth of our water and economic future. The Claude "Bud" Lewis Carlsbad Desalination Plant has helped diversify the San Diego region's water supply, which supports critical industries throughout San Diego. One of those industries, Craft Brewing, has become nationally and internationally regarded, propelling San Diego to be known as the number one craft beer destination in the country.	Desalination is one water source that local agencies may consider as part of their water supply portfolio. See response to comment 0026.05 regarding quality of water from Carlsbad facility.

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			There are numerous reasons why San Diego is able to maintain its place as a top craft beer locale, but one of the most important is often overlooked - high-quality water. Since 2015 when the Carlsbad Desalination Plant opened, the addition of desal water into our region 's distribution system has created a noticeable increase in overall water quality. This has subsequently made our beer that much better and the recipe options more versatile. Purifying the water to remove minerals and organic compounds helps to extend life and reliability of brewing equipment and industrial manufacturing operations for companies throughout the region, supporting the economic vitality of these critical industries, as well. I encourage you to consider the reliability and peace of mind that desalination can provide for the many industries that rely on a secure and safe water supply.	
0099.01	Jim Ure	Jan 16, 2020	I think we should proceed to develop and build the desal plant. We need a secure source of drinking water that will be available when we are back in a drought.	See response to comment 0094.

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0099.02			I'd suggest negotiating a max limit on what the developer can charge for the water we use.	The Santa Ana Water Board is not and will not be a party to any contract related to the purchase of the water and cannot negotiate the price of the water. See responses to comments 0031.02 and 0032.01.
0099.03			Ideally, we can inject excess water into our aquifers to store for when we need it. If we had enough excess, we could stop or cut back on the amount of Colorado River water that we currently purchase.	The suggestions for ways in which the desalinated water could be distributed are not within the Santa Ana Water Board's authority. Orange County Water District, the expected purchaser of the product water, has indicated to the Santa Ana Water Board that it does not know how the desalinated water will be distributed.
0100	Barbara and Steve Noffsinger	Jan 16, 2020	Comments are a duplicate of comment letter 0071	See responses to comments 0071.01 to 0071.05.
0101.01	Valli Febbraro	Jan 16, 2020	As you may know by now, Poseidon's last project the Carlsbad Desalination Plant built by Poseidon was sold. They missed their production goal and had to pay 1.9 million in penalty, 5 major violations and that their water cost was $2,685/ac-ft and is expected to increase to $2,892/ac-ft this year. As far as I can tell OCWD only has one other district that is interested in signing up for the water. Why? It is expensive, low quality, boron levels exceed World Health Organization levels.	See response to comment 0004.09 regarding the Carlsbad facility; response to comment 0032.01 regarding the cost of the water produced by the Facility; and response to comment 0008.04 regarding boron and water quality

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0101.02			We don't need this expensive, low quality water. I appreciate that you asked the hard questions and hope that you have been able to review everything that was discussed at the meeting. There are so many other options that should be considered first. When we had the recent drought the people were called upon to reduce their water use, we did! Plus, no one mentions all of the people that have changed their landscapes to water friendly. More and More people are doing that and it should have a big impact on water needs in the future. I don't have numbers on what % is used for landscaping but I am sure it is a good portion. I believe that OCWD was awarded 4 new grants for increasing water recycling.	See response to comment 0004.19 regarding alternative water supply options; see responses to comments 0014.04, 0055.01, and 0089 regarding need for the desalinated water.
0101.03			This plant will lock us into something that we can't get take back once we commit to it!. It Kills marine life, and creates a threat to marine habitat. Isn't it better to try less expensive options? Review MWDOC report.	See responses to comments 0004.01, 0004.03, 0017.02, 0022.04 and 0036.01 regarding marine life concerns. See responses to comments 0004.19, 0032.01, and 0055.01 regarding cost and alternative water supply options. MWDOC's 2015 Urban Water Management Plan and 2018 Reliability Study were reviewed and considered in the analysis of

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				the Ocean Plan's need provisions. See responses to comments 0014.04, 0148.09, and 0149b.08.
0102.01	Jeff Rokos	Jan 16, 2020	I am not opposed to the concept of desalination, but I am opposed to the design of this project, the location of this project, and the company behind this project.	Opposition noted. As discussed in Findings 6 to 17 of Attachment G to the Tentative Order, the project's site and design are the best available site and design feasible to minimize intake and mortality.
0102.02			First of all is my concern for our local marine environment and the damage that this desal plant will cause to the same. The ocean-water intake system that used to be used for cooling the neighboring power plant is obsolete and has been prohibited by the state Supreme Court for year, mainly because of the amount of marine life that it killed. Yet, Poseidon's plan is dependent on that system since they admit the Coastal Commission's preferred sub-surface intake system would be "economically unfeasible." Well, it seems to me that makes the whole design unfeasible since it all starts with obtaining the ocean water.	See responses to comments 0004.01 regarding the intake design and impacts and 0005.05 regarding the status of the power plant cooling intake and the State Water Board's Once Through Cooling Policy. Additionally, to clarify, it is the California Ocean Plan that requires desalination projects to use subsurface intakes unless they are infeasible. While the Coastal Commission has studied the feasibility of a subsurface intake at the proposed location pursuant to an application for a coastal development permit, the Ocean Plan requirements were established by the State Water Resources Control Board, not the Coastal Commission. As discussed in Attachment G to the Tentative Order, Findings 6, 19 and 20 and in Attachment G.1 to the Tentative Order,

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				subsurface intakes are not feasible for the design capacity.
0102.03			Secondly, the concentrated brine effluent that will be discharged back into the ocean is projected to create a 'dead zone' on the ocean floor of over 400 acres.	See responses to comments 0004.01, 0036.01, 0054.02, 0055.02, and 0062.02. Additionally, the area where effects from salinity may lead to mortality of marine life—known as the Brine Mixing Zone—is approximately 1 acre, not 400 acres as referenced in the comment. The Discharger is further required to provide compensatory mitigation for any impacts to marine life caused by the construction and operation of the proposed facility. See also responses to comments 0004.01, 0020.02, 0035.04 and 0055.02.
0102.04			And thirdly, the actual desalination process is energy-intensive, requiring high amounts of electrical power, thereby increasing the amount of greenhouse gases being released into our ever warming atmosphere.	See responses to comments 0004.05 and 0004.12.
0102.05			Additionally, I have concerns about this project being located in close proximity to the ocean which is expected to rise 4-6 feet by the end of the century, likely turning the location into an island. And that is only if it is not taken out of service by an earthquake or the resulting tsunami since the plant will sit atop an	See responses to comments 0041.01 regarding sea level rise and 0132.06 regarding seismic impacts. Additionally, the Discharger will need to comply with the California Coastal Commission's siting requirements regarding tsunamis, floods, and other hazards. See response to comment 0177.10.

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			earthquake fault. It seems that this source of 'emergency water' will most likely be unavailable in the event of an emergency.	
0102.06			Finally, the track record of the company that wants to build this desal plant is not good. Their first such project of note was built along Tampa Bay in Florida and eventually had to be taken over by the county at a considerable cost in order to make it feasible. They have since built a plant in Carlsbad similar to the one proposed for Huntington Beach that has yet to reach Poseidon's projected production levels while racking up numerous violations for the polluted, discharged effluent being released into the ocean there. They are a for-profit, venture capital firm that cares only about making a dollar. The fresh water they say they will deliver will be priced at multiples of what it can currently be obtained for. Water is the basis of all life, and it should never be allowed to be privatized on this scale. I urge you to deny the permit that Poseidon seeks, sending them yet another message that their expensive water project in Huntington Beach is harmful to the environment, unnecessary for your	See responses to comments 0004.09, 0006, and 0193.07 regarding the Carlsbad facility; 0032.01 regarding costs of the desalinated water; 0014.04 and 0055.01 regarding need for the desalinated water; and 0004.01, 0004.03, 0004.05, 0036.01, 0054.02, 0055.02, and 0062.02 regarding environmental impacts. The comment regarding the desalination plant in Tampa Bay, Florida is not relevant to the Santa Ana Water Board's consideration of the Tentative Order.

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			constituents, and unwanted by the community. After 20 years, it is time for them to cut their losses, fold their tents, and move on. Without your approval and other future commitments to buy their water, they will eventually see that they have no choice.	
0103.01	Ernie Courter	Jan 16, 2020	Poseidon's proposed desalination plant would have a disastrous impact on California's marine life, ocean water quality and greenhouse gas emission goals.	See responses to comments 0004.01, 0004.03, 0036.01, 0054.02, 0055.02, and 0062.02 regarding marine life impacts and water quality and 0004.05 and 0004.12 regarding greenhouse gas emissions.
0103.02			The draft Permit disregards the state's desalination regulations and would set a terrible precedent for future desalination projects. The draft permit holds a private company looking to profit off Californian's drought fears to an abysmally low standard for the protection of our precious coastal resources.	The Santa Ana Water Board has conditionally determined that the proposed Facility complies with the requirements set forth in the Ocean Plan. (See Attachment G to the Tentative Order.) Additionally, the Tentative Order includes effluent limitations, receiving water limitations, and other requirements that are protective of water quality and marine resources. The Tentative Order establishes requirements for an individual facility and will not set the precedent for future desalination facilities. See responses to comments 0082.02, 0096.02 0103.02 and 0185.01.
0103.03			This plant would discharge toxic brine near surf breaks, create an enormous	See responses to comments 0004.01, 0004.03, 0036.01, 0054.02, 0054.02, and

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			amount of greenhouse gases and kill billions of marine larvae every day. It is not an environmentally sound decision	0062.02 regarding marine life impacts and brine discharge. Please note while billions of larvae will be impacted by this project that will be on an annual, not a daily, basis. See response to comment 0017.02 which addresses the mitigation requirement.
0103.04			Poseidon is proposing to construct this desalination plant in Huntington Beach utilizing decades old, poorly designed and outdated technology, with obsolete and abandoned intake and output pipes.	The existing infrastructure is currently operating and is therefore not abandoned. The Tentative Order requires the Discharger to install a new linear diffuser for the discharge and to install wedgewire screens on the intake pipe, both of which meet the Ocean Plan's requirements for design and technology. See responses to comments 0004.01, 0004.03, and 0024.03 Regarding use and regulation of the power plant seawater intake pursuant to the State Water Board's Once Through Cooling Policy, see response to comment number 0005.05
0103.05			Our neighbors in San Diego County have the same plant currently that has been cited with many environmental violations and cannot meet expected production expectations. This large-scale privatized desalination plants a bad deal for Cities, Water Districts and Consumers of this County. We have better, less environmentally damaging options to meet our water needs	See responses to comments 0004.09 and 0193.07 regarding the Carlsbad facility; 0004.19 and 0032.01regarding cost and alternative water supply water sources.

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0104	William Butts	Jan 16, 2020	I am strongly in favor of the HB desalination project since we need as many sources of fresh water as possible. I have tired [sic] the Carlsbad desalination plant and was very impressed in how they care for the ocean while providing a major source of water for San Diego county.	See responses to comments 0003.01 and 0098.
0105.01	Dallas Weaver Scientific Hatcheries	Jan 17, 2020	As an environmental scientist with expertise in larval aquatic animals, I can state that all the “concerns" about “larval entrainment” are effectively pure “**junk science**”. The model for estimating “impacts” contains know false assumptions to get the results the agency desired. There is no field evidence or experimental evidence to back up their model results and the model has never been published in a peer reviewed scientific journal. It couldn’t get through even minimal peer review and it would be exposed as junk science.	The method used to assess the Facility’s impacts to marine life—Empirical Transport Model/Area of Production Foregone (ETM/APF)—was based upon recommendations from an expert review panel convened by the State Water Board in 2012. ETM/APF represents the best available science to determine ecosystem losses and calculate compensatory mitigation. Scientific assumptions included as part of the Ocean Plan desalination provisions were peer-reviewed prior to adoption, including use of ETM/APF. The reports can be found at: https://www.waterboards.ca.gov/water_issues/programs/peer_review/desalination/ In addition, the alternative intake sites analysis and the determination of an appropriate area of production foregone, used to determine the amount of mitigation required for the 50-year operational life of

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				the facility, were reviewed by the foremost expert (and neutral third-party reviewer) in the field of assessing impacts to all forms of marine life, Dr. Peter Raimondi (please see Attachment G.1, Section 3, to the Tentative Order for a detailed discussion of this issue). The ETM/APF analytical method of determining impacts from either a power generation facility that uses once-through cooling or a desalination facility has been in use for several decades.
0105.02			However, the water prices demanded by Poseidon are three time the world price for the same process and technology. Part of this excessive cost is to cover the time and effort to obtain permission. If your decision doesn't include costs, the science says YES.	See response to comment 0032.01.
0105.03			The 80 million larva /yr expected mortality in the input water is worth < $80,000 per year. I know as I have bought and sold larval fish and other larval marine animals at price ranges from $100 to $1000 / million.	The Discharger is required to provide compensatory mitigation based on the area of production forgone. See response to comment 0017.02. The price of marine larvae is not relevant to the Tentative Order.
0106	Terrell Koken	Jan 17, 2020	These people want to wreck the marine environment, stir up the crap, dump a lot of salty water back in the ocean, and charge us double for water we don't need, and for which there is no foreseeable need, but which we must	See responses to comments 0014.04, 0032.01, and 0055.01 regarding the cost and need for water; 0004.01, 0036.01, 0054.02, 0055.02, and 0062.02 regarding brine concerns; and 0031.02 and 0099.02

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			buy anyway. They have oh-so-generously mandated that they will give us the whole plant in fifty years, for FREE! But there is documented proof that no desal plant has ever lasted more than twenty years, so what they are generously donating to us is basically a superfund cleanup site.	regarding contract terms for the purchase of the water.
0107	Marinka Horack	Jan 17, 2020	There are a multitude of reasons why this project must be stopped. Chief among them is the damage it would do to the ocean habitat through its ocean water intake pipes that would kill countless numbers of sea life, thus degrading the rich ocean ecosystem. Add to that, the 24/7 discharge of concentrated brine and effluent from the plant which would create an increasingly degraded ocean environment. This would cause havoc for the ocean creatures and the sea birds that depend upon a healthy ecosystem to survive. The California Least Tern nesting site near the mouth of the Santa Ana River was set aside to protect this endangered species. The proposed Poseidon project nearby would put this species at great risk.	See responses to comments 0004.01 0004.03, 0036.01, 0054.02, 0055.02, and 0062.02 regarding intake and brine discharge impacts. The potential impacts to the California least tern were analyzed in the 2010 Final Subsequent Environmental Impact Report prepared by the City of Huntington Beach and the 2017 Final Supplemental Environmental Impact Report prepared by the State Lands Commission. (See 2010 FSEIR, p.4.9-47, 4.10-12, 4.10-67; 2017 FSEIR, pp. 4-23, 4-36, 4-49 to 4-50.) Construction for the project will not occur near the nesting sites for the least tern and such will not have a significant impact on nesting sites. (See 2010 FSEIR, pp. 4.9-47; 2017 FSEIR, p. 4-49.)

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0108	Armida Brashears	Jan 17, 2020	We DO NOT need the Poseidon desalination facility !!! We only need to construct more waste water treatment facilities so that we can clean all our waste water to replenish our aquifer. That WILL NOT require taking water from the ocean and needing to mitigate damage to marine life. That WILL NOT require putting salty brine into the ocean, our oceans are already too salty. Waste water treatment is less expensive both for use of electricity and facility maintenance. Waste water treatment does not require the citizens to sign up for a contract that mandates us to pay for water that we may not need.	See responses to comments 0004.19, 0014.04, and 0055.01 regarding other water supply sources and water need; 0004.01, 0036.01, 0054.02, 0055.02, and 0062.02 regarding brine concerns, 0004.03 regarding intake impacts; 0032.01 regarding the cost of the desalinated water; and 0004.05 and 0004.12 regarding electricity usage.
0109.01	Tyler Diep Assembly member California State Assembly	Jan 15, 2020	Representing the 72nd Assembly District, which includes the Orange County cities of Fountain Valley, Los Alamitos, Seal Beach, Westminster, portions of Garden Grove, Huntington Beach, and Santa Ana, and the unincorporated areas of Midway City and Rossmoor, the Huntington Beach Desalination Project is very important. Seeing it come to fruition will mean jobs, economic growth and a climate resilient water supply for Orange County.	Desalination is one water source that local agencies may consider as part of their water supply portfolio.
0109.02			This project has been underway for more than a decade and the permit	Comment noted.

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			before you in April represents years of work. The renewal of the Poseidon permit, which your staff supports, takes us one step closer to a climate resilient water supply.	
0109.03			And there is more, in the heart of my district is the Bolsa Chica Wetlands. At almost 1,500 acres, the Bolsa Chica Wetlands is the largest saltwater marsh between Monterey Bay and the Tijuana River Estuary, and it's designated by the state as a Marine Protected Area. Bolsa Chica has a variety of vital functions: a natural flood control, organic water purification, land erosion control, as well as providing critical habitats to over 1,100 species, including 50 endangered fish and wildlife species. Approximately 30,000 people visit the reserve each year for recreational activities, educational tours, and wildlife watching. About a decade ago, tidal action to the Bolsa Chica Ecological Reserve (Bolsa Chica) wetlands was restored. This restoration effort assures long-term and effective tidal action to support estuarine and coastal fish populations in this important regional wetland habitat.	The Discharger proposes to offset their impacts to all forms of marine life by providing mitigation at the Bolsa Chica wetlands. The Discharger's Marine Life Mitigation Plan, with the updates required by Attachment K to the Tentative Order, will include restoration and preservation tasks and actions that should ensure the long-term viability of the Bolsa Chica wetlands.
0109.04			The State Lands Commission, which oversees Bolsa Chica, has stated that	See responses to comments 0080.03 and 0109.03. Additionally, Santa Ana Water

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			the funds to maintain the ocean inlet will be depleted by the end of 2021. As part of the project, Poseidon and the Regional Board staff have reached an agreement that will ensure the long-term restoration of Bolsa Chica. Without the long-term, sustainable source of funds, the wetlands and restoration effort are at risk. The years of work and effort risk being undone. This Bolsa Chica project feature will make the Huntington Beach Desalination Plant a net environmental benefit. In addition to the plant complying with the Ocean Plan, it appears there remains misinformation about the project. Various local and state authorities have vetted this project and your staff has recommended approval by the Board.	Board staff have worked with the Discharger and State Lands Commission staff to ensure that the proposed mitigation will assure the long-term viability of the Bolsa Chica wetlands.
0110.01	Mikel Hogan Residents for Responsible Desalination	Jan 17, 2020	The proposed desal plant is not needed as we have other water supply options that are currently working well: recycling, conservation, and cleaning up groundwater. These options, moreover, are much less costly to the community and are better for the environment.	See responses to comments 0004.19, 0014.04, and 0055.01.
0110.02			Poseidon's **intake system**, for example, would kill marine life creating a dead zone offshore Huntington Beach and	See responses to comments 0004.01, 0004.03, 0036.01, 0054.02, 0055.02, and 0062.02.

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			threaten our ocean biodiversity and marine habitat. The **brine discharge** from the proposed Poseidon plant is another environmental threat because it would increase salinity and toxicity of the ocean water again adding to the dead zone offshore Huntington Beach.	See responses to comments 0006, 0035.04 and 0050 regarding toxicity.
0110.03			We have just lived through a terrible drought without needing Poseidon's high cost, polluting water. Desalinated water should be a last resort water option for meeting our water needs because it is the most costly and energy intensive method to produce fresh water.	See response to comment 0004.19 regarding alternative water supply options; 0014.04 and 0055.01 regarding need for the desalinated water; 0032.01 regarding cost of the desalinated water; 0004.05 and 0033.03 regarding energy use; and 0033.01, 0050, 0055.02 and 0062.02 regarding discharge quality.
0111	Stefanie Tellez	Jan 17, 2020	As you might imagine, I had concerns about the potential disturbances associated with the work to make the plant operational, but Poseidon Water did a stand-up job of minimizing construction-related impacts to our community and letting us know in advance of work that may impact our traffic routes. They hosted several open houses and generally made themselves available at any time to address questions and concerns. I commend them for being a good neighbor and pleased to see that they have also become a positive addition to	The construction-related impacts of the Carlsbad facility are not relevant to the Tentative Order. See responses to comments 0034 and 0050 regarding construction impacts of the proposed Facility.

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			our business community. I am proud to have the largest and most energy-efficient desalination plant in the nation right here in our backyard and I would recommend them without hesitation to our neighboring communities.	
0112	Shirley Bursvold	Jan 17, 2020	I'm writing to you today in support of desalination as a vital component of a long-term solution to California's water future. We must secure a diversified water portfolio to meet our state's growing population demands. We can no longer depend on snowpack and rainfall totals to fill our reservoirs, and the cost of importing water will only continue to rise. Desalination is a sustainable solution that we can depend on now and in the future. I encourage you to support the diversification of our state's water supply and embrace desalination as a viable solution for Huntington Beach.	See response to comment 0003.01.
0113	Long Pham	Jan 17, 2020	I urge that California communities move to secure our water security now. Desalination is proven a sound economical and environmentally process. We must protect ourselves from more severe droughts, climate change, less available and more	See response to comment 0003.01.

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			expensive import water. This is a no regret decision.	
0114.01	Jeanie Petrocella	Jan 17, 2020	Please don't approve of the Poisiden [sic] plant in Huntington Beach. Their track record is poor. Look at the lesser amount of water promised in Carlsbad, all the millions on fines. Who will make that right?? Huntington Beach does not need this debacle.	See responses to comments 0004.09 and 0193.07.
0114.02			there are other ways to provide water. Less costly and damaging. We showed how well we conserve. It's outrageous expense, especially since the 1 billion figure is 10 years old!! We don't need this, we don't want this, we can't afford this!!! Please vote NO to Poisiden [sic].	See responses to comments 0004.19 regarding alternative water supply options; 0014.04 and 0055.01 regarding need for the desalinated water; and 0032.01 regarding cost of the desalinated water.
0115.01	Steven LaMotte Building Industry Association, OC Chapter	Jan 15, 2020	the Poseidon Water Huntington Beach Seawater Desalination plant is a model of that sustainability. The project will be 100% carbon neutral and by using ocean water as its source supply, it is climate resilient. Your board first approved this project's NPDES permit in 2006, then unanimously approved the amended permit in 2012. As your staff notes, this project is fully compliant with the State Water Board's Ocean Plan and has put	See response to comment 0002.03.

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			countless hours into the Tentative Order that will be before you in April 2020 for your consideration.	
0115.02			The Carlsbad Desalination Plant received its approval in May 2019 by the San Diego Regional Water Board under the State Water Board's new Ocean Plan regulations. ...would hope that the Santa Ana Regional Water Quality Control Board would follow the lead of the San Diego Regional Water Board and approve the NPDES permit that is supported by both the science and your staff.	See response to comment 0079.03
0116.01	Toni Atkins CA Senate President pro Tempore	Jan 20, 2020	California faces a range of water challenges, from severely depleted groundwater basins to vulnerable infrastructure to unsafe drinking water in many communities to uncertain water supplies for our cities and agriculture. Climate change magnifies the risk. Maintaining and diversifying water supplies is a core goal of Governor Newsom's recently released 2020 Water Resilience Portfolio, and seawater desalination is identified as one Portfolio proposal to enhance the diversification of a regional water supply.	See responses to comments 0003.01, 0137.02, and 0177.09.

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			Seawater desalination operates independently of climate and weather patterns and will play a strong role in providing local sources of fresh drinking water as the state deals with the effects of climate change.	
0116.02			The Carlsbad Desalination Plant's operation is carbon neutral and in its first 48 months of operation provided San Diego County with more than 58 billion gallons of fresh drinking water. The State Water Board's 2015 Ocean Plan Amendments offers clear, uniform regulations to ensure that the construction and operation of desalination facilities are protective of coastal and marine environment. The Regional Board's extensive analysis has determined that the proposed Huntington Beach Project complies with the Ocean Plan and is using the best available site, design, technology and mitigation measures feasible to minimize the intake and mortality of marine life.	See response to comment 0079.03.
0117.01	Geri Von Freymann	Jan 17, 2020	i am heartbroken at what is happening next to the salt marshes and squirrel park. There are alternatives to this project which cost a great deal less and will not	See responses to comments 0004.01, 0004.03, 0017.02, 0022.04, 0036.01, 0054.02, 0055.02, and 0062.02 regarding marine life concerns.

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			have the detrimental impact on the ocean, sea life and coastal birds. The environment should matter.	See responses to comment 0004.19, 0011, 0032.01, and 0055.01 regarding alternative supplies and costs. See response to comment 0014.02 regarding CEQA analysis conducted on adjacent salt marshes/squirrel park.
0117.02			Selling out to big business for an unnecessary and cost exorbitant desalination project In addition data shows sufficient water without this project. It is a false urgency created by the project's venture capitalists who see huge dollar signs in their futures. Hold them accountable for reports, accurate data, and acknowledgement of past failures	See responses to comments 0014.04and 0055.01 regarding need for desalinated water; and 0032.01 regarding cost of the desalinated water.
0118.01	Mary Clarke	Jan 17, 2020	I am deeply concerned about the marine environment. I have seen how adversely temporary pollution can affect the marine environment and believe that desalination of water off the coast will permanently damage the marine environment, killing some life and causing other sea life to “relocate” at the ocean’s expense. The salt brine would be detrimental to the marine life, dumping tons of salt	See responses to comments 0004.01, 0004.03, 0017.02, 0036.01, 0054.02, 0055.02, and 0062.02. See responses to comments 0004.11 and 0035.04 regarding brine mixing zone minimization and 0004.14 regarding intake and discharge pipeline integrity. Also, regarding your comments mentioning desalination facilities in Chile see response to comment 171.02.

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			brine into the ocean daily. Just see what the salt brine has done to the coast off Chile. Divers say the appearance is like diving in a snowy area—everything is white. I understand that the intake pipes would be reused from AES when they are no longer needed for cooling. Their new plant will not be water cooled. Ordinarily, I like reusing things but these pipes were not built for a desalination plant and that is worrying to me. I'm thinking that Poseidon just wants to save money up front. Maybe they'll have sold the plant like they did in Carlsbad, if the salt brine destroys the pipes at a later date.	
0118.02			The tourist industry, which the city has worked hard to build up, may also be adversely effected.	The State Lands Commission certified a Final Supplemental EIR for the project. The 2017 FSEIR analyzed visual impacts from construction activities and concluded that they would be less than significant with mitigation. (FSEIR page 4.79 to 4-82). Furthermore, both the 2010 Final Subsequent EIR certified by the City of Huntington Beach and the 2017 FSEIR analyzed impacts to recreation concluded that impacts to recreation would both be less than significant with mitigation. (2010 FSEIR page 9-10).

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0118.03			I'll just say that their water is very pricey and we don't need it. Instead of spending millions (that would be residents, not Poseidon) on a distribution system to get this high priced water, we could invest money in recycling water, capturing runoff, and other methods of enhancing our water without destroying the environment. Then there's importing water at a lower price than Poseidon's, where we already have the distribution system in place.	See responses to comments 0004.19 and 0032.01.
0119.01	Chiyu Hu	Jan 18, 2020	1, More people moving out of California than moving in, we don't have any urgent need for it!	See response to comment 0014.04.
0119.02			2, It costs too much of our money for such an outdated project that could very well need to be replaced before its completion. 3 Can anyone give JUST ONE reason that we people must pay for it for nothing but endless trouble!	See responses to comments 0004.19 and 0032.01.
0120.01	Jim Niswander	Jan 18, 2020	I am a resident of Carlsbad where we have our desalination plant in production. It was a long process, but now we have a source of water independent from the others that gives us more security. Yes, I believe the cost may be higher than other sources today, but projections show	See responses to comments 0003.01 and 0032.01.

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			that over time the desalination costs will be competitive with other sources.	
0120.02			I am proud that our community provided the leadership to develop the desalination plant. I also enjoy going on the public tours to see the operation and hear about new developments. I encourage anyone considering building a desalination plant to come visit the facility in Carlsbad.	See responses to comments 0004.04, 0004.09, 0079.03.
0121	Laura Tezer	Jan 18, 2020	As a San Diego County resident and neighbor to the Claude “Bud” Lewis Carlsbad Desalination Plant, I’m writing to share with you my experience during the pipeline and plant construction. As you might imagine, I had concerns about the potential disturbances associated with the work to make the plant operational, but Poseidon Water did a stand-up job of minimizing construction-related impacts to our community and letting us know in advance of work that may impact our traffic routes. They hosted several open houses and generally made themselves available at any time to address questions and concerns.	See response to comment 0004.09 and 0079.03.

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			I commend them for being a good neighbor and pleased to see that they have also become a positive addition to our business community. I am proud to have the largest and most energy-efficient desalination plant in the nation right here in our backyard and I would recommend them without hesitation to our neighboring communities.	
0122	Tibor Farkas	Jan 18, 2020	As a resident of San Diego County, I can attest to the many benefits desalination has brought to our region. The Carlsbad Desalination Plant is the first major infrastructure project in the State of California to eliminate its carbon footprint, playing a vital role in helping the state meet its climate goals while also providing a reliable water supply. Furthermore, seawater desalination is drought-proof and critical to reducing the need to pump water from Northern California and the Colorado River, two climate-dependent sources of water with documented environmental impacts and that require a lot of energy to transport. I encourage you to help our state become more climate-resilient by supporting the proposed Huntington Beach desalination project.	See responses to comments 0004.09 and 0079.03.

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0123	Dan Bosch	Jan 18, 2020	Having seen firsthand the positive benefits of the Carlsbad Desalination Plant in San Diego, I am writing to urge your support for desalination, which significantly improves both water reliability and quality. In addition to providing a reliable water supply that isn't dependent on rain or snow, desalination has made a noticeable difference in our region's water quality. In fact, water hardness and dissolved solids have been reduced since the introduction of desal in San Diego County, resulting in better tasting, softer water that extends the lifespans of household appliances. I encourage your support of the Huntington Beach desalination project to help ensure a locally controlled supply of high-quality water for your region that meets or exceeds state and federal standards, as well.	See response to comment 0004.09, 0026.05, and 0079.03.
0124	Susan Hughes	Jan 18, 2020	Our roots have been very deep in this community for generations, and our family not only enjoys, but genuinely loves, the ocean here.	See responses to comments 0004.01, 0004.03, and 0036.01.

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			But how will we be able to take joy in bringing our beautiful four year old granddaughter to the beach to play in the waves, knowing that huge quantities of saline sludge, mixed with toxic chemicals used in the desalination plant cleaning process, are being pumped into the ocean not that far from the shore? The Poseidon desalination plant would have a long term and very negative effect, not only on the families of this community and the many thousands of visitors who enjoy our beach, but on the health and viability of the ocean itself and the marine life in it. I am asking that you oppose and vote NO on the Poseidon desalination plant in Huntington Beach.	
0125	Linda Minko	Jan 18, 2020	I do NOT want the Poseidon project to go through. We do not need it. It will hurt our ocean life. I vote every election and always look to see who is for and against this project that will only cost us money and hurt our environment.	See responses to comments 0032.01 and 0014.04 which are related to the cost and need for the desalinated seawater. The draft tentative order and water code 13142. 5(b) determination set mitigation requirements for the marine life impacts associated with the construction and operation of this facility.
0126	John Scott	Jan 18, 2020	[No written content and three attached photos]	The Santa Ana Water Board acknowledges receipt of your photos; however, no response is required.

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0127	Stephen Billard	Jan 19, 2020	Please move forward with the Huntington Beach desalination plant so we can ensure water reliability for our region now and in the future. The prospect of climate change threatens our normal sources of water. Orange County needs to take steps to future proof our water supply. Desalination is one step in the right direction.	See responses to comments 0003.01 and 0014.04.
0128	Lynette Kent	Jan 19, 2020	In California, we have access to an endless supply of water along our 840-mile coastline and the technology to turn ocean water into clean, drinking water that is sustainable, locally controlled and drought-proof. We have a responsibility to protect our valuable environmental resources like the Bay Delta, Colorado River and groundwater basins and we can do that by integrating desalinated water into our existing supply and reducing the demand on these sources. I hope you will consider supporting desalination as a viable, long-term solution to our state's water crisis.	See response to comment 0003.01
0129	Art Brown	Jan 19, 2020	Please be part of the solution and not part of the problem and get us the water	The Santa Ana Water Board regulates water quality—it is not a public utility. The

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			we need and want. Santa Barbara is STUPID. Stop paying us to put in rain barrels. Stop giving rebates for efficient new appliances. Stop sending certificates and plaques for buying efficient appliances. GET US THE WATER. You are not my nanny. You are a public utility. Act for the public good, not as water cops.	Board is reviewing the project to determine the appropriate requirements for the Facility's discharge of pollutants to the Pacific Ocean to protect water quality and reviewing whether the Facility uses the best available site, design, technology, and mitigation feasible to minimize intake and mortality of and impacts to marine life Water Code section 13142.5(b).
0130.01	Oliver Monus	Jan 19, 2020	The Huntington Beach plant will take advantage of the latest and greatest technology available. For example, the plant will utilize cutting-edge technology to recapture energy from the desalination process, reducing overall energy usage and decreasing carbon emissions. These devices help save an estimated 146 million kilowatt-hours of energy per year, reducing carbon emissions by 42,000 metric tons annually – roughly equivalent to the annual greenhouse gas emissions from 9,000 passenger vehicles. Additionally, the process is incredibly efficient – turning seawater into drinking water in just a couple of hours!	See responses to comments 0004.05, 0004.12, and 0033.03.
0130.02			Given recent weather patterns and water demand, we are undoubtedly going to need a locally controlled, drought-proof	See response to comment 0003.01.

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			water supply in the future, which is why we should start working to develop that supply now by approving the Huntington Beach desal plant.	
0131	David Lowe	Jan 19, 2020	I am in full support of the proposed desalination plant proposed to be built within 1/2 mile from our home. As a retired civil engineer I understand and support the idea of having redundancy in our water supply system. As a local surfer I believe the proposed impacts on the natural environment will be mitigated properly by the applicant.	See responses to comments 0003.01 and 0109.03.
0132.01	Mary Jo Baretich, Residents for Responsible Desalination Board	Jan 19, 2020	I attended the very first meeting about this proposal where the developers were asking for a desalination plant to be built next to the AES Energy plant. They said they needed water so they could build on the barren hills in south Orange County. Since that time, numerous studies and reports have been produced regarding the various impacts on the environment, along with numerous meetings on the subject both locally and statewide. The local impacts to our ocean waters, marine life, wetland animals and birds, and surrounding residents are of prime importance.	See responses to comments 0004.19 regarding alternative water supply options; 0014.04 regarding need for the desalinated water; 0004.01, 0004.03, 0036.01, 0049, 0054.02, 0055.02, 0062.02, and 0107 regarding impacts to ocean water, marine life, and the environment; 0004.05 and 0004.12 regarding energy use.

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			We do not need this energy intensive plant ad its expensive water. We are already producing 130 million gallons of purified water per day with the Ground Water Replenishment System (GWRS), pumping it into the Orange County aquifer in Anaheim which feeds the well for the central and northern Orange County cities and also pumping it into intrusion wells to keep the ocean water from invading the aquifer. The small percentage not produced by the GWRS come from the Metropolitan Water District at a very low price ($550 per acre foot).	
0132.02			The GWRS water costs only $470 per acre foot, but the Poseidon water is expected to cost $2400 per acre foot or more. Their Carlsbad plant is even more expensive than that.	See responses to comments 0004.19 and 0032.01.
0132.03			Poseidon plans to use the antiquated 1950 AES Intake Pipe rather than building subsurface technology for water intake. There is a history of the AES plant having problems keeping the filters intact. The screens proposed will still entrap marine life like jellyfish, fish larvae and eggs. Cleaning and replacing these new filters and screens as they fail will not stop. I have been on several	To comply with Water Code section 13142.5(b) and the implementing Ocean Plan provisions, the Discharger must modify the intake and discharge infrastructure to minimize intake and mortality of all forms of marine life. Additionally, to eliminate impingement, the Discharger must operate the intake so that velocity at the intake does not exceed 0.5 feet per second at any time. See responses to comments 0004.01 and

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			tours of the AES plant over the last 37 years, and have seen first-hand juvenile fish, crabs, other crustaceans, and octopus in the Intake Vat and thousands of marine animals going up the conveyor belt into dumpsters. Millions of fish larvae and eggs were also sucked into the Intake Pipe and destroyed. The AES workers told me of Jellyfish and other marine life being impinged on the filters, and their constant problem of removing them and repairing the filters. The marine life, along with concentrated brine was then pumped out the Outflow Pipe, causing a dead zone. This area, even with diffusers, still covers over 400 acres. Poseidon dispersed water will have numerous chemicals along with the dead marine life and highly concentrated brine. We do not need more pollution of our ocean waters	0004.03 regarding technology requirements to minimize impacts to marine life. Additionally, the discharge must comply with effluent limitations and receiving water limitations to protect beneficial uses. See responses to comments 0033.01, 0036.01, 0035.06, 0050 and 0062.02. See responses to comments 0004.01, 0004.11, 0020.02, 0035.04, 0035.05 and 0036.01 regarding brine impacts and brine mixing zone extent minimization. As detailed in Monitoring and Reporting Program, Attachment E to the Tentative Order, the Discharger is required to conduct biological surveys prior to and after construction to evaluate the differences between biological communities pre- and post-construction/operation.
0132.04			I have attached a dye study that was made in 2002 showing that this concentrated brine and waste made its way daily back to shore from its dumping site, causing eye infections for surfers and other swimmers.	Santa Ana Water Board staff reviewed the attached dye study and it does not provide new information. Meeting the required receiving water limits in the Brine Mixing Zone (BMZ) will prevent brine from reaching the shoreline. The Tentative Order requires the Discharger to implement a monitoring program to evaluate the receiving water. See responses to comments 0004.11,

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				0033.01, 0035.04, 0035.06, 0050, 0062.02, and 0072.
0132.05			The Poseidon desal plant is proposed to run 24 hours a day and 7 days per week. It will have 33 pumps running at the maximum (or higher) allowed sound levels. This is unacceptable for both the homeowners and the wetland animals and birds living in close proximity to the proposed facility. Most of the homeowners living near the proposed facility do not have double-pane windows to block the noise.	See responses to comments 0004.15 and 0014.01.
0132.06			We are also concerned about the proposed pipeline to be built alongside the two most deadly Pits in the Ascon Toxic Waste Dump, containing arsenic, lead, mercury, cadmium, aviation fuel, and other detected contaminants. There is a real threat of an earthquake that could cause a leak in the 8 foot diameter pipe and allow the toxic chemicals and waste to contaminate the water downstream in our aquifer. The last large quake in the local area (1933) was centered not too far from the proposed desal plant. That quake leveled numerous building in Long Beach. The proposed plant location sits on top of the earthquake fault. And of course, there	Potential impacts associated with the Facility's proposed pipeline location near the former Ascon Landfill were analyzed in the 2010 Final Subsequent Environmental Impact Report (2010 FSEIR) prepared by the City of Huntington Beach. The conceptual pipeline alignments identified in Figure 3-3a and 3-3b of the 2010 FSEIR illustrate that portions of the distribution pipeline are proposed for the northern side of Hamilton Avenue and not "alongside the two most deadly Pits in the Ascon Toxic Waste Dump." The 2010 FSEIR states that the "Ascon monitoring data from outside of the landfill property do not indicate migration of contaminated groundwater from the landfill site, such as on Hamilton

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			would be the real possibility of a huge Tsunami.	Street where segments of the offsite pipelines are proposed." (2010 FSEIR, p. 4.8-3.) Thus, "it appears that groundwater under the desalination facility sited would not be contaminated by hydrocarbon products originating from the Ascon Landfill." (2010 FSEIR, p. 4.8-3.) However, the Discharger must implement mitigation measures (pursuant to the State Lands Commission's 2017 FSEIR) to ensure that any contamination from the Ascon site encountered during construction is properly handled (also see the City of Huntington Beach's 2010 FSEIR, p. 4.8-3.) Furthermore, the clean-up and remediation of the Ascon site is in the final phases and anticipated to be completed prior to construction of the proposed project. (See https://asconhb.com/ for additional information.) Finally, the 2010 FSEIR also evaluated seismic hazards related to the pipelines and concluded that they would not be significant with the implementation of mitigation measures: "A design-level geotechnical investigation would be performed for the selected pipeline alignment to examine the potential for earthquake shaking hazards, surface rupture, shallow groundwater, and

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				unstable soils (liquefaction, subsidence, lateral spread). Should the potential for such geological hazards exist, adequate mitigation for both pipeline construction and pipeline design would be incorporated to mitigate impacts in this regard to less-than-significant levels." (2010 FSEIR, p. 4.2-13.) With regard to the siting of the Facility itself, the 2010 FSEIR states that "[t]he results of this preliminary study indicate an absence of evidence that faulting has ever occurred at the facility site and that the risk of future surface faulting at the desalination facility site is minimal." (2010 FSEIR, p. 4.2-11.) The impacts of seismic-related ground shaking are potentially significant, and the Discharger must implement mitigation measures to address the impacts. (2010 FSEIR, p. 4.2-11.) See response to comment 0177.09 regarding tsunami impacts.
0132.07			In addition, by not requiring this desal plant to use subsurface technology for the intake of their water, the water flowing to the plant will contain unacceptable levels of Boron. The molecules of Boron and water are very close in size, and difficult to remove from the water.	See response to comment 0008.04.

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0132.08			And finally, our periodic algae blooms that occur in the ocean contain neurotoxins that also have molecules similar in size to water and will be impossible to remove.	The Discharger will be required to obtain a permit from the Division of Drinking Water, which will address this concern. If events, e.g. toxic algae blooms, occur and the Facility cannot produce water that meets drinking water standards, the facility would temporarily cease operations.
0132.09			Please take all that I have said into consideration. This desalination plant is not necessary. It is extremely expensive and energy expensive. There is a great possibility that the water could become contaminated. Millions of our precious marine life will be destroyed, along with the avenue where our juvenile fish travel to and from the nurseries. Our wetland animals and birds in the Magnolia Marsh will be affected causing possible problems in our local ecosystem	See responses to comments 0132.01 to 0132.08; see also response to comment 0014.02 regarding Magnolia Marsh. .
0133.01	Mark Lopez Orange County Farm Bureau	Jan 16, 2020	On behalf of the Orange County Farm Bureau, I am writing in support of the role that desalinated water can play in meeting water demands for our state's agriculture community, one of the largest consumers of water resources. By adding desalinated water to our region's supply sources, we can provide much needed assurances to local farmers that our water supply is reliable in drought years and during mandated restrictions,	See response to comment 0003.01.

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			which have wreaked havoc on our agricultural community in the past.	
0133.02			As demonstrated in San Diego County, the Claude “Bud” Lewis Desalination Plant has been blending desalinated water with local supplies and farmers have reported positive impacts and improved crop health. Blended water supplies that include desalinated water have been found to have lower total dissolved solids, chlorides and reduced salt levels which allows crops to more easily absorb water.	See response to comment 0026.05..
0133.03			With the renewed focus on PFOAS contaminants and their potential impacts to local water supplies, it is prudent to seriously consider new water supply options that are proven PFOAS free.	The use of reverse osmosis (RO) as the main process of desalination is also effective in removing PFAS compounds. Nonetheless, this will likely be a monitoring requirement specified by the Division of Drinking Water (DDW) for direct delivery of the desalinated water or a water recycling requirement if the desalinated water is recharged or injected in the groundwater basin.
0133.04			We support the diversification of new water resources that advance our ability to maintain local water supplies, ensure local control, are not dependent on rainfall or snowpack and improve quality to support our farmers.	See response to comment 0003.01.

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0134	Katie Greer	Jan 19, 2020	I want t to express my support for the Huntington Beach Desalination plant that is possibly going to be built at the AES plant location. There are many reasons why I support this proposal. For one thing, the location of the plant is ideal since it is already next to a power plant and will not be taking up any precious coastal real estate. Secondly, it would produce a new water source from the Pacific Ocean, which is right in our backyard! Thirdly, because of the success of the Carlsbad plant which has proven to be able to successfully produce safe drinking water from seawater without harming the environment.	See responses to comments 0003.01 and 0162.01. To correct the comment, the Carlsbad Desalination plant (permitted by the San Diego Water Board) has surface intake and discharge systems that impact marine life. As required by the Ocean Plan, the Carlsbad Facility is required to mitigate for the impacts from operation of this facility.
0135	Deb Janus	Jan 20, 2020	I oppose this desalination plant proposed in Huntington Beach. The salt and salt brine will pollute the waters near our shore and this will kill marine life and poison citizens.	See responses to comments 0004.01, 0036.01, 0054.02, 0055.02, and 0062.02.
0136.01	Milt Dardis	Jan 20, 2020	The supplement to a 2010 EIR addressed the possible environmental effects of a screen and diffuser added to the intake and outflow pipes. The State Lands Commission report concluded that the screen on the intake pipe would help reduce harm to marine animals. The 2010 EIR had already concluded	In 2015, the State Water Board adopted an amendment to the Ocean Plan to include provisions that the regional water boards must follow to determine whether a desalination facility uses the best available site, design, technology, and mitigation feasible to minimize intake and mortality of all forms of marine life in accordance with

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			that the intake wouldn't significantly impact sea life. The screen would have 1-millimeter segments to keep marine life from being sucked into the tube. The diffuser is a part with several openings that would enable salt water leaving the plant to better mix with — diffuse into — the ocean since it would be sprayed in multiple directions. The commission report said the salinity of discharges through the diffuser wouldn't pose a significant threat to marine populations. However, the commission concluded that the force of water from the diffuser could put unidentified sea creatures at significant risk, though it said it could not find such special species during its investigation. Poseidon Vice President Scott Maloni called that finding "scientifically unsound." "We don't think there is evidence that there will be any significant impact to any species, not to mention a species with special status," he said. Scott Maloni of Poseidon stated that the company determined the open-faced	Water Code section 13142.5(b). The Santa Ana Water Board reviewed the proposed Facility under the framework established in the Ocean Plan. The Tentative Order requires the Discharger to install 1mm wedgewire screens composed of stainless steel at the end of the intake pipe. Additionally, the intake velocity may not exceed 0.5 feet per second. These requirements comply with the Ocean Plan requirements (which were peer reviewed) and constitute the best available design and technology feasible for surface intakes. Also, unlike copper-nickel screens, stainless steel screens will not leach into the water. See response to comment 0004.01. With regard to the discharge, the Tentative Order requires the Discharger to install a multiport linear diffuser at the end of the discharge. Wastewater is not available to commingle with the Facility's brine and under the Ocean Plan, a diffuser is the next best technology feasible to minimize impacts to marine life. See responses to comments 0004.03, 0004.13, 0033.02, 0035.04 and 0055.02.

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			intake pipe previously called for in the plan would take in about two fish eggs for every 1,000 gallons of water, an amount he characterized as small. He said the amount would be even smaller with a screen in place. The commission said the copper-nickel material of the proposed wedge wire screen could leach and affect water quality nearby. So who we believe: It was Poseidon who argued discharge diffusers would cause more harm to marine life than the open intake. It's all documented in their participation in the Science Panel report that Scott Jenkins, the Poseidon Consultant, was a member of. Scott Jenkins argued the diffusers were harmful so that Carlsbad Plant would not have to retrofit. Now Scott' Maloni is arguing just the opposite -- diffusers are fine.	Finally, the marine life impacts associated with the intake and discharge will be mitigated at Bolsa Chica. See response to comment 0017.02.
0136.02			You folks are the experts so what is Fact and what is Fiction. I am just a Taxpayer who wants to know. That simple as am opposed to the development by Poseidon Resources of a Desal Plant that will double my water	See response to comment 0032.01.

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			rate price and not being told THE TRUTH.	
0137.01	Steve La Motte South Orange County Economic Coalition	Jan 16, 2020	As Chairman of the South Orange County Economic Coalition that covers a region that creates more than $25 billion in economic activity annually, I'm writing on behalf of the thousands of businesses throughout the region to urge the Santa Ana Regional Water Quality Control Board to renew Poseidon Water's NPDES permit for the Huntington Beach Seawater Desalination plant. We need this drought-proof, climate resilient water reliability project to ensure that businesses have the confidence to put roots down in South Orange County and grow here. The proposed desalination project meets and exceeds every regulatory hurdle it has faced and it complies with the State Water Board's desalination amendment to the Ocean Plan.	See response to comment 0002.03.
0137.02			Governor Gavin Newsom approved this project when he served on the State Lands Commission in 2017 and has included desalination in his Climate Resilient Water Plan. Additionally, the California's Water Resilience Portfolio	The Santa Ana Water Board is reviewing the proposed project for compliance with Water Code section 13142.5(b) and to determine appropriate waste discharge requirements for the discharge of brine. Although the State Lands Commission's

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			identifies desalination as a proposal to enhance regional water supply diversification.	Final Supplemental Environmental Impact Report discussed the requirements of the Water Code section 13142.5(b) and related Ocean Plan provisions, the Santa Ana Water Board is the agency with the authority to determine whether the Facility complies with Water Code section 13142.5(b) and other applicable laws and regulations under its jurisdiction. See responses to comments 0003.01 0004.19, and 0055.01 regarding desalination as a water supply option.
0137.03			Orange County currently imports about 50% of the water we need. This proposed desalination project will help reduce that dependence on imported water and allow us to take one step closer to water independence.	See responses to comments 0003.01 0004.19, and 0055.01.
0138	Reuben Franco Orange County Hispanic Chamber of Commerce	Jan 16, 2020	OCHCC supports the Huntington beach Seawater Desalination Project because it would provide Orange County with a new, local water supply that would enhance water reliability and facilitate economic development and investment opportunities for Hispanic and other minority-owned businesses. Seawater desalination ensures that orange county will always have a high-	Desalination is one water source that local agencies may consider as part of their water supply portfolio. Not all state agencies have approved permits for the project to move forward. In addition to the Tentative Order, the Discharger must also obtain a Coastal Development Permit from the Coastal Commission and another lease amendment from the State Lands Commission.

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			quality, climate resilient water supply that we control locally. This project has been under regulatory review for the better part of two decades and every scientific study conducted by local and state permitting agencies have approved the permits required to allow this project to move forward.	
0139.01	David Ellis	Jan 20, 2020	I am VERY concerned about the Poseidon Huntington beach desalination project. My concerns can best be summarized by questions: 1. Why hasn't Poseidon used any of the $56 million + they have invested so far educating the residents of Orange County on the benefits of this project? They have been at it for almost 20 years and I have yet to receive any educational information from "them".	This comment is not relevant to the Santa Ana Water Board's consideration of the Tentative Order. See response to comment 0003.02.
0139.02			2. Why was "the most expensive" option (Poseidon) selected as the go-forward strategy for new water? As I understand it, many of the other options have realistic potential for a lot less cost.	See response to comment 0004.19 regarding alternative water supply options, and 0032.01 regarding the cost of the desalinated water.
0139.03			3. Why aren't other companies being considered? I don't know of any large/very large contracts, public or private, that don't go through some sort	The Santa Ana Water Board is reviewing Poseidon Water's application for an NPDES permit and request for a Water Code section 13142.5(b) determination—the

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			of competitive bid process. Is Poseidon the only company that can do this work, or has the expertise to accomplish this project? Was there a competitive selection process?	Santa Ana Water Board did not select the project. If other proposed desalination facilities submit applications to the Santa Ana Water Board, the Board will review those applications at that time. See responses to comments 0004.19 and 0055.01.
0139.04			4. Is it true that "if" Poseidon gets this project, they will have a use or loose contract? How on this earth during these economic times is a decision made that we may be paying (for over 50 years+) for water we may not even need, or use? By any measure, this is a highly questionable business decision.	See responses to the comments 0031.02 and 0099.02.
0139.05			5. If we need the water, now or in the future, why don't we ("our" local water districts) build a desalination plant as a public utility? Water is a necessity! It should not be supplied by a "for-profit" business.	See response to comment 0139.03.
0139.06			6. Is it true that the beach, 2 kilometers east and west of the project site, will be have pipes installed for intake and out flow? Is the cost estimated to be half a billion dollars, plus usage impact for 2-3 years?	A feasibility study was completed to evaluate alternative intake locations, one located 2 kilometers up-coast and another 2 kilometers down-coast. These alternatives were not found to be feasible. The proposed facility will not require any pipelines along the beach, the existing intake and discharge facility at the AES HBGS station will be re-purposed for the

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				proposed seawater desalination facility. The detail of this analysis is in Attachment G.1 of the Tentative Order.
0139.07			Every time I get information on this project, the cost go up exponentially. Based on my informal survey of neighbors, friends and random new people I meet, there is a lot of confusion regarding this project. Most are poorly informed, or outright confused. They have no idea what impact this project will have on the beach, the environment and most of all their monthly budgets. I confess that I'm no expert, but this project looks like a boondoggle with the water rate payers on the hook for a long-long time.	See responses to comments 0004.19 and 0032.01regarding the cost of the water. See responses to comments 0004.11, 0033.01, 0035.06, 0036.01, 0050, and 0062.02 regarding impacts on the environment.
0140.01	Donald Slaven	Jan 20, 2020	As Past Chair of the Huntington Beach/Seal Beach Chapter of the Surfrider Foundation, I want to remind you that Surfrider Foundation and many other groups in Orange County and beyond, have been working to STOP the Poseidon desal plant for over 20 years!! Not only is this desalination plant unnecessary and an ultimate waste of taxpayer subsidies, it still IMPACTS directly, Huntington State Beach, which	See responses to comments 0014.04 regarding need for the desalinated water and 0035.06 regarding the impacts to recreation and parks, including Huntington State Beach, were analyzed in the 2010 Final Subsequent Environmental Impact Report, the 2017 Final Supplemental Impact, and the Addendum. As indicated in the analyses, the impacts would be temporary and less than significant. (2010 FSEIR, p. 4.6-11; 2017 FSEIR, pp. 4-156 to 4-157.

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			is one of the most heavily utilized California State Parks.	
0140.02			The Orange County Sanitation Plant and water works has for decades been one of the most state-of-the-art facilities in the world, treating and recycling wastewater. Our Orange County plant is a world leader in technology driven methods to take raw sewage waters, filter, clean and sanitize it suitable for human consumption! The Orange County Sanitation and Water Plant can continue to expand the cleaning and REUSE of water into the future. There is NO reason why individual households continue to use water brought over a vast infrastructure, and then used once and flushed into the ocean.	The Santa Ana Water Board acknowledges and agrees with your comment related to the benefits of recycled water. Desalination is another water source that local agencies may consider as part of their water supply portfolio.
0141	Daniel R. Ferons Santa Margarita Water District	Jan 20, 2020	Santa Margarita Water District (SMWD) strongly supports the development of new water resources in Orange County, including the Huntington Beach Seawater Desalination Project, and we respectfully request that the Santa Ana Regional Water Quality Control Board (SARWQCB) approve the National Pollutant Discharge Elimination System	Comment noted. See responses to comments 0003.01 and 0014.04.

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			(NPDES) Permit Order No. R8-2020-0005, NPDES No. CA8000403. South Orange County is currently 100% reliant on imported water from northern California and the Colorado River to meet the needs of our customers. While we have invested heavily in the development of recycled water supplies and conservation programs over the years (and we will continue to do so), ensuring long-term water reliability will also require developing new sources of supply. SMWD views seawater desalination as an important part of our future regional water supply portfolio. It is prudent and necessary for SMWD to diversify its water supply portfolio to avoid over-reliance on any one source of water or strictly enforce demand-management measures. Balancing water supplies and demand-management measures to include imported water, increased water storage, water conservation, water recycling, groundwater recharge, and seawater desalination are critical for Orange County to maintain an adequate, safe and reliable water supply portfolio.	

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			Seawater desalination will provide a significant benefit to Orange County by producing 56,000 acre-feet of potable water each year. It would help to reduce our dependence on imported water as well as provide us with a local, drought-proof supply source.	
0142.01	Yvette Arango and Ed Arango	Jan 20, 2020	Although the concept of desalination sounds like a great idea, this is NOT needed here in SEHB due to many reasons listed below; -The cost of this does not substantiate itself -There is no need for it here in HB or local areas. Sanitation already is at full capacity with grey water recirculation -No clear customer willing to pay for the expense	See responses to comments 0004.19, 0011, 0014.04, and 0032.01.
0142.02			-Concerned with Marine life and environment.	See responses to comments 0004.11, 0033.01, 0035.06, 0036.01, 0050, and 0062.02 regarding impacts on the environment.
0142.03			Aside from the reasons above this project is in the vicinity of AES power plant – that is still in testing of the new power stacks (very noisy so far).It is also next to ASCON a toxic dumpsite that is in process of being cleaned up (with many issues). Also a planned developer	See responses to comments 0014.03 and 0022.04 regarding location near AES, and 0132.06 regarding Ascon Landfill.

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			that is still not cleared at building homes and lodging. I am not in favor of this desalination plant.	
0143	Craig Peterson	Jan 20, 2020	Please help protect the HB we came here for. Please say no to the Poseidon project. Protect our environment and our town.	Comment noted. The Tentative Order imposes requirements aimed at protecting water quality and minimizing impacts to marine life. See responses to comments 0033.01, 0035.06, 0036.01, 0050 and 0062.02.
0144.01	Kaelyn Jenkins	Jan 21, 2020	I am a life-long resident of Huntington Beach, and what I know to be absolutely true is that the biggest, most important asset, and THE main reason people love this place and want to come here - IS the BEACH. This decision is a no-brainer....NO to Poseidon!	Comment noted. See response to comment 0140.01.
0144.02			The people behind this company have been trying to fool the people for over 20 years. Their technology is old. They are telling lies.	See responses to comments 0004.01, 0004.03, and 0033.03.
0144.03			We do not need their WAY overpriced water. This is wrong. There are still too many unanswered questions. Too much doubt to blindly allow them to proceed.	See response to comment 0032.01.

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0144.04			If you allow this, it will be devastating to the sea life and all the extremely important ocean organisms that are here. The massive amount of salt content will be overwhelming. This will be devastating to our beach, to California, to the world.	See responses to comments 0004.01, 0004.03, 0036.01, 0054.02, 0055.02, and 0062.02.
0145.01	Lisa Ohlund East Orange County Water District	Jan 08, 2020	The Carlsbad Desalination Project was the first desalination plant to be approved under the State Water board's new Ocean Plan regulations and has now been successfully operating for five years. This plant has been a critical element in San Diego County's water reliability plan – as was demonstrated during the 2015-2016 drought.	See response to comment 0079.03. Please note that the review of the Carlsbad facility was completed prior to the adoption of the desalination provisions into the Ocean Plan.
0145.02			The state has provided prudent and rigorous review of desalination projects and your board has been particularly thorough. Those that meet these rigorous requirements have earned the right to have their permits amended and/or renewed. The Huntington Beach plant fits these criteria. Thank you for considering the science and the hard work that your staff have put into its analysis of this project; we ask that your Board support responsible and sustainable desalination.	See response to comment 0162.01.

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0146.01	Greg Carrow		As a lifelong resident of Huntington Beach that enjoys surfing and fishing our beautiful coastline, I want to convey my strong opposition to the proposed reverse osmosis desalination plant. I urge you to reject the requested permit from Poseidon Resources based on the following facts: 1. The water is not needed at this location	See responses to comments 0004.19, 0014.04, and 0055.01.
0146.02			The water would be too expensive compared to alternatives	See response to comment 0032.01.
0146.03			The project would unnecessarily consume electricity just as automobiles are transitioning from combustion engines to electric batteries which will increase demand for electricity.	See response to comment 0004.05 and 0004.12.
0146.04			The project would unnecessarily release greenhouse gases and pollute the environment	See response to comment 0004.05 and 0004.12.
0146.05			2. The project would unnecessarily kill marine life from the first step to the last.	See responses to comments 0004.01, 0004.03, 0017.02, 0022.04, 0036.01, 0054.02, 0055.02, and 0062.02.
0146.06			Since 2003, the Poseidon Resources Corporation has pushed to build a water desalination plant in Huntington Beach despite the fact the water is not needed in Orange County. If it were, there	See responses to comments 0004.19, 0014.04, and 0055.01.

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			would be buyers but there are none given the outrageously high cost of production. And the city of Huntington Beach certainly does not need the water given it has a large aquifer that provides 70% of its water. Even if additional sources of water were needed, the proposed project in Huntington Beach is the most financially risky of possible alternatives including other desalination locations.	
0146.07			One reason the proposed reverse osmosis desalination plant in Huntington Beach is financially risky is because of the enormous amount of electricity it will require for 30 years regardless of the cost of electricity, which is projected to increase as the world transitions away from fossil fuels that generate greenhouse gases. For example, the worldwide automotive industry is currently investing in technology to transition away from combustible engines to battery powered engines. These batteries will need to be charged daily and will be one reason the demand and cost of electricity will increase in the future. When the cost of production increases, ratepayers will pay the price.	See responses to comments 0004.05, 0004.12, and 0032.01.

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0146.08			It is worth noting that Poseidon Resources could have proposed using a sub-service intake system as required by law to protect marine life, but it chose not to. Instead, it chose to use political influence to lobby for an exception to the law. Not only will the open ocean water intake system kill marine life, the salty brine extract from the desalination process will kill marine life too when it is discharged back into the ocean. I strongly urge you to reject the permit to build a desalination plant in Huntington Beach.	The Santa Ana Water Board finds the subsurface intake is technically infeasible. Please see the justification explained in Attachment G.1. of the Water Code 13142.5(b) determination and response to comment 0035.02. Also, see responses to comments 0004.01, 0004.03, 0004.11, 0004.13, 0017.02, 0035.04, 0036.01, 0054.02, 0055.02, and 0062.02 regarding marine life concerns.
0147.01	Diane Feinstein United States Senator	Jan 17, 2020	I am writing to express my support for the proposed 50 million gallon per day (MGD) Huntington Beach Desalination Project, which Poseidon Resources is seeking to construct and operate to provide potable water for purchase by local water districts. Given our state's ongoing water supply challenges, I have long supported this project because it is important that federal, state, and local water agencies work together to pursue an "all of the above" strategy that includes desalination as well as the expansion of	See response to comment 0003.01.

Comment Number	Commenting Parties	Date of Comment Letter(s)	Comment	Response
			surface and groundwater storage, conservation, recycling, and water transfers.	
0147.02			My support is based on the project's development in an environmentally safe manner that is consistent with the State Water Resources Control Board's Desalination Amendment to the Water Quality Control Plan for the Ocean Waters of California. It is my understanding that Poseidon made modifications to its Huntington Beach Desalination Plant design in order to adhere to the Board's requirements and to minimize the impact to marine life.	See responses to comments 0002.03, 0004.01 and 0004.03.
0147.03			And while the Bolsa Chica mitigation is compelling, there are other compelling reasons to renew this permit. • Seawater desalination is drought-proof • Seawater desalination is climate resilient • Seawater desalination is needed to reduce the need to pump water from Northern California and the Colorado River.	See response to comment 0003.01.