

STAFF SUMMARY FOR OCTOBER 11-12, 2017

26. ITEMS OF INTEREST FROM PREVIOUS MEETINGS (MARINE)

Today's Item **Information** ☒ **Action** ☐

This is a standing agenda item to provide FGC with updates on marine items of interest from previous meetings. For this meeting there are two topics:

- (A) Discuss FGC role related to desalination plants and living marine resources
- (B) Receive update on status of recreational razor clam fishery closure

Summary of Previous/Future Actions

(A)

- FGC letter sent to California Coastal Commission on proposed desalination project Feb 1, 2017
- FGC directs staff to schedule discussion on roles Aug 16, 2017; Sacramento
- FGC letter sent to California State Lands Commission on proposed desalination project Aug 17, 2017
- **Today's discussion on FGC's role** **Oct 11-12, 2017; Atascadero**

(B)

- FGC emergency closure of recreational razor clam fishery Apr 25, 2016; emergency teleconference
- FGC 90-day emergency closure extension Oct 19-20, 2016; Eureka
- Declaration of fishery closure by DFW director Jan 30, 2017
- FGC update on persistently elevated domoic acid levels in razor clam Aug 16, 2017; Sacramento
- **Today's update** **Oct 11-12, 2017; Atascadero**

Background

This item is an opportunity for staff to provide any follow-up information on marine topics previously before FGC.

(A) FGC role related to desalination plants and living marine resources

FGC has expressed concerns and raised questions about potential impacts to marine organisms from the proposed Huntington Beach desalination plant, particularly impacts to those associated with marine protected areas (MPAs). FGC submitted letters expressing these concerns to the California Coastal Commission in Feb 2017 and the California State Lands Commission in Aug 2017 (Exhibit A1), and through direct communication with the project applicant, Poseidon Water (see "Significant Public Comments" below).

At its Aug 2017 meeting, FGC directed staff to consult with DFW regarding stewardship responsibilities and potential actions to protect marine organisms that projects like the

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proposed desalination project may impact, and to provide an update at the Oct 2017 FGC meeting.

Staff met with DFW marine region staff to review current and prospective opportunities for possible engagement on key issues of concern. DFW and FGC do not have permitting authority associated with proposed commercial activities that may impact living marine resources, such as desalination plants; however, DFW does have an established role in the permitting process of desalination plants. DFW regularly communicates with and participates in review committees of permitting agencies. It provides scientific and biological impact information and makes recommendations intended to integrate ecological safeguards into the design and operation of projects. In addition, DFW formally comments on environmental review documents developed pursuant to CEQA, to ensure marine resources are protected. DFW's active engagement could serve to identify when DFW and FGC staff should coordinate on issues of particular concern to FGC. As such, in lieu of a direct regulatory oversight, FGC can support marine resource protection through ongoing coordination with DFW to identify projects or issues of particular concern, and discuss how to ensure priorities for resource protections are in place.

With regard to MPAs, FGC is a member of the MPA Statewide Leadership Team, convened in 2014 to ensure active and engaged communication among MPA network management partners. The leadership team consists of many of the same partner agencies that DFW coordinates with on proposed projects; the leadership team offers a potential platform to facilitate FGC and DFW coordination with permitting agencies throughout project development and decision processes to minimize impacts to marine resources associated with MPAs.

(B) *Recreational razor clam closure and status of domoic acid levels*

In Apr 2016, California's health agencies (California Department of Public Health and the Office of Environmental Health Hazard Assessment) determined that razor clams in Humboldt and Del Norte counties had high levels of domoic acid that posed a human health risk, and recommended closing the recreational fishery (there is no commercial fishery). FGC took emergency action to close the fishery from Apr to Oct 2016, FGC continued the closure through Jan 26, 2017, and DFW's director issued a declaration to uphold the closure on Jan 30, 2017 under new authority established by Fish and Game Code Section 5523. The closure continues until the director is notified by public health agencies that a health risk no longer exists.

The most recent report from the health agencies, received on Aug 18, indicates a decline in domoic acid levels; however, two out of ten samples were still above the agency-imposed 20 parts per million action level (Exhibit B1). As a result, the recreational razor clam closure remains in effect in both Humboldt and Del Norte counties.

Significant Public Comments

- (A) Poseidon Water provided responses to FGC's written concerns via letter in May 2017 (Exhibit A2), and via conference call with President Sklar, Commissioner Williams, and

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FGC staff in Sep 2017. Poseidon Water has offered to highlight at a future FGC meeting the review process and updates it has made to the proposed Huntington Beach desalination plant.

(B) N/A

Recommendation (N/A)**Exhibits**

- A1. [Letter from FGC to California State Lands Commission, dated Aug 17, 2017](#)
- A2. [Letter from Scott Malone, Poseidon Water, received May 16, 2017](#)
- B1. [California Department of Public Health email and test results for domoic acid levels in the most recent razor clam samples, received Aug 18, 2017](#)

Motion/Direction (N/A)

Commissioners
Eric Sklar, President
Saint Helena

Jacque Hostler-Carmesin, Vice President
McKinleyville

Anthony C. Williams, Member
Huntington Beach

Russell E. Burns, Member
Napa

Peter S. Silva, Member
El Cajon

STATE OF CALIFORNIA
Edmund G. Brown Jr., Governor

Valerie Termini, Executive Director
1416 Ninth Street, Room 1320
Sacramento, CA 95814
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Fish and Game Commission



Wildlife Heritage and Conservation
Since 1870

August 17, 2017

Honorable Gavin Newsom
Lieutenant Governor and Chair
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825

Via email to CSLC.CommissionMeetings@slc.ca.gov

Re: Comments on Poseidon Resources' proposed seawater desalination project at Huntington Beach (Poseidon Project)

Dear Lieutenant Governor Newsom:

I am writing on behalf of the California Fish and Game Commission (FGC) to offer comments for consideration on proposed desalination projects in general, and the proposed Poseidon Project in Huntington Beach specifically. FGC provided comments to the California Coastal Commission on its consideration of the proposed Poseidon Project in February 2017¹, and appreciates the opportunity to convey similar comments to you now.

With ongoing concerns about long-term water availability for California and less snow pack as the climate warms, seawater desalination is proposed as one solution to the water needs of California communities. FGC understands the need to explore new and alternative measures to meet resource demands in a sustainable manner, and recognizes that seawater desalination has the potential to be a valuable tool in California's water supply portfolio. FGC also recognizes that climate variability is an issue facing all resource management agencies, and that balancing the needs of human populations in the face of uncertain resource availability can be a difficult task.

At the same time, current seawater desalination technology also has the potential for significant detrimental impacts to California's marine ecosystems. The mission of FGC is to ensure the long-term sustainability of fish and wildlife in California. Thus, FGC would like to emphasize that seawater desalination projects must be carefully considered and analyzed by all permitting agencies, and ultimately designed in a way to avoid or minimize

¹http://www.waterboards.ca.gov/santaana/water_issues/programs/Wastewater/Poseidon/Letter_CFG_2017_02_01.pdf

adverse effects to living marine resources and habitats in the marine environment to the greatest extent possible.

Of particular relevance, in an effort to preserve marine ecosystem functions, buffer against uncertainty, and complement species-specific management, FGC adopted the nation's first coast-wide network of marine protected areas (MPAs). In place since 2012, California's globally-significant MPA network was created to help ensure that the natural diversity, marine ecosystem functions, and marine natural heritage of the state were protected while also helping to improve recreational, educational and study opportunities.² FGC, along with the California Department of Fish and Wildlife and numerous other agencies and non-governmental organizations, has invested significant time and resources to ensure that MPAs are managed in a manner consistent with legislative guidance, FGC and stakeholder intent, and ensuring that the system of MPAs functions as a robust network.

I understand that there are at least nine active proposals for seawater desalination plants along the California coast that would join the ten existing plants³, some in close proximity to MPAs. FGC seeks to strengthen the shared commitment of our partner coastal management agencies to help maximize MPA network functionality by considering actions that subject the MPA network to limited human disturbance. FGC valued the opportunity to work with the California State Lands Commission (SLC) and its staff during the MPA planning process and would like to acknowledge SLC's continued leadership in upholding standards for marine protection, specifically its role as a key member of the MPA Statewide Leadership Team convened by the California Ocean Protection Council. In particular, SLC committed in the leadership team's adopted work plan⁴ to update SLC's strategic plan to reflect commitments regarding MPAs, to assess pending agency regulations for potential impacts to MPAs, and to both consider data regarding, and identify opportunities for, mitigation and impact avoidance strategies in current regulatory/policy requirements pertinent to MPAs.

FGC reiterates its support of efforts to reduce impacts to marine resources by evaluating potential project impacts to individual MPAs, the MPA network as a whole, and site-specific marine resources during permitting and decision-making processes. As such, we urge SLC to require that proposals for seawater desalination facilities avoid or minimize impacts to MPAs and all marine resources through best available siting, design, and technology.

Minimizing impacts through thoughtful design is consistent with the State Water Resources Control Board's recently-adopted Ocean Plan Amendment, which requires desalination plants to use the best available site, design, technology and mitigation measures feasible to minimize intake and mortality of marine life *and identifies subsurface*

² Marine Life Protection Act, Fish and Game Code § 2853(b)

³ <http://pacinst.org/publication/key-issues-in-seawater-desalination-proposed-facilities/>

⁴ Marine Protected Area (MPA) Statewide Leadership Team Work Plan FY 15/16 – 17/18, Key Action Items 1.4, 2.4, and 4.3. Available at www.opc.ca.gov/programs-summary/marine-protected-areas/partnerships/

*intakes as the preferred technology.*⁵ Additionally, the board's policy contains requirements for protecting MPAs, including a prohibition on harmful intake and discharge structures *within* MPAs and a directive to site discharge and surface intakes at sufficient distances to minimize water quality and marine life impacts to protected areas.

Impacts to marine life from seawater desalination clearly can be avoided through current technology such as subsurface intakes, which pull ocean water through wells and/or galleries beneath the seafloor rather than through an open pipe in the water column. Subsurface technology eliminates impacts to marine life from being impinged on an intake screen or entrained in the source water from a screened open ocean intake, impacts that can result in significant injury and death of marine species. Despite this, the policy within the Ocean Plan Amendment also provides flexibility for alternative intake and disposal methods, with greater impacts to marine life, if it can be demonstrated that preferred technologies are infeasible. It is our understanding that an earlier feasibility evaluation, performed by an Independent Scientific Technical Advisory Panel jointly convened by the California Coastal Commission and Poseidon Water, found the nine sub-surface technologies it evaluated to be technically or economically infeasible; however, we also have been informed that the Santa Ana Regional Water Quality Control Board is currently seeking additional information to help determine if subsurface intakes are feasible at the proposed Huntington Beach site, or alternative sites. FGC encourages further consideration of subsurface intakes for the Poseidon project proposal consistent with the Ocean Plan Amendment. However, FGC questions the appropriateness or necessity of siting a 50 million gallon a day desalination plant off Huntington Beach given the availability of alternative sources of water to augment Orange County's water supply portfolio at a much lower economic and environmental cost.

At a minimum, FGC urges SLC to make avoiding potential impacts to MPA effectiveness a priority and to consider additional science on best management measures for seawater intake and discharge. While new desalination projects with open ocean intakes will not be permitted within MPAs, facilities with open ocean intakes *near* MPAs can have a direct impact on marine resources; incidental take and the reduction of critical larval connectivity between MPAs occurs as marine life is pulled into a plant and removed from the ecosystem, including organisms originating from the MPAs that are necessary to support California's marine life. Impacts from open ocean intake have the potential to undermine the ability of MPAs to function as a network, weakening the science-based framework on which they were created and potentially their ability to generate expected long-term benefits.

While in a July 2017 letter to FGC⁶ Poseidon stated that 91% of larvae estimated to be entrained by the proposed project are from fish that are not associated with the kelp and rocky reef habitat inside the southern California coastal MPA reserve network, FGC would

⁵ State Water Resources Control Board, Final Staff Report and Final Desalination Amendment, including the Final Substitute Environmental Documentation. Adopted on May 6, 2015. Available at: www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2015/rs2015_0033_sr_apx.pdf

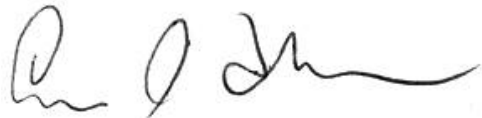
⁶ Fish and Game Commission meeting materials for June 21-22, 2017 meeting, Agenda Item No. 34, available at nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=145898&inline

like to emphasize that kelp and rocky reef habitat are only two of the many habitat types California's MPAs are designed to protect. The network is designed to provide protection to *all* marine habitat types and their associated marine life, as mandated by the Marine Life Protection Act. Further, while Poseidon concludes that there is little or no likelihood that the project's potential entrainment could negatively affect any MPA or any network of MPAs, and that marine life effects due to entrainment are anticipated to be insignificant based on the 2010 California Environmental Quality Act (CEQA) review relied upon by SLC, the 2010 CEQA review was completed before MPAs were designated as a network within the Southern California Bight. FGC requests that at a minimum the supplemental CEQA review, or preferably a new CEQA review based on current baseline and information, fully evaluate how the proposed open ocean intake as modified would adversely impact productivity and connectivity of the affected MPA system.

With a tidelands lease for desalination facilities poised for your consideration, it is critical to uphold protections for California's MPA network, and to preserve the state's significant investment in the resilience of our ocean. Seawater desalination can be a tool in our water supply portfolio, particularly when other less economically- and environmentally-costly options are exhausted, but it must be carefully analyzed and designed in a way to avoid or minimize adverse effects to the greatest extent possible. Siting desalination facilities, intakes, and discharges away from MPAs (and other sensitive habitats and species), and requiring the use of subsurface intakes, will help ensure California's ocean ecosystems are sustained in the long-term.

Based on the aforementioned concerns regarding the proposed Poseidon Project and any future seawater desalination projects along the California coastline, we urge you (1) to apply sound scientific information to inform decisions surrounding siting, precautionary design, and technology for intake valves and discharge sites; (2) to seriously evaluate if or how the community need justifies the impacts associated with the proposed project relative to other options or sitings; and (3) to structure an adaptive process for any approved project to include periodic project review for careful consideration of new scientific information and technologies that may reduce impacts, and how to integrate them into the existing project.

Sincerely,



Eric Sklar
President

cc: Members, California Fish and Game Commission
Honorable Betty T. Yee, California State Controller and member, California State Lands Commission
Michael Cohen, Director of the California Department of Finance and member, California State Lands Commission
Dayna Bochco, Chair, California Coastal Commission
Jennifer Lucchesi, Executive Officer, California State Lands Commission

Lieutenant Governor Newsom

August 17, 2017

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Jack Ainsworth, Executive Director, California Coastal Commission

Felicia Marcus, Chair, State Water Resources Control Board

David Noren, Chair, North Coast Regional Water Quality Control Board

Dr. Terry Young, Chair, San Francisco Bay Regional Water Quality Control Board

Dr. Jean Pierre Wolff, Chair, Central Coast Regional Water Quality Control Board

Irma Munoz, Chair, Los Angeles Regional Water Quality Control Board

William Ruh, Chair, Santa Ana Regional Water Quality Control Board

Henry Abarbanel, Chair, San Diego Regional Water Quality Control Board



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2017 MAY 16 PM 3:42

MLS

May 9, 2017

Mr. Eric Sklar
President
California Fish and Game Commission
1416 Ninth Street, Room 1320
Sacramento, CA 95814

SUBJECT: Huntington Beach Desalination Project

Dear President Sklar:

I am writing in response to your February 1, 2017 letter to the California Coastal Commission regarding the proposed Huntington Beach Desalination Project ("Project"). A copy of your letter was recently provided to us by the State Water Resources Control Board staff on May 4, 2017.

Poseidon supports the California Fish and Game Commission's mission to ensure the long-term sustainability of fish and wildlife. Our Carlsbad Desalination Plant, the state's first and only large-scale seawater desalination plant, has successfully produced over 20 billion gallons of drinking water since starting commercial operation in December 2015 while operating in accordance with applicable state and federal environmental laws and regulations. The Carlsbad project includes the restoration of 66 acres of wetlands in south San Diego Bay, an endeavor undertaken in cooperation with the U.S. Fish and Wildlife Service that will measurably enhance fish and wildlife habitat. In addition, with the adjacent Encina Power Station scheduled to decommission its cooling water system soon, Poseidon is poised to serve as the long-term steward for the resource-rich Agua Hedionda Lagoon, 300 acres of sensitive and vital coastal wetlands.

Based on the comments in your February 1, 2017 letter I want to make sure the Fish and Game Commission and its staff are correctly informed about our proposed Huntington Project and its relationship to the state's Marine Protected Areas (MPAs) and the Commission's effort to preserve marine ecosystem functions and oversee species-specific management.

The proposed Project has been in the state's permitting process since 2002. Over the past fifteen years the Project has successfully obtained permits and environmental approvals from the City of Huntington Beach, the Santa Ana Regional Water Quality Control Board ("Regional Board") and the California State Lands Commission ("SLC"). These environmental approvals include the Project's Subsequent Environmental Impact Report ("SEIR") (State Clearinghouse No. 200151092) certified by the City of Huntington Beach on September 7, 2010 and subsequently relied upon by the SLC and Regional Board for the agency's respective approvals of the Project.

Poseidon Surfside

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More recently, the proposed Project description has evolved and been amended to demonstrate compliance with the requirements of the California State Water Resources Control Board's Seawater Desalination Ocean Plan Amendment ("Desalination Amendment"). Poseidon's proposed Huntington Beach Project will be the first large-scale desalination facility in the world to deploy 1mm (1/25th inch) slot width wedgewire intake screens with a through-screen water velocity of less than 0.5 feet per second in an open-ocean setting. The plant will also include state-of-the-art brine diffuser technology that will ensure that the salinity level in the plant's seawater discharge meets the Desalination Amendment's stringent new receiving water quality requirements. These technologies will minimize the intake and mortality of all forms of marine life. Because of these technology enhancements the Project's long-term, stand-alone operation will continue to provide 50 MGD of drinking water but only require an average annual volume of source water of approximately 106 MGD, or 30% less water than the 152 MGD analyzed in the City of Huntington Beach's 2010 SEIR.

The current proposed Project description was informed, in large part, by the outcome of a site-specific assessment of the feasibility of subsurface seawater intake technologies. Between 2014-15, at the direction of the Coastal Commission, the Coastal Commission staff and Poseidon jointly convened an Independent Scientific & Technical Advisory Panel ("ISTAP") to reach a scientifically justified and independent assessment of the feasibility of subsurface seawater intake systems. During the two-year process, which included public participation, the ISTAP evaluated nine different subsurface intake technologies and different project scales (i.e., product water production capacities) ranging from a plant capable of producing 12.5 MGD to 100 MGD of drinking water. Based on the application of the Coastal Act's and Desalination Amendment's definition of feasibility, the ISTAP concluded that eight (8) of the nine (9) subsurface intake technologies – including all beach well technologies - were technically infeasible, and a the ninth (9th) technology – a seafloor infiltration gallery - was not economically viable at the Huntington Beach location within a reasonable time frame. To our knowledge, the Commission's ISTAP process is the most comprehensive, independent evaluation of the site-specific feasibility of subsurface seawater intake technologies ever conducted.

Your February 1, 2017 letter characterized the feasibility standards in the Desalination Amendment as providing "unfortunate" technology flexibility; however, the requirement that a project be feasible is codified in state law - both the Coastal Act and California Water Code – with the Water Code requirement recently being affirmed by the California courts (*Surfrider Foundation v. the California Regional Water Quality Control Board, San Diego Region, Fourth District Court of Appeal case No. Do60382.*), which in turn helped inform the development of the Desalination Amendment.

The Fish and Game Commission's concern about the potential effects screened seawater intakes could have on the state network of MPAs is understood; however, the proposed Project's intake and discharge structures are not located within or nearby any MPA. The

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nearest Area of Special Biological Significance is located more than nine (9) miles southeast and down current. The nearest MPA is the Bolsa Chica State Marine Conservation Area, which is approximately 4.3 miles northwest.

Any concerns to the state's MPAs should be based on Project and site-specific facts. A key marine life finding in the Project's EIR on this point states:

Impacts on marine organisms due to the potential entrainment resulting from the project are relatively small, and would not substantially reduce populations of affected species, or affect the ability of the affected species to sustain their populations. Therefore, entrainment impacts would be less than significant.

This CEQA finding is supported by site-specific information, empirical data and statistical analysis including:

- **The intake area does not have any environmentally sensitive habitats such as eelgrass beds, surfgrass, rocky shores, or kelp beds;**
- **No larvae of threatened or endangered species are anticipated to be entrained;**
- **Potential entrainment of larval species of commercial or recreational value will be extremely rare;**
- **Operation of the desalination facility may entrain 0.02% of the larva in the source water and at risk of entrainment, meaning only 2 out of every 10,000-at-risk larval are anticipated to be entrained.**

It's important to note these potential impacts do not take into consideration that the 1mm wedgewire screens will reduce entrainment and eliminate impingement of larger marine life (e.g., seals, sea lions, sea turtles, and adult fish like Kelp Bass and California Sheephead). The entrainment reducing potential of the wedgewire screens is a function of slot size relative to organism size, the behavior of organisms near the screen, and ambient hydrodynamics. The influence of organism behavior (swimming ability) and ambient hydrodynamics are documented by the 2010 Santa Cruz Water District pilot study <https://www.youtube.com/watch?v=bSEmJZmJRMU>.

In 2015, at the request of the Coastal Commission staff, Poseidon specifically analyzed the relationship between the proposed Project's ocean intake and the state's networks of MPAs. Tenera Environmental issued a report entitled "Assessment of Entrainment Effects Due To The Proposed Huntington Beach Desalination Facility On State Marine Protected Areas" which concludes that 91% of larvae estimated to be entrained by the proposed Project are from fish that are not associated with the kelp and rocky reef habitat inside the Southern California coastal MPA reserve network. Of the remaining 9% associated with kelp and

rocky reef habitats, the report's ocean currents model concludes that the probability is, at most, 1.0% (or 0.09% of the total larvae potentially at risk of entrainment) of that larvae from inside one of these MPAs could be transported into the vicinity of the Project and subject to entrainment. The results of the ocean current modeling suggest that the more likely source of the larvae from fishes associated with kelp and rocky reef habitat in the vicinity of the Project's intake and discharge is from the rocky habitat formed by Los Angeles/Long Beach Harbor Complex, which is not a protected area and is closer to the proposed Project's intake than any of the kelp and rocky reef coastal MPAs. Therefore, the location of the Project at the proposed site ensures that there is little or no likelihood the Project's potential entrainment could negatively affect an MPA or any "network" of ocean MPAs. Again, this analysis did not include any consideration of the entrainment minimizing effects of the 1 mm wedge wire screens. California Department of Fish and Wildlife were briefed and provided copies of this study in December of 2015 and over the past fifteen-plus months there have not been any questions or comments.

Tenera 2015 found that four of the nine MPAs within 80 km (50 mi) up coast or down coast of the HBDP intake are protected tidal embayments or estuaries (e.g., Bolsa Chica) and do not contain kelp and rocky reef habitat. Marine larvae spawned from within these MPAs are subject to high levels of natural mortality because there is no suitable adult habitat for these larval fishes to settle on along the open coast. The Project intake is in an area not directly adjacent to the opening to any of these MPAs where tidal action might have some possibility of transporting larvae back into the embayment from which they were spawned. It is extremely unlikely larvae originating from embayment MPAs that are potentially entrained at the intake would have contributed to the adult population in the absence of entrainment and therefore entrainment of these larvae is extremely unlikely to result in any impacts to the adult populations of these fishes inside the embayment MPAs.

Nonetheless, in 2016, at the request of the Regional Board staff, Poseidon augmented the 2015 Tenera Environmental report with a species-specific marine life biological assessment conducted by HDR and MBC entitled "*Huntington Beach Desalination Facility: Intake Location Entrainment Analysis.*"

The HDR/MBC report was prepared, in part, to address concerns about potential impacts to Bolsa Chica and non-open-ocean, rocky-reef MPA species and whether moving the proposed screened intake location farther offshore would reduce marine life effects. The HDR/MBC report concluded:

- **Only four (4) of the twenty (20) most abundant taxa occurring in plankton samples taken offshore of Huntington Beach are documented to occur in the Bolsa Chica Ecological Reserve;**
- **The current intake location entrained the fewest fish taxa and lowest density of those taxa that the California South Coast Region Marine Protected Area Network was expected to protect and enhance;**

- **Adverse impacts to fish taxa that the South Coast Region Marine Protected Area Network was designed to protect will increase by moving the intake farther offshore of Huntington Beach.**

Finally, despite the Project's CEQA determination that the marine life effects are anticipated to be insignificant, the Coastal Act and State Water Code require mitigation for unavoidable marine life impacts, no matter how ecologically insignificant. Based on guidance provided by the Desalination Amendment, Poseidon has calculated the Project's necessary compensatory mitigation, and based on input from the SLC staff we have proposed a Marine Life Mitigation Plan that involves the maintenance of the tidal influence of Bolsa Chica to ensure the long-term preservation of the 1,500-acre Bolsa Chica Ecological Reserve, the largest saltwater marsh between Monterey Bay and the Tijuana River Estuary.

In closing, we want to take this opportunity to propose a meeting with the Fish and Game Commission and its staff to address any questions you may have about the Huntington Beach Project. In the meantime, the studies and reports referenced above are part of the Regional Board application administrative record and copies can be provided to you at your request.

Sincerely,



Scott Maloni
Vice President, Poseidon Water

cc: Nancy McFadden, Executive Secretary Office of Governor Edmond G. Brown Jr.
Felicia Marcus, Chair State Water Resources Control Board
Dayna Bochco, Chair California Coastal Commission
Lt. Governor Gavin Newsom, Chair State Lands Commission
Kurt Bertchold, Executive Officer Santa Ana Regional Water Board
Valerie Termini, Executive Director CA Fish and Game Commission

From: Zubkousky-White, Vanessa (CDPH-DDWEM-EMB) <Vanessa.Zubkousky@cdph.ca.gov>
Sent: Friday, August 18, 2017 12:15 PM
To: Jacque Smith (j-smith@att.net); Jaytuk Steinruck; Ken Graves (salmon700@live.com); Rosa Laucci; Tom Weseloh (Tom.weseloh@sen.ca.gov); Ashcraft, Susan@FGC; Grant, Christina (CDPH-DFDRS); Mastrup, Sonke@Wildlife; Klasing, Susan@OEHHA; Ramey, Kirsten@Wildlife; Martel, Melissa (HUMBOLDT COUNTY); McNally, Brian (Del Norte); Ray, James@Wildlife; Trevena, Eric (CDPH-EMB)
Subject: Razor Clam Results 7/23/17

Hello,

Razor clams were collected 7/23/17 from Clam Beach in McKinleyville by James Ray with DFW. The domoic acid results are below and posted [online](#).

Only 2 out of 10 samples were above the 20 ppm action level.

Location	Collection Date	Collecting Agency	Sample Type	DA (parts per million)
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Meat	27
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Meat	19
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Meat	11
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Meat	15
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Meat	27
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Meat	18
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Meat	16
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Meat	11
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Meat	17
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Meat	9.3
Clam Beach, McKinleyville	7/23/2017	CA Dept of Fish & Wildlife	Viscera	15

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