



KEY REGULATORY ISSUE SUMMARY

Updated October 11, 2016

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Action items for member agencies are in **bold**

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
NUTRIENTS IN SAN FRANCISCO BAY – SCIENCE			
<ul style="list-style-type: none"> SF Bay has historically been resilient to nutrient impacts because of tidal mixing, clam grazing, and high turbidity. However, turbidity is decreasing due to capture of sediment by upstream dams, and clam populations are on the decline. There is concern that SF Bay may lose its resiliency in the future. Because of the complexity of the science behind nutrient impacts in the SF Bay, stakeholders in the region are participating in a steering committee to prioritize scientific studies and ensure that all science to be used for policy decisions is conducted under one umbrella. The watershed permit specifies \$880K/yr of funding from POTWs to the RMP, which BACWA has provided for FY2017. 	<ul style="list-style-type: none"> For FY17, individual agencies have provided additional funding for studies targeting their specific subembayment. Agencies are now conducting effluent monitoring under the watershed permit. Under contract with the Regional Water Board, SCCWRP produced a report entitled “<i>Scientific Basis to Assess the Effects of Nutrients on San Francisco Bay Beneficial Uses</i>” (Scientific Basis). BACWA engaged a consultant to provide a third party review of the report and its Appendices. 	<ul style="list-style-type: none"> Continue to participate in steering committee and planning subcommittee, and provide funding for scientific studies. Participate in the Nutrient Technical Workgroup, which is a venue to provide technical input to the process, and is open to the public, as well as the Stakeholder Advisory Group. Engage with Regional Water Board as needed to “test drive” assumptions in the Scientific Basis documents. Consider increased funding for the Science Plan. 	<p>BACWA “Other Useful Nutrient Documents” Page: http://bacwa.org/nutrients/other-useful-nutrient-documents/ (includes Scientific Basis documents and third-party review).</p> <p>SFEI Nutrient Science Plan Documents: http://sfbaynutrients.sfei.org/books/reports-and-work-products</p>

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SF BAY NUTRIENT WATERSHED PERMIT			
<ul style="list-style-type: none"> • The nutrient watershed permit was adopted in April 2014, with an effective date of July 1, 2014. • Through the nutrient surcharge levied on permittees, BACWA funds compliance with the following provisions of the nutrient watershed permit on behalf of its members: <ul style="list-style-type: none"> ○ Group Annual Reporting ○ Optimization and facilities upgrade studies ○ Support of scientific studies through the RMP at \$880K per year through the five-year permit term. 	<ul style="list-style-type: none"> • Consultant team was selected by BACWA Contract Management Group to lead the Optimization and Upgrade studies and annual reporting. The Scoping and Evaluation Plans for the optimization/upgrade studies were submitted to the Regional Water Board in December 2014 and finalized in February 2015. Agencies participating in these studies completed a questionnaire about their facilities' infrastructure, operations, and site constraints. The Consultant team conducted site visits in April through September 2015. • BACWA hosted a workshop on June 28 to discuss Facility Reports with member agencies • BACWA and SFEI submitted a science implementation plan and schedule update on February 1, 2016. • All agencies participated in the first Group Annual Report, submitted Nov 12, 2015, and the second Group Annual Report, submitted October 1, 2016. Agencies are now reporting to BACWA via a data sheet developed by the consultant 	<ul style="list-style-type: none"> • Agencies continue to report nutrient monitoring to the Water Boards through CIWQS and to BACWA via the data sheet. • The consultant has been distributing Facility Reports on nutrient removal opportunities to individual agencies in four waves. The Reports must be signed off by agency points of contact for inclusion in the Optimization/Upgrade studies. • BACWA and the Regional Water Board are beginning discussions about the Nutrient Watershed Permit reissuance in 2019. • Since no increase in net nutrient loading has been discussed as a possible permit requirement upon reissuance, the consultant is providing an analysis on what this could mean in term of assumptions used to calculate load removals and associated costs. • The consultant is collecting information from agencies on how recycled water may contribute to nutrient load removal, as well as any other plans already in agencies' capital budgets that would reduce nutrient loading. 	<p>Nutrient Watershed Permit: http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2014/R2-2014-0014.pdf</p> <p>Optimization/Upgrade Scoping and Evaluation Plan: http://bacwa.org/wp-content/uploads/2015/05/BACWA_ScopingEvalPlan_Final.pdf</p> <p>Draft Schedule for Facility Reports: http://bacwa.org/wp-content/uploads/2016/04/Facility-Report-Schedule.pdf</p> <p>BACWA Nutrient Annual Reports: http://bacwa.org/document-category/nutrient-annual-reports/</p>

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SELENIUM – EPA CRITERIA AND SF BAY TMDLs			
<ul style="list-style-type: none"> On July 15, the EPA published its proposed selenium criteria in the Federal Register. The rule would reduce the selenium water quality criterion for the waters of San Francisco Bay and Delta from 5 ppb to 0.2 ppb. It also proposes fish and clam tissue criteria. Selenium discharges from North Bay POTWs are governed by the 2015 North Bay Selenium TMDL, which was approved by the EPA in August 2016, but POTWs in the South Bay could be impacted by the new criteria. 	<ul style="list-style-type: none"> Most San Francisco Bay Area POTWs would not be able to meet EPA’s proposed water column criterion without dilution credit. The Lower South Bay Selenium Fact Sheet, developed by the City of Palo Alto, shows how measured selenium concentrations in the water column, POTW effluent, as well as fish and clam tissue, compare to EPA’s proposed criteria. The Bay Delta Conservation Plan’s (BDCP) EIR acknowledged that the Delta tunnels could increase selenium concentrations in the San Francisco Bay. It then put the burden on the North Bay TMDL process to mitigate these increased concentrations. BACWA provided comments stating that this was not an acceptable strategy. 	<ul style="list-style-type: none"> EPA has extended the deadline for comments from September 13 until October 28, 2016. BACWA and the Lower South Bay Dischargers both plan to submit comments. Track and comment on initiatives by outside entities such as the BDCP whose activities could impact selenium in the San Francisco Bay. 	<p>Federal Register notice: https://www.regulations.gov/docket?D=EPA-HQ-OW-2015-0392</p> <p>Lower South Bay Selenium Fact Sheet: http://bacwa.org/wp-content/uploads/2016/09/FINAL-LSB-Selenium-Factsheet_AUG2016-1.pdf</p> <p>Regional Water Board North Bay Selenium TMDL: http://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2015/November/6_final_to.pdf</p> <p>BDCP Documents: http://baydeltaconservationplan.com/2015PublicReview.aspx</p>

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MICROPLASTICS			
<ul style="list-style-type: none"> • Microplastics are gaining attention worldwide as a contaminant of emerging concern. SFEI presented a poster at the September 2015 State of the Estuary Conference showing results of a preliminary survey of microplastics in Bay Area wastewater effluent and surface waters. • Several media outlets picked up the story, raising the level of public attention to the issue. • Recent State and Federal legislation phase out microbeads in personal care products, but do not address other sources of microplastics, such as pellets and fibers. 	<ul style="list-style-type: none"> • Bay Area POTWs with filtration have similar levels of microplastics in their effluent as facilities without filtration, according to SFEI's study. • Bay Area POTW effluent and surface waters had much higher concentration of microplastics than in other watersheds in the country. However, it is not clear that the same sampling and analytical methods were used as in studies in other regions, so results may not be comparable. • Representatives from BACWA member agencies formed a workgroup through the BACWA Laboratory Committee to develop an analytical protocol to measure microplastics. They determined that via the method used in the SFEI study, not all the particles counted in effluent were plastic. 	<ul style="list-style-type: none"> • Coordinate with SFEI to develop a list of important questions that need to be answered to better understand the microplastics problem. • Comment on RMP's draft Microplastic Science and Strategy document. 	<p>2015 SFEI Poster: http://www.sfei.org/documents/microplastic-contamination-san-francisco-bay</p> <p>RMP Microplastics Fact Sheet: http://www.sfei.org/sites/default/files/biblio_files/RMP%20Sutton%20FactSht%20Microplastics%20081116web.pdf</p>
MERCURY/PCB WATERSHED PERMIT			
<ul style="list-style-type: none"> • Mercury/PCB Watershed Permit adopted on 12/12/12 with 1/1/13 effective date. • Aggregate PCB and mercury loads have been well below waste load allocations. • Method 1668C for PCB congeners has not been promulgated by EPA. Data collected during the first permit term varied widely depending on which laboratory performed the analyses. 	<ul style="list-style-type: none"> • The permit requires continued risk reduction program funding and annual reporting of effort (BACWA submits letter). In 2015, BACWA issued an RFP for community-based organizations to conduct risk reduction work. Two \$25,000 grants were awarded to APA Family Support Services and the California Indian Environmental Alliance (CIEA). • BACWA Laboratory Committee developed an updated PCB Protocol to reduce variability between laboratories running Method 1668C, effective January 1, 2014. Data have been more consistent since the distribution of this document. 	<ul style="list-style-type: none"> • Review quarterly progress reports from CIEA and APA. Hold a joint progress meeting with the two entities and the RWB on October 25, 2016. • Begin permit reissuance discussions with members and Regional Water Board in early 2017. 	<p>2013 Mercury/PCB Watershed Permit: http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2012/R2-2012-0096.pdf</p> <p>Updated PCBs Protocol: https://bacwa.box.com/s/bs7iil34xradh5xdyc7</p>

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STATE WATER BOARD TOXICITY PLAN			
<ul style="list-style-type: none"> • Draft State Toxicity Policy issued in June 2012 would establish/require: <ul style="list-style-type: none"> ○ numeric limits for chronic toxicity; ○ use of Test of Significant Toxicity (TST) as statistical method to determine toxicity replacing EC25/IC25 (with concerns it will lead to more false positive results); ○ Regional Water Board discretion on inclusion of acute toxicity in permits and whether to allow for dilution. • State Water Board released a Fact Sheet in 2013 outlining proposed revisions, and invited stakeholders to weigh in on the proposed updates. 	<ul style="list-style-type: none"> • Date for next draft of policy is expected in Fall 2016. • BACWA submitted a comment letter to the State Water Board outlining our response to the 2013 Fact Sheet and proposing language to reduce monitoring requirements. • BACWA representatives have met with Regional Water Board Staff to discuss the Region 2 implementation of acute toxicity testing and instream waste concentrations. • On September 4, 2014, EPA issued a formal objection to draft permits that Region 4 was developing for two of Los Angeles County Sanitation Districts' (LACSD) facilities (Whittier Narrows and Pomona). They required immediate introduction of toxicity limits, rather than triggers, and made recommendations on how these limits would be implemented. They did not allow a 5-concentration test to be used to validate toxicity test results. BACWA supported a CASA-led petition to the State Water Board requesting a stay to the two LACSD permits, which has since been put in abeyance. • On January 15, 2015, EPA issued a formal objection letter to the permit under development for Las Gallinas Valley Sanitary district requiring that they be given numeric chronic toxicity limits. Las Gallinas' new permit contains both toxicity limits and triggers. 	<ul style="list-style-type: none"> • BACWA will comment on the next draft of the Toxicity Plan once it is released. • Key issues to for BACWA to discuss with the State Water Board continue to be the enforceable limits, monitoring frequency, reasonable potential analysis methodology, sensitive species screening requirements, and instream waste concentration. • Work with other POTWs in the State through CASA to support research into the statistical validity of chronic toxicity tests. 	<p>State Board Page: http://www.swrcb.ca.gov/water_issues/programs/strate_implementation_policy_tx_ass_cntrl.shtml</p> <p>Fact Sheet: https://bacwa.box.com/s/m7dcmzeugfwylwsusl74</p> <p>BACWA Comment Letter: https://bacwa.box.com/s/bws7iil34xradh5xdyc7</p> <p>2015 Draft Toxicity Plan: http://bacwa.org/wp-content/uploads/2015/09/10.-Tox-plan_for_EPA_review1.pdf</p> <p>EPA Formal Objection to Region 4 permits: https://bacwa.box.com/s/9iq0fx6b5htyggq7d8dzd</p> <p>CASA Petition to State Water Board on Region 4 permits: https://bacwa.box.com/s/plgv0oao4rnkr4sufjmssqzi7jxhpbhb</p> <p>EPA Formal Objection to Las Gallinas Permit https://bacwa.box.com/s/pdmtzgd8vfad5ceez19x36qu2uqph902</p>

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COMPOUNDS OF EMERGING CONCERN			
<ul style="list-style-type: none"> Pharmaceuticals and other trace compounds of emerging concern (CECs) are ubiquitous in wastewater at low concentrations and have unknown effects on aquatic organisms. The State Water Board is developing a Pilot CECs Monitoring Plan for the State. Region 2's CEC strategy focuses on monitoring/tracking concentrations of constituents with high occurrence and high potential toxicity and source control. Much of what the State Water Board is considering is already being implemented in Region 2 through the RMP. 	<ul style="list-style-type: none"> Pulse of the Bay 2013 focused on CECs. The San Francisco Bay CEC strategy will expand to include some degree of POTW effluent monitoring. BACWA submitted a letter to the State Water Board urging them to work through the RMP's existing CECs program when developing a Statewide CECs Monitoring Plan. BACWA has provided RMP with a list of volunteer POTWs to have their effluent monitored for CECs by the RMP. This monitoring would be for informational and not for compliance purposes. BACWA is working with SFEI and volunteer member agencies to support contracting for CECs analysis 	<ul style="list-style-type: none"> Continue to participate in the RMP CEC Workgroup and solicit agency volunteers for future studies. Work with the Regional Water Board to develop CECs Management Actions Fact Sheets. 	<p>BACWA letter to State Water Board on draft CECs Pilot Monitoring Plan: http://bacwa.org/wp-content/uploads/2016/03/BACWA_BASMAA-comments-CECs-Monitoring-Plan-030816-2.pdf</p> <p>Regional Monitoring Program CEC Workgroup: http://www.sfei.org/rmp/ecwg#tab-1-4</p> <p>Pulse of the Bay 2013: http://www.sfei.org/sites/default/files/biblio_files/Pulse_2013_CECs.pdf</p>
RECYCLED WATER GENERAL ORDER			
<ul style="list-style-type: none"> In response to the Governor's proclamation of a Drought State of Emergency, the State Water Board adopted a General Order on June 3, 2014 to streamline permitting for recycled water. The State Water Board reissued the General Order on June 7, 2016, making enrollment mandatory for Regional Permittees. The State General Order, as adopted, is more onerous than Region 2's General Order for water reuse, 96-011. 	<ul style="list-style-type: none"> Enrollment is mandatory for 96-011 permittees within three years of adoption of the State General Order, which is June 7, 2019. The San Francisco Regional Water Board has not yet developed a strategy for how to manage the transition. The State Water Board plans to update the State General Order within the next three years subsequent to its revision of the State Recycled Water Policy. One of the anticipated changes to both documents is a reduction in priority pollutant monitoring. 	<ul style="list-style-type: none"> Work with our agencies to see how coverage under the new State General Order impacts their new recycled water projects. Develop a proposal for streamlined transition of 96-011 enrollees to State General Order to deliver to the Regional Water Board. Provide comments on 2015 State Recycled Water Policy update through WateReuse. 	<p>2016 State Recycled Water General Order: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2016/wqo2016_0068_dwdw.pdf</p>

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ELAP UPDATE			
<ul style="list-style-type: none"> In August 2015, the State Water Board contracted with Southern California Coastal Water Research Project to establish and facilitate an Expert Review Panel to conduct an examination of ELAP, California's laboratory certification body. The Expert Review Panel concluded that ELAP's current regulations are inadequate. The Panel recommended that ELAP adopt the laboratory standard established by The NELAC Institute (TNI) as the most viable option for California. 	<ul style="list-style-type: none"> Adopting TNI standards will pose a formidable challenge since there are more than 1000 individual requirements. Initial cost may include the need to hire staff to handle TNI-related paperwork; hiring consultants to setup the TNI documentation framework; purchasing Laboratory Information Management System (LIMS) software; and purchasing documents and training material from TNI, etc. Small municipal laboratories may close if they are unable to meet the new standards. The State Water Board has made the TNI documents available for review although they are copyrighted At their October 6 Workshop, the State Water Board announced that they will proceed with the TNI standard, but will remove some requirements. The proposed standards are expected to be posted for public comment in Winter 2017, with adoption approximately one year later. 	<ul style="list-style-type: none"> Provide a detailed comment letter by October 20 via BACWA's Laboratory Committee Comment on proposed standards in 2017. 	<p>Revised notice of opportunity to comment: http://www.swrcb.ca.gov/drinking_water/certlic/labs/documents/100616_rev_notice_elap%20wrkshp_comment.pdf</p> <p>TNI Standards available for review: http://nelac-institute.org/cms/posts/1474858877.php</p>

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PHASEOUT OF BIOSOLIDS AS ALTERNATIVE DAILY COVER			
<ul style="list-style-type: none"> • Many drivers are indicating the phaseout of biosolids as alternative daily cover (ADC): <ul style="list-style-type: none"> ○ CARB has called for a virtual elimination of all organics in landfills by 2025. ○ AB 341 sets a goal to recycle 75% of solid waste by 2020 and CalRecycle’s plan to achieve that goal calls for a marked, but as yet unquantified, reduction of organics to landfills. ○ In 2020 CalRecycle will count green waste as disposal, rather than diversion, when used as ADC. 	<ul style="list-style-type: none"> • SB 1383, adopted in September 2016, mandates reduction of methane, and 75% diversion of organics from landfills by 2025. • BACWA is conducting a survey to learn how many member agencies rely on ADC for biosolids reuse, and which agencies have plans for its likely phaseout. 	<ul style="list-style-type: none"> • Complete the BACWA Biosolids survey. BACWA will report results to members • Consider ways to build a market for compost and other soil amendment products made from biosolids, using lessons learned in the Pacific Northwest. 	<p>BACWA Biosolids Survey: https://www.surveymonkey.com/r/LXKF3RL</p>

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CLIMATE CHANGE MITIGATION			
<ul style="list-style-type: none"> • The AB 32 scoping plan lays out the approach for the State to meet its greenhouse gas emissions reduction targets through 2020, and goals through 2030 and 2050. • The Scoping Plan Update’s Water sector goals include: <ul style="list-style-type: none"> ○ Developing incentives for resource-recovery wastewater treatment projects by 2015, ○ Modifying state and regional water board policies and permits to encourage conservation, water recycling, stormwater reuse, and wastewater-to-energy goals by 2016, and ○ Implementing green infrastructure permits to treat and capture urban run-off by 2016. • BAAQMD is developing a Clean Air Plan that may require GHG emissions reduction on track with CARB’s 2015 target. 	<ul style="list-style-type: none"> • SB 1383, adopted in September 2016, mandates reduction of methane and diversion of organics from landfills. It also requires State agencies to consider/adopt policies and incentives to increase production and use of renewable gas (i.e., biogas) • CARB aims to develop nitrous oxide emissions estimates and/or emission factors for landfills, golf courses, and POTWs. Their preliminary research plan identified oxidation ditches as a typical treatment process. To correct this, CASA has distributed a survey on treatment processes used throughout California. • Draft Clean Air Plan control measures have been posted on BAAQMD’s Open Air Forum. These measures are largely exploratory at this stage, but will help guide prioritization of future actions, including those related to greenhouse gas emissions • Many POTWs are exploring energy generation, but toxic air emissions regulations make waste to energy programs more expensive. Direct injection of biogas to PG&E’s pipelines or use as a transportation fuel for a fleet vehicles may be more efficient. 	<ul style="list-style-type: none"> • Respond to CASA survey on POTW treatment • BACWA will help deliver information on nutrient removal in the Bay Area to CASA to use in its discussions with CARB on nitrous oxide sources. • Work with CASA to look for opportunities for POTWs to help the State meet GHG reduction goals. • Look for opportunities to inform BAAQMD on the opportunities and challenges for climate change mitigation by Bay Area POTWs. • Work with PG&E and BAAQMD to explore options for POTWs to inject biogas into PG&E pipelines. 	<p>CWCCG Presentation to BACWA May 2016 on AB 32 Scoping Plan: http://bacwa.org/wp-content/uploads/2016/05/CWCCG-Update-to-BACWA-5-20-16.pdf</p> <p>BAAQMD Clean Air Plan Measures: http://www.baaqmd.gov/in-your-community/open-air#peak_democracy</p> <p>CASA Survey on POTW treatment: https://www.surveymonkey.com/r/CASA_Survey</p>

“Parking lot” issues with no updates can be found in previous [BACWA issues summaries](#).

ACRONYMS

ADC	Alternate Daily Cover
BAAQMD	Bay Area Air Quality Management District
BDCP	Bay Delta Conservation Plan
CARB	California Air Resources Board
CASA	California Association of Sanitation Agencies
CECs	Compounds of Emerging Concern
CIWQS	California Integrated Water Quality System
ELAP	Environmental Laboratory Accreditation Program
EPA	United States Environmental Protection Agency
GHG	Greenhouse Gas
NELAC	National Environmental Laboratory Accreditation Conference
PCB	Polychlorinated Biphenyl
POTW	Publically Owned Treatment Works
RFP	Request for Proposals
RWB	San Francisco Bay Regional Water Quality Control Board
RMP	Regional Monitoring Program
SCCWRP	Southern California Coastal Water Research Project
SF Bay	San Francisco Bay
SFEI	San Francisco Estuary Institute
TMDL	Total Maximum Daily Load
TNI	The NELAC Institute
TST	Test of Significant Toxicity
VOC	Volatile Organic Compound