
State Water Resources Control Board

NOTICE OF ADOPTION MEETING

PROPOSED FINAL AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR OCEAN WATERS OF CALIFORNIA ADDRESSING DESALINATION FACILITY INTAKES, BRINE DISCHARGES, AND THE INCORPORATION OF OTHER NON-SUBSTANTIVE CHANGES AND PROPOSED FINAL STAFF REPORT INCLUDING THE SUBSTITUTE ENVIRONMENTAL DOCUMENTATION

NOTICE IS HEREBY GIVEN that the State Water Resources Control Board (State Water Board) will hold a public meeting to consider: (1) approval of the Final Staff Report, including the Draft Substitute Environmental Documentation (SED) and (2) the adoption of the proposed Final Amendment to the Water Quality Control Plan for the Ocean Waters of California (Ocean Plan) addressing Desalination Facility Intakes, Brine Discharges, and the Incorporation of other Non-substantive Changes (Desalination Amendment). Interested parties may provide oral comments on changes to the proposed amendments at the public meeting. The date, time, and location of the public meeting for consideration of adoption is:

Tuesday, May 5, 2015 – 9:00 a.m.
Joe Serna Jr. - CalEPA Headquarters Building
Coastal Hearing Room
1001 I Street, Second Floor
Sacramento, CA 95814

BACKGROUND

Several large desalination plants are planned along the California coast to augment increasingly scarce water supplies. Desalination facilities access source water either using surface or subsurface intakes. Surface intakes typically draw water directly from a water body (e.g. an offshore ocean intake pipe), whereas subsurface intakes draw water through pipes that are installed underground or under the seafloor (e.g. beach wells and infiltration galleries). The construction of surface and subsurface intakes can result in marine life mortality; however, these impacts occur only for the duration of the construction.

Marine life may also be adversely affected by operation of desalination facility intakes through entrainment or impingement. Entrainment occurs when organisms are drawn in with the source water and enter the facility's water processing system. Impingement occurs when organisms become trapped on intake screens. Surface intakes can entrain or impinge marine organisms, whereas subsurface intakes do not. Studies have shown that organisms do not survive entrainment in desalination facilities using traditional technology.

Surface intakes can be screened to reduce entrainment. The size of the gaps in the screen (slot size or mesh size) will determine which organisms are protected from entrainment. Many aquatic organisms are very small and can pass through intake screens with small screen openings. Larger organisms can become trapped or impinged on intake screens, which can result in stress, bodily damage, or mortality. In addition to the direct effects on the entrained or impinged organisms, there are indirect effects on the aquatic ecosystem due to reduced food availability for wildlife that depend on the organisms removed by surface intakes.

During the process of seawater desalination, salt and minerals are removed from salt water to produce fresh water. The salt, minerals, and other compounds may be discharged as hyper-saline brine or may be diluted by commingling with other discharges or through other techniques. Hyper-saline brine is denser than the receiving ocean water and depending on discharge methods, may settle on the sea floor, adversely affecting marine organisms.

Currently, the State Water Board and Regional Water Quality Control Boards regulate brine discharges from these types of facilities through the issuance of National Pollutant Discharge Elimination System (NPDES) permits that contain conditions to ensure protection of beneficial uses. However, the Ocean Plan does not have an objective or limitation for elevated salinity levels in the ocean, nor does it describe how brine discharges are to be regulated and controlled, leading to permitting inconsistencies and uncertainty. Further, the Ocean Plan does not address possible impacts to marine life from seawater intake into desalination facilities.

The proposed Desalination Amendment would: (1) clarify the State Water Board's authority over desalination facility intakes and discharges, (2) provide direction to the regional water boards regarding the determination required by California Water Code section 13142.5, subdivision (b),¹ (3) include implementation provisions for a statewide narrative receiving water limitation for salinity, and an option for dischargers to apply for a facility-specific receiving water limitation, and (4) include monitoring and reporting requirements. The proposed Desalination Amendment also includes provisions that promote interagency collaboration for siting, design, and permitting of desalination facilities, and that help define the roles of the State Water Board and Regional Water Boards in regulating desalination facilities. The proposed Desalination Amendment provides a consistent statewide approach for minimizing intake and mortality of marine life, and protecting water quality and related beneficial uses of ocean waters at and near desalination facilities.

SUBMISSION OF WRITTEN COMMENTS

The State Water Board will accept public comments on changes to the proposed draft Final Desalination Amendment and the draft Final SED. **Comments must be limited to proposed revisions made to the proposed Desalination Amendment and draft Final SED** that was distributed and posted on July 3, 2014. Written comments must be received by **12:00 noon on Thursday, April 9, 2015** and addressed to:

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

¹ Requires that any "new or expanded coastal power plant or other industrial installation using seawater for cooling, heating or industrial processing" must utilize "the best available site, design, technology and mitigation measures feasible...to minimize the intake and mortality of all forms of marine life."

Comment letters may be submitted electronically, in pdf text format (if less than 15 megabytes in total size), to the Clerk to the Board via e-mail at commentletters@waterboards.ca.gov. If the file is greater than 15 megabytes in total size, then the comment letter may be submitted by fax at (916) 341-5620. Please indicate the subject line: **“Comment Letter – Desalination Amendment.”** Couriers delivering hard copies of comment letters must check in with lobby security personnel, who can contact Jeanine Townsend at (916) 341-5600.

DOCUMENT AVAILABILITY

The proposed Desalination Amendments and all related documents are available to view or download on the State Water Board’s Web site at:
http://www.waterboards.ca.gov/water_issues/programs/ocean/desalination/.

You may request a paper copy by contacting Ms. Rachael Tadlock at (916) 341-5568 or Rachael.Tadlock@waterboards.ca.gov.

Additional information on the meeting in Sacramento can be found on the State Water Board’s Web site at http://www.waterboards.ca.gov/board_info/calendar/.

PROCEDURAL MATTERS

Participants are encouraged to submit written comments prior to the meeting, in accordance with the deadline specified above. At the meeting, participants will be given an opportunity to summarize and supplement their written materials with oral presentations.

To ensure a productive and efficient meeting in which all participants have an opportunity to participate, oral presentations may be time-limited. For other presentation recommendations, go to: http://www.waterboards.ca.gov/board_info/meetings/board_presentations.shtml.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

This is to advise that the State Water Board is proposing to adopt or amend the Ocean Plan in accordance with a regulatory program exempt under Section 21080.5 of the Public Resources Code from the requirement to prepare an environmental impact report under the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) and with other applicable laws and regulations.

PARKING AND ACCESSIBILITY

For directions to the Joe Serna Jr. (CalEPA) Building and public parking information, please refer to the map on the State Water Board Web site:
<http://www.calepa.ca.gov/EPAldg/location.htm>.

The CalEPA Building is accessible to persons with disabilities. Individuals requiring special accommodations are requested to call (916) 341-5880 at least five working days prior to the meeting. Telecommunications Device for the Deaf (TDD) users may contact the California Relay Service at (800) 735-2929 or voice line at (800) 735-2922. An audio broadcast of the meeting will be available via the internet and can be accessed at: <http://www.calepa.ca.gov/broadcast/>.

All visitors to the CalEPA Building are required to sign in and obtain a badge at the Visitor Services Center located just inside the main entrance (10th Street entrance). Valid picture identification may be required. Please allow up to 15 minutes for receiving security clearance.

FUTURE NOTICES

The State Water Board will hold the public meeting at the time and place noted above. Any change in the date, time, and place of the public meeting and consideration of adoption will be noticed via e-mail subscription. Any person desiring to receive future notices concerning the Proposed Desalination Amendments, including any changes to the notice of consideration of adoption, must subscribe to the e-mail list using the E-mail List Subscription form at:

http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml.

Select the "California Ocean Plan" e-mail list, located within the "Water Quality Topics" group.

CONTACT INFORMATION

Please direct questions about this notice to Ms. Claire Waggoner at (916) 341-5582

(Claire.Waggoner@waterboards.ca.gov).

March 20, 2015

Date



Jeanine Townsend
Clerk to the Board