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State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814
April 9th, 2015



Subject – Comment Letter – Desalination Amendment

We thank the State Water Resources Control Board for the opportunity to submit comments on the Draft Final Amendment of the Desalination Policy as well as the continued stakeholder outreach and acceptance of comments through-out this multi-year process. This process has been instrumental in providing a policy that is the first of its kind in terms of marine protection and has been developed utilizing a balanced collaborative approach. West Basin Municipal Water District (West Basin) has carefully reviewed all of the proposed amendments and the Supplemental Environmental Document and only has three areas of comment and those are listed below.

1. Wedge Wire Screen Entrainment Credit (1%)

West Basin appreciates the extent of study and investigation that has already been performed to date by the Staff and the Expert Panel on wedge wire screen and appreciate that screens are deemed the best available technology after subsurface intakes. We have been studying wedge wire screens for 4 years and have completed very intensive and exploratory testing on the entrainment effectiveness of the screens. West Basin feels the 1% entrainment credit for applying a 1.00mm wedge wire screen is far too low being that the ETM/APF entrainment analysis assumes a large, unscreened open pipe intake with no marine protection to calculate the entrainment impact from a desalination plant. It appears the 1% credit only may only account for the absolute levels of entrainment reduction to fish larvae and not the actual effects on the populations.

West Basin has consulted with industry experts and believes the credit should be much larger, around 50%, for a 1.00mm wedge wire screen. When comparing the ETM/APF analysis of a large open pipe compared to a wedge wire screen with a 1.00mm opening the 1% credit does not take into account the protection of larger larvae that have greater chance of surviving to become adult fish. Basically, the 1.0% value ignores the fact that there are different age larvae in the population subject to entrainment. West Basin recommends that the Amendment allow for a demonstration of the credit for use of 1.00mm wedge wire screens since the actual credit will be subject to the species of fish larvae subject to entrainment at a site. Currently, there are no existing studies proving the biological level of significance of the organisms not accounted for in the ETM calculation (ie holoplankton, diatoms, etc) is the same as a juvenile or reproductive adult species. While no studies exist West Basin has received an expert opinion from Tenera, expert marine biologists, who state the impacts from entraining smaller species not identified in the ETM are not the same, and less, than the impacts of entraining a juvenile or reproductive adult species.

West Basin also agrees with the new optional language inserted allowing project proponents to utilize other assessments for determining entrainment impacts. CODAR and travel times have been used in existing reports to calculate time of travel for larvae and West Basin would like to utilize this method to determine the habitats that would be impacted by a proposed desalination plant based on the head capsule size data. This data would be utilized to show which habitats are capable of producing larvae that would travel, by current, to the location of the proposed desalination intake and be too large (ie head capsule size above 1.00mm) to entrain. See Shanks, A. L. 2009. Pelagic larval duration and dispersal distance revisited. Biological Bulletin 216:373-385, and Siegel, D. A., B. P. Kinlan, B. Gaylord, and S. D. Gaines. 2003. Lagrangian descriptions of marine larval dispersion. Marine Ecology Progress Series 260:83-96.

West Basin's recommendation for Board consideration:

- a) Project proponents who utilize a 1.00mm wedge wire screen should be able to provide data in support of a site-specific credit for a project to account for the protection of juvenile and adult marine life that is not accounted for in the existing ETM/APF calculation.
- b) Continue to allow optional entrainment impact calculations by a peer reviewed expert panel as stated in 2.e.1.a.

2. Clarification of Diffuser Impacts

West Basin agrees with the Board's recommendation to utilize brine diffusers to minimize discharge impacts to local marine life. In the draft amendments it's not clear how to calculate the salinity based operational marine life impacts from the brine within the area of the discharge that exceeds 2.0 parts per thousand over ambient salinity. There is also discussion about the operational impacts due to shearing, yet how to calculate and quantify the total shearing impact due is unclear. West Basin would appreciate some guidance on how to calculate operational impacts due to shearing and impacts within the volume of water with salinity above 2.0ppt over ambient. These two points reflect the policy currently outlined in section 2.E.1.b.

West Basin's recommendation for Board consideration:

Staff to provide a methodology for calculating diffuser operation impacts due to:

- a) The volume of water with a salinity of 2.0ppt over ambient background salinity
- b) The shearing impacts from the diffuser's mechanical impacts

3. Clarification on Reporting

West Basin agrees with reporting and monitoring to maintain an accurate representation of the impacts of an operational ocean water desalination facility. We have even completed many studies on a demonstration scale to identify the key impacts. In the draft amendments it remains unclear of the total number of monitoring reports and studies and what is expected in those reports to be completed before a project can get permitted and operational reporting. Reporting should be required, but if the types of reports and parameters are not defined they may end up taking several years and become very costly. We acknowledge the

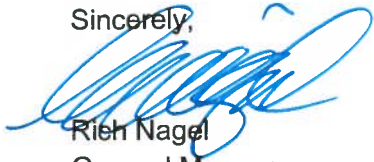
Board proposes a Marine Life Mortality Report that will encompass all impacts from the desalination facility and West Basin would suggest having a "How To" guide for the reporting to clarify expectations from local regulators and project proponents. An outline with the types of testing and reporting for each impact that should be addressed would be very helpful for all involved parties.

West Basin's recommendation for Board consideration:

A "How-To", or similar guide be provided with all the tests/studies to be performed prior to building a desalination facility as well as operational reporting.

West Basin remains committed in working with the State Water Resources Control Board towards the creation of a policy that will identify desalination as a much needed new water supply for our state. Again, I thank you for your time and careful consideration. As always, should you have any questions or concerns about please don't hesitate to contact me.

Sincerely,



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West Basin Municipal Water District

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cc:

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