

**California Regional Water Quality Control Board**  
**San Diego Region**  
**David Gibson, Executive Officer**



**Executive Officer’s Report**  
**June 24, 2015**

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**Table of Contents**

<b>Part A – San Diego Region Staff Activities.....</b>	<b>2</b>
1. Personnel Report .....	2
2. San Diego Bay Fishing for Science Derby.....	3
3. Public Forum – Ms. Sally Roney, City of Escondido Resident .....	7
<b>Part B – Significant Regional Water Quality Issues.....</b>	<b>9</b>
1. SCCWRP 2014 Annual Report .....	9
2. The SONGS Artificial Reef Mitigation Project .....	9
3. Update on San Diego Bay Fish Consumption Survey.....	11
4. Public Notice for Proposed Settlement Orders.....	12
5. Enforcement Actions for April 2015 ( <i>Attachment B-5</i> ) .....	13
6. Sanitary Sewer Overflows (SSOs)—March 2015 ( <i>Attachment B-6</i> ) .....	13
<b>Part C – Statewide Issues of Importance to the San Diego Region.....</b>	<b>15</b>
1. Desalination Amendment to the Ocean Plan Approved by State Board ( <i>Attachment C-1</i> ).....	15
2. State Water Board Adopts Water Quality Objective and Implementation Plans for Trash.....	16

**The June report for the Tentative Schedule of Significant NPDES Permits, WDRs, and Actions, agenda items requested by Board Members, and the attachments noted above are included at the end of the report.**

## Part A – San Diego Region Staff Activities

### 1. Personnel Report

*Staff Contact: Lori Costa*

The Organizational Chart of the San Diego Water Board can be viewed at [http://www.waterboards.ca.gov/sandiego/about\\_us/org\\_charts/orgchart.pdf](http://www.waterboards.ca.gov/sandiego/about_us/org_charts/orgchart.pdf)

#### Promotion

Laurie Walsh was promoted to Senior Water Resource Control Engineer. She is supervising the Storm Water Management Unit. Laurie has worked for the San Diego Water Board since June 1993. For the past 6+ years she was part of the Regional Storm Water Permit Team. She has a Bachelor of Science degree in Civil Engineering from California State Polytechnic University, Pomona and is a Professional Engineer. Recruitment will soon be underway to fill her vacated position.

#### Recent Hires

Sandy Khounphet began working as a Student Assistant Engineer on June 4, 2015 in the Storm Water Management Unit. Her primary responsibilities are program support and data management activities. Sandy is working towards a Bachelor of Science degree in Environmental Engineering at San Diego State University. She anticipates graduating in June 2016. Before her recent hire, Sandy volunteered in the Water Board's Compliance Assurance Unit.

Lalitha Thotakura began working as a Water Resource Control Engineer on June 16, 2015 in the Central Cleanup Unit. Her primary responsibilities include site investigation, remediation, and cleanup and enforcement. Lalitha has Master of Science degree in Civil Engineering from San Diego State University. She has five years of consulting experience including groundwater and soil remediation projects.

#### Departures

Alex Smith, a Student Assistant Engineer in the Storm Water Management Unit, left State service on May 14, 2015. He recently graduated from San Diego State University with a Master of Science degree in Civil Engineering and accepted a full-time position with a private engineering firm.

Lauren Bray, a Scientific Aid in the Central Cleanup Unit, left state service on June 17, 2015. Before being hired in August 2014, she volunteered in the Water Board's Compliance Assurance Unit. She anticipates graduating in May 2016 from San Diego State University with a Bachelor of Science degree in Environmental Engineering. Lauren accepted an environmental engineering internship with the Space and Naval Warfare Systems Command.

#### Recruitment

Interviews to fill a Scientific Aid position in the Land Discharge Unit have been held.

## 2. San Diego Bay Fishing for Science Derby

*Staff Contact: Julie Chan*

Saturday, June 6 saw staff members, the public, and even a board member casting lines into San Diego Bay and donating their catch to science in the first ever “Fishing for Science Derby.” The San Diego Water Board, and its partners, the San Diego Unified Port District, the City of San Diego, AMEC Foster Wheeler, and the Southern California Coastal Water Research Project (SCCWRP) will use this catch to improve our understanding of the bioaccumulation of pollutants in the types of fish from San Diego Bay that are typically caught and consumed by people. The goal of the fishing derby was to collect enough biomass and diversity of species for SCCWRP to assess the risk to human health from eating fish from San Diego Bay. A companion study, also being conducted by SCCWRP, is surveying San Diego Bay fishers to understand consumption patterns of the people and families who consume fish caught from the bay.

Exactly 100 fishers participated at four pier locations; Shelter Island, Embarcadero, Pepper Park, and Tidelands Park. Participants expressed appreciation for the study, and were excited to contribute as well as compete for prizes and bragging rights. Chris Stransky, Aquatic Sciences Group Manager for AMEC Foster Wheeler, organized the event with funding supplied by the City of San Diego. Stransky deemed the event a success with 89 fish retained for analysis from 11 different species. One of the Shelter Island fishers even landed a spotted sand bass that had been tagged as part of a research study of movement patterns conducted by the Scripps Institution of Oceanography. SCCWRP will now oversee the extraction and analyses of tissue from the fish collected during the derby.



**A banner announces the derby at the registration booth at the Embarcadero Pier.**



**Board member Gary Strawn and members of his fly fishing club sign up to participate at Tidelands Park.**



**Yellow “Fishing for Science” collection buckets the length of Shelter Island Pier show the strong support for the derby.**



Many participants fished from kayaks providing greater coverage of the bay.



Fish were weighed, measured, wrapped in aluminum foil and put on ice for storage and transport.



**Who knew that scientific data collection could be so fun and relaxing?**



**Kevin Stolzenbach of AMEC weighs a halibut landed at Shelter Island Pier.**



This spotted sand bass (*Paralabrax maculatofasciatus*) had been tagged as part of a study of movement patterns. SCCWRP provided Scripps Institution of Oceanography with this picture along with the tag ID and location where the fish was caught.

### 3. Public Forum – Ms. Sally Roney, City of Escondido Resident

*Staff Contact: Laurie Walsh*

Ms. Sally Roney, a City of Escondido resident, addressed the San Diego Water Board at the May 13, 2015 Board meeting public forum to express her concerns that the City of Escondido's tiered water rates and other conservation measures will lead to reduced watering of fire protection landscape areas of her property. Ms. Roney is concerned that the reduced watering will create areas of dead vegetation and bare spots on hillsides, increasing erosion potential.

The City of Escondido has implemented tiered water rates as a means of achieving compliance with the emergency statewide regulations adopted by the State Water Resources Control Board (State Water Board), setting mandatory water-use reduction targets for urban water supply agencies during the period from June 1, 2015 through February 2016. Water supply agencies are responsible for determining the specific measures necessary to meet the mandatory reduction targets and avoid financial penalties by the State Water Board. The City of Escondido is required to achieve a 20 percent reduction target<sup>1</sup> and the San Diego Water Board does not have regulatory authority to direct the City's method of achieving compliance with this mandatory water reduction target.

<sup>1</sup> <http://www.sdcwa.org/drought-response>

Ms. Roney reports that she must irrigate the existing vegetation on the steep slopes of her property to maintain it as a defensible fire break space. Although vegetation is typically the most effective means to protect sloped land from erosion, under the current severe drought conditions, other methods for the diligent maintenance of existing vegetation as well as alternatives to status quo landscaping and irrigation practices must be considered. For example, Ms. Roney could consider changes to the landscaped defensible space such as replacing the current existing ice plant with more drought tolerant plants or by introducing intermittent granite paths or stone walls to act as a fuel break and help slow down or change the path of an approaching fire.

The University of California Cooperative Extension advises on its *Sustainable and Fire Safe Landscapes* website that, when done well, cleared areas should still include enough well-spaced and judiciously pruned plants to protect against excessive erosion and provide wildlife habitat.<sup>2</sup> Proper maintenance for fire safety does not mean eradication of all plants, but rather the selective removal of highly flammable vegetation.

Ms. Roney can also access the Metropolitan Water District's BeWaterWise website at [www.bewaterwise.com](http://www.bewaterwise.com) for information on existing and forthcoming incentive-based water conservation programs for potentially offsetting the cost of landscape irrigation and/or replacement. Additional resources on the design and maintenance of sustainable fire safe landscapes are provided below:

### **Landscaping within Fire Break Areas**

- 1 Sustainable and Fire Safe Landscapes, University of California Cooperative Extension, 2015  
[http://ucanr.edu/sites/SAFElandscapes/Defensible space, fire safe landscaping, and fire hazard reduction/](http://ucanr.edu/sites/SAFElandscapes/Defensible_space,_fire_safe_landscaping,_and_fire_hazard_reduction/).
- 2 Firescaping Landscape Design for Defensible Space, Fact Sheet 01-33 University of Nevada Cooperative Extension  
<http://www.unce.unr.edu/publications/files/ho/2001/fs0133.pdf>.
- 3 Home Landscaping for Fire, University of California Division of Agriculture and Natural Resources Publication 8228, 2007  
[http://firecenter.berkeley.edu/docs/CE\\_homelandscaping.pdf](http://firecenter.berkeley.edu/docs/CE_homelandscaping.pdf).

### **Fire-Resistant California Friendly Plants**

Comprehensive 50-page booklet, The Homeowner's Guide, written by wildland resource scientist Klaus Radtke, Ph.D. for homeowners interested in reducing the chances of wildfire and mudflow disasters on their properties.

[http://www.bewaterwise.com/pdf\\_firewatershed.pdf](http://www.bewaterwise.com/pdf_firewatershed.pdf)

<sup>2</sup> [http://ucanr.edu/sites/SAFElandscapes/Defensible space, fire safe landscaping, and fire hazard reduction/](http://ucanr.edu/sites/SAFElandscapes/Defensible_space,_fire_safe_landscaping,_and_fire_hazard_reduction/)



## **Part B – Significant Regional Water Quality Issues**

### **1. SCCWRP 2014 Annual Report**

*Staff Contacts: Bruce Posthumus and David Barker*

The Southern California Coastal Water Research Project (SCCWRP) has released its 2014 Annual Report. The 2014 Annual Report, which is magazine-sized, in contrast to the book-sized annual reports of previous years, provides an overview of SCCWRP's work in nine major research areas:

1. Microbial Water Quality
2. Eutrophication
3. Contaminants of Emerging Concern
4. Bioassessment
5. Sediment Quality
6. Flow Ecology
7. Wetlands
8. Regional Monitoring
9. Information Technology and Visualization

The redesigned 2014 Annual Report is intended to communicate SCCWRP's technical achievements in a style that will be relevant to environmental program managers and policy makers as well as trained scientists. To that end, the first portion of the Annual Report consists of a series of magazine-style feature articles that highlight selected aspects of SCCWRP's research and present progress and accomplishments in ways that emphasize big-picture policy implications. The second half of the Annual Report (which begins on [Page 15](#)) describes some of the more substantive scientific accomplishments in 2014 and includes abstracts for 38 peer-reviewed journal articles and technical reports co-authored by SCCWRP scientists.

SCCWRP annual reports for 2014 and previous years are available at <http://www.sccwrp.org/Documents/AnnualReports.aspx>.

SCCWRP is a public agency formed to conduct environmental research in coastal waters and associated watersheds and to suggest management strategies. The San Diego Water Board is one of fourteen SCCWRP member agencies. David Gibson represents the San Diego Water Board on the SCCWRP Commission, which is SCCWRP's governing board. David Barker is the alternate, and Bruce Posthumus serves as a representative on the Commission's Technical Advisory Group (CTAG). More information about SCCWRP is available at: <http://www.sccwrp.org/AboutSCCWRP.aspx>.

### **2. The SONGS Artificial Reef Mitigation Project**

*Staff Contact: Deborah Woodward*

The San Onofre Nuclear Generating Station (SONGS) artificial reef mitigation project entails the creation of a subtidal rocky reef large enough to sustain a kelp forest community. It is one of several projects required by the California Coastal Commission (CCC) to mitigate the adverse impacts of SONGS operations on the marine environment. At a recent workshop, scientists who

monitor the reef reported that it did not meet a key performance standard in 2014: it did not produce enough fish.

Workshop Scientists from the University of California Santa Barbara Marine Science Institute reported their findings at a public workshop hosted by the California Coastal Commission (CCC). The workshop was held April 13, 2015, at the Ocean Institute in Dana Point and attended by representatives from Southern California Edison (SCE), resource agency staff, and members of the public interested in restoration and environmental monitoring. Deborah Woodward of the Monitoring, Assessment and Research Unit attended.

The reef The artificial reef is located off the coast of San Clemente (Figure 1). It is known as the Wheeler North Reef, in memory of the noted kelp forest ecologist. The CCC required SCE to create the reef to compensate for kelp forest resources damaged by turbidity associated with the station's discharge of once-through cooling water. SCE completed construction of the reef in 2008, making 2014 the sixth year of post-construction monitoring.

Performance standards The artificial reef is evaluated using 15 performance standards. Some standards are *absolute*, based on attributes measured only at the artificial reef, and must be met to receive mitigation credit for the year. For example, the reef must provide at least 150 acres of kelp and 28 tons of fish. Other standards are *relative*, based on attributes measured concurrently at the artificial reef and two reference reefs (Figure 1). Relative standards evaluate a suite of algal, invertebrate, and fish population attributes including species richness, density, reproductive rate, food chain support, and others. To satisfy the relative standards, the artificial reef must perform at least as well as the lower performing reference reef.

2014 results Last year the artificial reef satisfied the relative standards and met three of the four absolute standards. The reef did not meet the absolute standard for fish standing stock, however, as the estimated amount (25 tons) was less than the performance standard (28 tons). Because the reef failed to meet that standard, SCE does not receive mitigation credit for 2014. This performance standard has not been met in any year, so SCE and the scientists involved are discussing ways to improve the reef's fish production in the future.

30 years SCE will complete its mitigation even though the generating station was shut down in mid-2013. The reef mitigation requirement will be fulfilled when the number of years of mitigation credit accrued equals the total years of operation of SONGS Units 2 & 3, including the decommissioning period to the extent that there is continuing discharge of cooling water. Unit 2 operated for approximately 30 years and Unit 3 for about 29 years, thus the minimum number of years of mitigation credit needed is 30 years. The San Diego Water Board issues discharge permits for SONGS (R9-2005-0005 and R9-2005-0006), and the CCC mitigation requirements are reiterated in the permit Fact Sheets.

Model monitoring program The reef monitoring program has features that make it a model program, one the San Diego Water Board could look to when designing or approving monitoring plans for restoration projects of all types.

- Thorough, well-reasoned performance standards. The standards go beyond measures of acreage and vegetation cover to include measures of ecological function.

- Concurrent monitoring of project and reference sites. The use of reference sites allows one to evaluate project performance in the context of natural variability and to confirm that the created site is similar to a natural one.
- Discharger-funded independent monitoring. The CCC requires SCE to provide funds for project monitoring that is independent of SCE (independent contract scientists work under the direction of the CCC Executive Director). SCE also provides funds for CCC staff technical oversight of the project.

Monitoring programs should include these features to the extent possible and appropriate, consistent with the San Diego Water Board's Practical Vision goals of scientifically sound, strategic, and effective monitoring.

The workshop presentation was excellent, and a copy is available at:

[http://marinemitigation.msi.ucsb.edu/documents/annual\\_review\\_workshops/artificial\\_reef/index.html](http://marinemitigation.msi.ucsb.edu/documents/annual_review_workshops/artificial_reef/index.html).



Location of the artificial reef and the two reference reefs relative to the San Onofre Nuclear Generating Station (SONGS). Map is from the workshop presentation.

### 3. Update on San Diego Bay Fish Consumption Survey

*Staff Contact: Tom Alo*

The Southern California Coastal Water Research Project (SCCWRP) is conducting a fish consumption survey in San Diego Bay with funding from the San Diego Water Board, City of San Diego, and Port of San Diego. The goals of this survey are to (1) provide essential

information necessary to assess risk to human health, and (2) inform the development of cleanup goals for contaminated sediment, and numeric targets for TMDLs to protect human health.

This survey is important for several reasons. First, little is known of the current fishing and consumption habits of anglers in San Diego Bay. Previous fish consumption surveys have been done in the bay; however, they were done over a decade ago and were not technically robust. Second, the San Diego Water Board needs the survey results to more accurately assess risks to humans catching and consuming fish from the bay instead of using default fish consumption values. Default values may not be representative of fish consumption rates in San Diego Bay. Third, the survey results will provide key information to improve outreach and education to the fishing population and to guide future studies to monitor fish consumption. Lastly, the goals of the study are consistent with our Practical Vision to protect and restore the health of waters in the San Diego Region.

The fish consumption survey is currently underway. SCCWRP will conduct the survey over a one-year period to capture the fishing and consumption habits in the spring, summer, fall, and winter seasons. In early May 2015, multilingual field crews began interviewing anglers using a predetermined set of questions. As of May 18, a summary of some key responses are as follows:

- 256 anglers were encountered;
- 89% of the anglers completed the survey;
- Most anglers are on the piers (61%) followed by shoreline (24%) and boat (15%).

SCCWRP will complete the surveys in April 2016 and submit the study final report to the San Diego Water Board by March 2017.

#### **4. Public Notice for Proposed Settlement Orders**

*Staff Contact: Chiara Clemente*

##### **Background on Executive Officer Settlement Actions**

[Resolution R9-2014-0046](#) clarifies the San Diego Water Board's desire to have certain enforcement actions, including settlement orders imposing penalties up to \$500,000, be delegated to the Executive Officer for consideration. Once a settlement agreement is reached between the Prosecution Team and a Discharger, it is noticed through a Penalty Assessment Notices email list, posted on the Board's [website](#), and subject to a 30-day public review and comment period. Any member of the Board or public can subscribe to the email list by selecting "Penalty Assessment Notices" on the email [subscription page](#). Any comments received and applicable responses are submitted to the advisory body as part of the record prior to the Executive Officer making a final decision.

Current Settlements Pending Executive Officer Action:

[Jacobs Center for Neighborhood Innovation, Northwest Village Creek Construction Project, San Diego County](#)

On May 15, 2015, the San Diego Water Board Prosecution Team and Jacobs Center for Neighborhood Innovation (Parties) released proposed settlement agreement [No. R9-2015-0015](#) to settle alleged violations of the NPDES Construction Storm Water Permit (Order No. 2009-0009-DWQ) including discharges to Chollas Creek on December 4, 2014 from the Northwest

Village Creek Construction Project, located at 602 Euclid Avenue, San Diego. The Parties engaged in confidential settlement negotiations in accordance with the State Water Resources Control Board [Enforcement Policy](#) and its penalty calculation methodology, and ultimately agreed to the final imposition of an administrative civil liability totaling \$46,718 with no Supplemental Environmental Project (SEP). **Written comments were accepted until 5:00 p.m. on June 18, 2015. No comments were received.**

As a settlement the Executive Officer may only approve or reject the settlement agreement; not change SEP provisions or the assessed liability. Pursuant to Directive three of Resolution R9-2014-0046, a member of the Board may request that a delegable action be brought to the attention of the Board at a public Board meeting or by appropriate communication to the Executive Officer.

## **5. Enforcement Actions for April 2015 (*Attachment B-5*)**

*Staff Contact: Chiara Clemente*

During the month of April, the San Diego Water Board issued 7 written enforcement actions as follows; 1 Addendum to a Cleanup and Abatement Order, 1 Investigative Order pursuant to California Water Code section 13267, 2 Notices of Violation, and 3 Staff Enforcement Letters. A summary of each enforcement action taken is provided in the Table below. The State Water Board's [Enforcement Policy](#) contains a brief description of the kinds of enforcement actions the Water Boards can take.

Additional information on violations, enforcement actions, and mandatory minimum penalties is available to the public from the following on-line sources:

State Water Board Office of Enforcement webpage:

[http://www.waterboards.ca.gov/water\\_issues/programs/enforcement/](http://www.waterboards.ca.gov/water_issues/programs/enforcement/)

California Integrated Water Quality System (CIWQS):

[http://www.waterboards.ca.gov/water\\_issues/programs/ciwqs/publicreports.shtml](http://www.waterboards.ca.gov/water_issues/programs/ciwqs/publicreports.shtml)

State Water Board GeoTracker database: <https://geotracker.waterboards.ca.gov/>

## **6. Sanitary Sewer Overflows (SSOs)—March 2015 (*Attachment B-6*)**

*Staff Contact: Vicente Rodriguez*

State agencies, municipalities, counties, districts, and other public entities (collectively referred to as public entities) within the San Diego Region that own or operate sewage collection systems greater than one mile in length, submit sanitary sewer overflow (SSO or spill) reports through an on-line spill reporting system, the *California Integrated Water Quality System (CIWQS)*. These spill reports are required under a [Statewide General SSO Order](#)<sup>3</sup> and a [San Diego Region-wide](#)

<sup>3</sup> State Water Board Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems* as amended by Order No. WQ 2013-0058-EXEC, *Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*.

[SSO Order](#)<sup>4</sup>. The public entities subject to these SSO Orders are also required to report known private lateral sewage spills pursuant to the San Diego Region-wide SSO Order. Federal agencies and other federal entities (collectively referred to as federal entities) submit spill reports as required by an individual NPDES permit or voluntarily depending on the specific federal entity involved<sup>5</sup>.

The information below summarizes the public, federal, and private SSOs in the San Diego Region that were reported through CIWQS during the month of March 2015:

#### **Public Sewage Collection Systems**

- Total number reported = 13 spills, totaling 16,405 gallons
- Total number reaching surface waters (including storm drains) = 5 spills, totaling 11,500 gallons
- SSOs larger than 1,000 gallons = 4 spills, totaling 14,500 gallons

#### **Federal Sewage Collection Systems**

- Total number reported = 0 spills,
- Total number reaching surface waters (including storm drains) = 0 spills
- SSOs larger than 1,000 gallons = 0 spills

#### **Private Laterals**

- Total number reported = 8 spills, totaling 1,252 gallons
- Total number reaching surface waters (including storm drains) = 3 spills, totaling 220 gallons
- SSOs larger than 1,000 gallons = 0 spills,

**Additional Information:** Details on the reported public, federal and private lateral SSOs are provided in two attached tables titled:

1. March 2015 Summary of Public and Federal Sanitary Sewer Overflows in the San Diego Region
2. March 2015 Summary of Private Lateral Sewage Spills in the San Diego Region

<sup>4</sup> San Diego Water Board Order No. R9-2007-0005, *Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*.

<sup>5</sup> Marine Corp Base Camp Pendleton reports sewage spills to CIWQS as required by its individual NPDES permit, Order No. R9-2013-0112, NPDES Permit No. CA0109347, *Waste Discharge Requirements for the Marine Corps Base, Camp Pendleton, Southern Regional Tertiary Treatment Plant and Advanced Water Treatment Plant, Discharge to the Pacific Ocean via the Oceanside Ocean Outfall*. The U.S. Marine Corps Recruit Depot is not required to report sewage spills but does so voluntarily. The U.S. Navy is not required to report sewage spills but does voluntarily fax in its sewage spill reports. This report does not include sewage spills from U.S. Navy sewage collection systems because this information is not available through CIWQS.

Reports on sewage spills are available to the public on a real-time basis on the State Water Board's webpage at:

[https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso\\_main](https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_main).

Additional information about the San Diego Water Board sewage overflow regulatory program is available at [http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/sso/index.shtml](http://www.waterboards.ca.gov/sandiego/water_issues/programs/sso/index.shtml).

## **Part C – Statewide Issues of Importance to the San Diego Region**

### **1. Desalination Amendment to the Ocean Plan Approved by State Board (Attachment C-1)**

*Staff Contact: Cynthia Gorham*

The State Water Resources Control Board (State Board) approved an amendment to the state's Water Quality Control Plan for the Ocean Waters of California (Ocean Plan) on May 6, 2015 to address effects associated with the construction and operation of seawater desalination facilities ([Desalination Amendment](#)). The amendment will take effect upon approval from the Office of Administrative Law. Currently, the Water Boards regulate brine discharges and aquatic life mortality from these types of facilities through the issuance of National Pollutant Discharge Elimination System (NPDES) permits that contain conditions protective of aquatic life.

Attached is a Media Release that announces and explains the State Board action. The Desalination Amendment is intended to set criteria for the use of ocean water as a reliable supplement to traditional water supplies while protecting marine life and water quality. It specifies requirements and considerations to be used by the regional water boards for issuing permits and provides specific implementation, monitoring, and reporting requirements.

#### **Desalination as an Alternative Water Supply**

California's [Water Action Plan](#) concludes that desalination can be one of the tools used to improve water supply reliability and foster self-reliance at the regional and local level. Indeed, several coastal communities are looking to desalination as a way to develop additional, reliable supplies of municipal water, particularly as a buffer in times of drought.

Several relatively small desalination plants already exist in California, and several larger facilities have been proposed along the coast, including one that is nearing completion in Carlsbad. The San Diego Water Board adopted Orders No. R9-2006-0065 and R9-2009-0038 establishing waste discharge requirements for the Carlsbad Desalination Project. The project is scheduled to be on-line delivering water in late 2015. Additional ocean desalination facilities are being planned in Orange and San Diego counties.

#### **Potential Impacts to Marine Life**

While desalination facilities offer potential benefits for the state, the seawater intakes have the potential to harm marine life. For example, screened ocean water intakes can trap fish on the intake screens and allow much smaller marine life, such as larvae and plankton, to be drawn into the facility. Marine life does not survive passage through desalination facilities that use traditional technology. Subsurface intakes can draw water through pipes that are installed

underground or under the seafloor and do not trap marine life, but these intakes may not be feasible for all projects.

The desalination process, which involves forcing seawater through membranes that remove salt and other contaminants, produces residual brine that is much saltier than ocean water. Discharging that brine back into the ocean can result in toxic effects on the ocean floor by causing hypoxia, which is an oxygen deficiency.

### **Addressing the Potential Impacts with Preferred Technologies**

The amendment requires new or expanded seawater desalination facilities to use the best available site, design, technology, and mitigation measures feasible to minimize intake and mortality of all forms of marine life. Based on the best available science, the amendment identifies preferred technologies (see amendment, chapter III.M.2.d.) to reduce mortality of marine life including: 1) withdrawing seawater using subsurface intake, and where subsurface intake is not feasible, using a 1 mm or smaller slot size screen on surface intakes, with flow velocity through the screen not exceeding 0.5 feet per second; and 2) disposing of brine by commingling brine with wastewater that would nevertheless be discharged to the ocean. The wastewater must provide adequate dilution to ensure salinity of the commingled discharge meets the receiving water limitation for salinity.

Alternative intake and disposal methods can be used if they are demonstrated to be as protective of marine life as the preferred technologies. Additionally, mitigation measures are required in order to address damage to marine life that occurs after the best available site, design, and technologies feasible are used.

### **For More Information on Desalination**

A fact sheet is located at [http://www.waterboards.ca.gov/publications\\_forms/publications/factsheets/docs/desal\\_fs.pdf](http://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/desal_fs.pdf).

To learn more about desalination issues, go to:

[http://www.waterboards.ca.gov/water\\_issues/programs/ocean/desalination/](http://www.waterboards.ca.gov/water_issues/programs/ocean/desalination/).

## **2. State Water Board Adopts Water Quality Objective and Implementation Plans for Trash**

*Staff Contact: Cynthia Gorham*

The State Water Board recently adopted a statewide water quality objective and implementation provisions aimed at reducing the amount of trash that finds its way into rivers, lakes and the ocean. Referred to as "Trash Amendments," the State Water Board's action provides statewide consistency within the Water Boards regarding trash control by amending the Water Quality Control Plans for the Ocean ([California Ocean Plan](#)) and the forthcoming Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan) to:

- Establish a narrative water quality objective for trash,
- Establish a prohibition on the discharge of trash,
- Provide implementation requirements for permitted storm water and other dischargers,
- Set a time schedule for compliance, and



- Provide a framework for monitoring and reporting requirements.

The narrative water quality objectives require that trash will be limited to “amounts that shall not adversely affect beneficial uses or cause nuisance.”

The Trash Amendments were adopted in April 2015. Implementation provisions will take effect following approval by the Office of Administrative Law, and narrative water quality objectives will be effective once approved by U.S. EPA (anticipated in fall 2015). Although the ISWEBE Plan is still under development, the Trash Amendments associated with it will be effective upon their approval by OAL.

For more information, visit the State Water Board web site at:  
[http://www.waterboards.ca.gov/water\\_issues/programs/trash\\_control/](http://www.waterboards.ca.gov/water_issues/programs/trash_control/)

### **Why Is Trash Management In Waterways A Priority?**

Trash threatens virtually all of the beneficial uses of surface waters. Trash threatens aquatic and marine life by ingestion, entanglement and habitat degradation. Trash can jeopardize public health and safety and poses a hindrance to recreational, navigational, and commercial activities. Additionally, trash can serve as a transport medium for other pollutants and act as a vector for invasive species.

The Trash Amendments provide a framework for implementing provisions that would be incorporated into NPDES storm water discharge permits, waste discharge requirements, and waivers of waste discharge requirements. The storm water discharge permit categories include municipal systems, Caltrans, industrial sites and construction sites.

### **What Happens Next?**

The timeline within the adopted Trash Amendments provides an 18-month window following OAL approval for the Water Boards to amend applicable permits or issue Investigative Orders (e.g., Water Code section 13267 or 13383) to permittees.

The Trash Amendment provisions will be incorporated into NPDES storm water discharge permits for municipal systems, Caltrans, industrial sites and construction sites. The provisions also will be incorporated into waste discharge requirements and waivers of waste discharge requirements for areas that may generate trash such as, campgrounds, picnic area, parks, and recreational beaches.

The storm water permitting timeline dictates that within 3 months, the permittee must choose whether to select the Track 1 option, which is prescriptive for storm water controls; or the Track 2 option, which is less prescriptive, but requires permittees to develop an implementation plan within 18 months. Final compliance is 10 years from the effective date of each implementing permit (Figure 1).

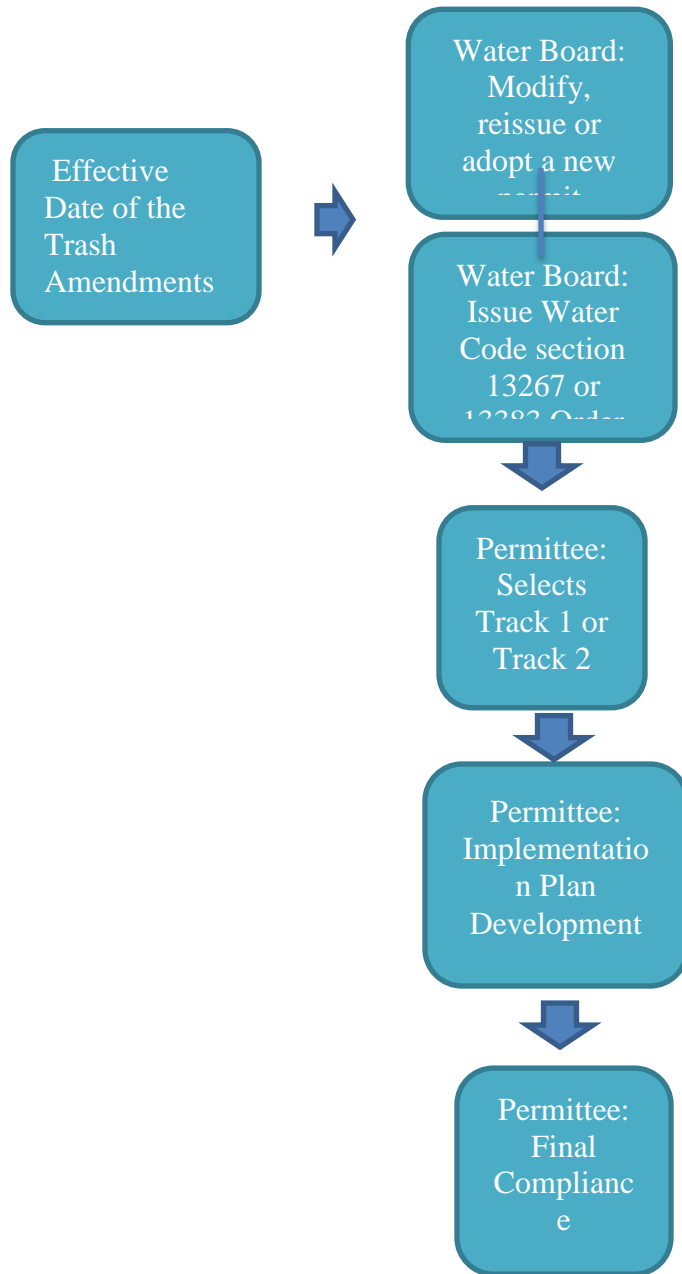
### **Recent San Diego Water Board Efforts Addressing Trash**

The San Diego Water Board has made efforts to decrease the trash and debris found in and near our waterways. The emphasis over the past 20 years has been trash reduction through NPDES permits for storm water runoff. The Water Quality Control Plan for the San Diego Basin (Basin

Plan) includes prohibitions and narrative water quality objectives that prohibit the presence in surface waters of floatable, solid, suspended, and settleable materials in amounts that adversely affect beneficial uses. The following innovative efforts are underway to advance our Practical Vision.

1. Tijuana River Valley: The Tijuana River Valley Recovery Team developed a [Five-Year Action Plan](#) that includes specific projects aimed to alleviate the economic and beneficial use impacts from cross-border pollutants, including trash. The Board adopted Resolution No. R9-2015-0035 in March 2015 that strongly endorses and encourages immediate implementation of this Five-Year Action Plan.
2. San Diego Bay: The Board's Monitoring, Assessment, and Research Unit is working with local partners on a trash survey to characterize and assess this debris within several different habitats in San Diego Bay. This study will help managers understand the current extent and severity of trash issues across the bay. The study also will provide an opportunity to generate results that can be used for management actions to address trash in the watersheds, coastal wetlands/bays, and ultimately in the ocean. The San Diego Water Board is working with California Sea Grant, Wildcoast, Ocean Discovery Institute, San Diego Coastkeeper, the Navy, the Port of San Diego, University of San Diego, City of Chula Vista, City of Imperial Beach, and SCCWRP on this project.

Figure 1. Trash Amendments Implementation Schedule for Municipal Storm Water Permits.



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

Significant NPDES Permits,  
WDRs, and Actions of the  
San Diego Water Board

June 24, 2015

APPENDED TO EXECUTIVE OFFICER'S REPORT

TENTATIVE SCHEDULE  
SIGNIFICANT NPDES PERMITS, WDRS, AND ACTIONS  
OF THE SAN DIEGO WATER BOARD

Action Agenda Item	Action Type	Draft Complete	Written Comments Due	Consent Item
<b>July 20, 2015</b> <i>San Diego Water Board</i>				
Legislative and Water Quality Summit ( <i>Gibson</i> )	Workshop	NA	NA	NA
<b>August 12, 2015</b> <i>San Diego Water Board</i>				
New Waste Discharge Requirements and Monitoring and Reporting Program: Teledyne Ryan Aeronautical, Closure and Post-Closure Maintenance of the Convair Lagoon Sand Cap, San Diego Bay (Tentative Addendum No. 1 to Order No. 98-21, and Revisions to MRP No. 98-21) ( <i>Alo</i> )	New WDR and MRP	90%	TBD	Yes
Addendum No. 1: Order No. R9-2009-0072, County of San Diego Sanitation District, San Pasqual Academy Water Pollution Control Facility, San Diego County ( <i>Osibodu</i> )	WDR Addendum	100%	13-Jul-15	Yes
Information Item on San Diego Bay - Status of Ecosystem Health ( <i>Posthumus</i> )	Information Item	NA	NA	NA
Climate Change Considerations for the San Diego Water Board ( <i>Blank</i> )	Information Item	NA	NA	NA
<b>September 9, 2015</b> <i>Temecula</i>				
Update on Water Law ( <i>Hagan</i> )	Information Item	NA	NA	NA
Water Quality Coordinating Committee Issue Discussion in Preparation for the Oct WQCC Meeting ( <i>Gibson</i> )	Information Item	NA	NA	NA
Revised Master Reclamation Permit for North City Water Reclamation Facility, City of San Diego, San Diego County ( <i>Osibodu</i> )	Revised Master Reclamation Permit	90%	TBD	Yes
NPDES Permit Renewal for Southern California Edison, San Onofre Nuclear Generating Station (SONGS), Units 2 and 3 ( <i>Neill</i> )	NPDES Permit Reissuance	80%	TBD	No

**Agenda Items Requested by Board Members**

<b>Requested Agenda Item</b>	<b>Board Member</b>	<b>Status</b>
<b>August 13, 2014</b>		
Fish Tissue Sampling Update	Strawn	Results available September 2015
<b>September 10, 2014</b>		
Annual or Biannual Water Quality Summit	Kalemkiarian	Scheduled for June 2015 Board Meeting
Information from San Diego MS4 Copermittees regarding outreach to educate and inform the public about compliance efforts	Abarbanel	
Beach water quality update by SCCWRP	Abarbanel	Planned for Fall 2015 after second round of studies is complete
<b>October 8, 2014</b>		
Water regulations and water rights workshop	Warren	Scheduled for Summer 2015
Discussion of legislative priorities	Abarbanel	Scheduled for July 2015 Board Meeting
<b>March 16, 2015</b>		
Follow up to Recycled Water item from February Agenda: what would it take to achieve zero discharge to the ocean by 2025 or 2030	Abarbanel	Scheduled Executive Officer's Report item
Estimate of PYs necessary to achieve the goals of the Practical Vision, the amount of PYs expected during the next fiscal year, and an accounting of what will not be accomplished due to the expected shortfall.	Abarbanel	Executive Officer and Assistant Executive Officer to discuss with Board Chair.
<b>April 15, 2015</b>		
Information Item regarding Padre Dam Advanced Treatment Facility	Strawn	May 13, 2015 Executive Officer's Report

### Enforcement Actions for April 2015

Enforcement Date	Enforcement Action	Facility	Summary of Violations and Enforcement	Applicable Permit/Order Violated
4/15/2015	Addendum 1 to Cleanup and Abatement Order No. R9-2014-0019	Rohr/Goodrich South Campus Site, Chula Vista	Addendum to existing Cleanup and Abatement Order to revise submission dates for groundwater and soil remedial action plans.	N/A
04/08/2015	Notice of Violation and Investigative Order No. R9-2015-0056	City of Carlsbad MS4, Carlsbad	Failure to implement adequate best management practices (BMPs), and failure to implement an escalating enforcement process to prevent noncompliance.	National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit Order Nos. R9-2013-0001 and R9-2007-0001
04/21/2015	Notice of Violation R9-2015-0071	Lantern Crest Phase II, Santee	Failure to implement adequate BMPs and conduct adequate weekly inspections.	NPDES General Construction Storm Water Permit Order No. 2009-0009-DWQ.
04/09/2015	Staff Enforcement Letter	Concrete Collaborative Linda Vista, San Marcos	Failure to implement adequate BMPs.	NPDES General Industrial Storm Water Permit Order No. 97-03-DWQ
04/17/2015	Staff Enforcement Letter	BNSF Railway, San Diego	Failure to implement adequate BMPs and failure to update Storm Water Pollution Prevention Plan (SWPPP).	NPDES General Industrial Storm Water Permit Order No. 97-03-DWQ

<b>Enforcement Date</b>	<b>Enforcement Action</b>	<b>Facility</b>	<b>Summary of Violations and Enforcement</b>	<b>Applicable Permit/Order Violated</b>
<b>04/28/2015</b>	Staff Enforcement Letter	2412 Escondido Blvd. LLC, Escondido	Perimeter control deficiencies and failure to implement adequate BMPs.	NPDES General Construction Storm Water Permit Order No. 2009-0009-DWQ.



Responsible Agency	Collection System	Total Volume*	Total Recovered*	Total Reaching Surface Waters*	Percent Recovered (%)	Percent Reaching Surface Waters (%)	Miles of Pressure Sewer	Miles of Gravity Sewer	Population in Service Area
		(Gallons)	(Gallons)	(Gallons)					
Escondido City	HARRF Disch To San Elijo OO CS	300	200	300	67%	100%	10.7	370.0	142,000
Imperial Beach City	City of Imperial Beach CS	300	200	100	67%	33%	4.4	39.5	26,324
		150	150	0	100%	0%			
La Mesa City	City of La Mesa CS	14	14	0	100%	0%	0.0	155.0	58,244
		150	150	0	100%	0%			
Rancho California Water District	Santa Rosa WRF-Recycled Wtr CS	5,100	1,000	4,100	20%	80%	4.0	80.0	14,487
San Clemente City	City of San Clemente CS	5,200	0	5,200	0%	100%	3.7	174.6	67,373
		150	150	0	100%	0%			
San Diego City	San Diego City CS (Wastewater Collection System)	370	70	0	19%	0%	145.0	3,002.0	2,186,810
		41	41	0	100%	0%			
		1,200	1,200	0	100%	0%			
San Diego County Dept of Public	County of San Diego CS	430	430	0	100%	0%	10.0	407.0	151,500
Trabuco Canyon WD	Trabuco Canyon Water District CS	3,000	1,200	1,800	40%	60%	9.0	46.5	12,700
Totals for Public Spills		16,405	4,805	11,500					
Totals for Federal Spills		0	0	0					

\*Total Recovered plus Total Reaching Surface Waters does not always equal Total Volume for one or more of the following reasons: 1) a portion of the spill may have been to land and not recovered, 2) a portion of the spill may have been to a drainage channel and recovered (all of the volume discharged to a drainage channel whether recovered or not is considered reaching surface waters), and/or 3) a portion of the spill may have been discharged directly to surface waters and recovered (all of the volume discharged directly to surface waters whether recovered or not is considered reaching surface waters).

Reporting Agency	Collection System	Total Volume*	Total Recovered*	Total Reaching Surface Waters*	Percent Recovered	Percent Reaching Surface Waters	Population in Service Area	Lateral Connections
		(Gallons)	(%)	(%)				
Chula Vista City	City of Chula Vista CS	30	30	0	100%	0%	256,780	49,532
Escondido City	HARRF Disch To San Elijo OO CS	254	50	204	20%	80%	142,000	53,848
La Mesa City	City of La Mesa CS	50	0	0	0%	0%	58,244	13,000
Leucadia Wastewater District	Leucadia Wastewater District CS	16	1	15	6%	94%	60,000	20,365
Padre Dam Municipal Water District	Padre Dam CS	702	0	0	0%	0%		
		1	1	1	100%	100%	67,658	15,024
San Diego City	San Diego City CS (Wastewater Collection System)	165	165	0	100%	0%	2,186,810	267,237
		34	34	0	100%	0%		
	Totals	1,252	281	220				

\*Total Recovered plus Total Reaching Surface Waters does not always equal Total Volume for one or more of the following reasons: 1) a portion of the spill may have been to land and not recovered, 2) a portion of the spill may have been to a drainage channel and recovered (all of the volume discharged to a drainage channel whether recovered or not is considered reaching surface waters), and/or 3) a portion of the spill may have been discharged directly to surface waters and recovered (all of the volume discharged directly to surface waters whether recovered or not is considered reaching surface waters).



# Media Release

## State Water Board Addresses Environmental Concerns In New Desalination Facility Standards

For Immediate Release  
May 6, 2015

Contact: George Kostyrko  
George.Kostyrko@waterboards.ca.gov

**SACRAMENTO** -- The State Water Resources Control Board today approved an amendment to the state's Water Quality Control Plan for the Ocean Waters of California (Ocean Plan) to address effects associated with the construction and operation of seawater desalination facilities.

"Desalination is one of several tools communities can use in appropriate circumstances to gain greater water security," said State Water Board Chair Felicia Marcus. "This amendment will provide a consistent framework for communities and industry as they consider desalination, while protecting the coastal marine environment."

The amendment sets criteria for the use of ocean water as a supplement to traditional water supplies while protecting marine life and water quality. The desalination amendment will provide direction for regional water boards when permitting desalination facilities by providing a statewide, uniform and consistent process. The amendment also provides specific implementation, monitoring, and reporting requirements.

Several relatively small desalination plants already exist in California, and several larger ones have been proposed along the coast, including one in Carlsbad that is nearing completion.

While desalination plants offer potential benefits for the state, the seawater intakes have the potential to harm marine life. For example, screened ocean water intakes can trap fish on the intake screens and allow much smaller marine life like larvae and plankton to be drawn into the plant. Marine life does not survive passage through desalination plants that use traditional technology. Subsurface intakes can draw water through pipes that are installed underground or under the seafloor and do not trap marine life, but these intakes may not be feasible for all projects.

The desalination process, which involves forcing seawater through membranes that remove salt and other contaminants, produces residual brine that is much saltier than ocean water. Discharging that brine back into the ocean can result in toxic effects to bottom-dwelling marine life as the dense brine settles on the ocean floor. It can also cause hypoxia, which is oxygen





## Media Release

deficiency in the ocean floor environment. These impacts can be prevented by diluting brine with municipal wastewater prior to discharging into the ocean or disposing brine through diffusers that rapidly mix and dilute brine.

To address these issues for coastal desalination facilities in California, this amendment was developed through a multi-year process that included commissioning experts in the field to study the best methods to minimize and mitigate the impacts of seawater intakes and effects of brine discharges. The amendment underwent an external scientific peer review to evaluate the validity of the scientific conclusions in the policy.

A number of public workshops were held to gather stakeholder feedback. In addition to the stakeholder outreach, the State Water Board held a public hearing and two public comment periods during which stakeholders were able to provide additional feedback on the amendment. Based on this feedback, the amendment was designed to provide flexibility for site-specific considerations and allow for future innovations that provide protection equivalent to current technologies.

The amendment requires new or expanded seawater desalination plants to use the best available site, design, technology, and mitigation measures feasible to minimize intake and mortality of all forms of marine life. Based on the best available science, the amendments identify preferred technologies; however, alternative intake and disposal methods can be used if demonstrated to be as protective of marine life as the preferred technologies. Additionally, mitigation measures are required in order to address damage to marine life that occurs after the best available site, design, and technology feasible are used.

A fact sheet on the draft amendment is located [here](#).

The draft amendment language is located [here](#).

To learn more about the draft amendment and desalination issues, visit the State Water Board's website [here](#).

To learn more about the state's drought response, visit [Drought.CA.Gov](#).

Every Californian should take steps to conserve water. Find out how at [SaveOurWater.com](#).

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