



April 9, 2015



Jeanine Townsend  
Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24th Floor  
Sacramento, CA 95814

Subject: Comment Letter – Desalination Amendment

Dear State Water Resources Control Board Members:

On behalf of Deepwater Desal, we are submitting comments on the proposed revisions made to the proposed Desalination Amendment and draft Final SED. We appreciate the staff work and time put in to developing the proposed policy. In its current form, this Desalination Amendment is not ready for adoption by the State Water Resources Control Board without further amendment.

We are keeping our comments brief and targeted so that they might be carefully considered by the State Water Resources Control Board members.

There are five important points we want to make:

1) Subsurface Intake Requirement is Wrong

While modifications have been made to the Desalination Amendment, the current amendment language continues to have an explicit subsurface requirement/preference that needs to be addressed. We strongly believe that the existing Desalination Amendment needs to be modified to change the requirement to an alternative that must be thoroughly analyzed using the feasibility standards in the existing amendment language in the consideration of any proposed desalination project.

2) No Recognition of Differences in Ocean Intakes

Not all ocean intakes are the same. Deepwater Desal has developed a project proposal that locates our ocean intake below the photic zone in the near shore Monterey submarine canyon in order to minimize the impact to marine life. This locationing approach was determined and informed by oceanographic research and marine species monitoring to determine a location that was optimized for the project and minimizes the impacts to marine species. The currently policy does not adequately recognize that ocean intakes can substantially mitigate marine species impact with sound locationing considerations informed by science. Our approach is entirely different than other ocean intake approaches that leverage pre-existing shallow or estuary intakes from energy



generation facilities. The Desalination Amendment must recognize science-based approaches intake design and siting that are not only subsurface.

### 3) Lack of Operational Experience to Justify Subsurface Intake Requirement

The subsurface intake requirement is inconsistent with the world-wide operational experience with desalination facilities. There is not enough successful operational experience to justify an explicit technology preference for subsurface intakes. Actually, the experience has predominately demonstrated that subsurface intakes have not been successful, are limited in their application and scale, and alternative subsurface approaches like infiltration galleries can have substantial coastal and marines species impacts. In light of the overwhelming science and operational experience, a “subsurface intake technology requirement” is ill-advised.

### 4) CEQA is the Optimal Review Mechanism

The explicit requirement for a subsurface intake is a single criteria preference that trumps a thorough analysis under the California Environmental Quality Act (CEQA). Desalination projects will have numerous impact considerations that must be considered with a series of project alternatives. The feasibility standards in the proposed desal amendment provide useful policy guidance for analyzing a subsurface intake alternatives in comparison to other types of ocean intakes. However, the desal amendment starts with a subsurface requirement first and does not enable the CEQA review process to consider all environmental impacts associated with project alternatives in order to determine the preferred project alternative. Impacts such air quality, green house gas emissions, subsurface disturbance, land based impacts, impacts to benthic marine organisms, maintenance impacts are just a few that will be analyzed in conjunction with the impacts associated with marine that will be considered in CEQA analysis in considering alternatives for any proposed project in an effort to determine the preferred alternative.

### 5) Drought Conditions are a Reminder of the Need for Policy Flexibility

The current drought experience is a important reminder for the need for flexibility when developing public policy. The SWRCB has made some important contributions to the development of policy to determine feasibility of subsurface intakes. These feasibility standards will guide future project alternative analysis under CEQA. The explicit subsurface intake requirement first does not meet the critically important public policy need to have all options and consideration available to water resource planners and public officials in considering solution for drought, replacing impaired water sources, and adapting our water resource infrastructure to address global climate change.

Attached are some specific amendments to the latest draft of the Desalination Amendment. We respectfully recommend the State Water Resources Control Board delay adoption of the final amendment to consider our comments and those of many other stakeholders. However, if action is taken, we strongly suggest the medications to the desalination Amendment proposed in the attached.



Thank you for your consideration. We will also be providing testimony at the proposed adoption hearing.

Sincerely,

A handwritten signature in black ink, appearing to read "Brent Constanz", written in a cursive style.

Dr. Brent Constanz  
CEO, Deepwater Desal

Attachment



## **Proposed Amendment to the final Desalination Amendment Draft**

L.2.c.(2):

“If the regional water board determines that surface water intakes are the best available technology under the analysis described below, analyze potential designs for those intakes in order to minimize the intake and mortality of all forms of marine life.”

L.2.d.(1)(a):

“Subject to Section L.2.a.(2), the regional water board in consultation with State Water Board staff shall conduct a comparative analysis of the factors listed below for surface and subsurface intakes to determine which intake technology is feasible for the proposed desalination facility. The analysis shall also determine which feasible intake technology is the environmentally superior alternative for the proposed desalination facility. A design capacity in excess of the need for desalinated water as defined in chapter III.L.2.b.(2) shall not be used by itself to declare subsurface intakes as not feasible.”

L.2.d.(1)(a)i:

“The comparative analysis shall consider the following factors in determining the feasibility of alternative intakes for the proposed desalination facility:...”

L.2.d.(1)(c):

“If the regional water board determines that a surface water intake is the best feasible technology for the proposed desalination facility, its approval of the surface water intake shall be made subject to the following conditions:”