



KEY REGULATORY ISSUE SUMMARY

Updated May 6, 2020

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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"> San Francisco Bay receives some of the highest nitrogen loads among estuaries worldwide, yet has not historically experienced the water quality problems typical of other nutrient-enriched estuaries. It is not known whether this level of nitrogen loading, which will continue to increase in proportion to human population increase, is sustainable over the long term. 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. 	<ul style="list-style-type: none"> For FY20, BACWA contributed the \$2.2M required by the Watershed Permit, as well as “frontloading” additional funds that would be subtracted from future permit years. Moving the funding up will accelerate the pace of the science that will be used for management decisions for the third Watershed Permit. Agencies are conducting effluent monitoring for nutrients under the watershed permit. Current scientific efforts are focused on expanding monitoring data, modeling, and work exploring the linkage between nutrients, dissolved oxygen, and harmful algal species. Future studies will be focused on the science needed to inform the development of nutrient load caps for the third Nutrient Watershed Permit. 	<ul style="list-style-type: none"> BACWA and the Regional Water Board are discussing the possibility of a one-year extension of the current permit term. 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. May 2020 Nutrient Technical Workgroup meeting will focus on review of science plan for 2021. 	<p>BACWA “Other Useful Nutrient Documents” Page: http://bacwa.org/nutrients/other-useful-nutrient-documents/</p> <p>SFEI Nutrient Science Plan Documents: http://sfbaynutrients.sfei.org/books/reports-and-work-products</p>

SF BAY NUTRIENT WATERSHED PERMIT

<ul style="list-style-type: none"> • The first nutrient watershed permit was adopted in April 2014. The second Nutrient Watershed Permits was adopted May 8, 2019 with an effective date of July 1, 2019. • The second Nutrient Watershed permit includes: <ul style="list-style-type: none"> ○ Continued individual treatment plant nutrient monitoring and reporting; ○ Continued group annual reporting; ○ Significantly increased funding for science; ○ Regional assessment of the feasibility and cost for reducing nutrients through nature-based systems and recycled water; ○ Establishing current performance for TIN, and “load targets” for nutrient loads based on 2018 load data plus a 15% buffer for growth and variability ○ Recognition of “early actors” who are planning projects that will substantially decrease TIN loads. • Through the nutrient surcharge levied on permittees, BACWA funds compliance with the following provisions on behalf of its members: <ul style="list-style-type: none"> ○ Group Annual Reporting ○ Optimization and Facilities Upgrade Studies (first permit term) ○ Regional Studies on Nature Based Systems and Recycled Water (second permit term) ○ Support of scientific studies through the RMP at \$2.2M per year through the five-year permit term. 	<ul style="list-style-type: none"> • BACWA submitted a final report on Nutrient Treatment by Optimization and Upgrade on June 26, 2018. An agency-customizable presentation, and a brochure to educate governing boards and the public were made available to our members. • BACWA and SFEI most recently submitted a science implementation plan and schedule update on February 1, 2020. • All agencies covered by the Nutrient Watershed Permit participated in the first four group Annual Reports, submitted in 2015, 2016, 2017, and 2018. Agencies are now reporting to BACWA via a data sheet developed by the consultant. An updated data sheet was distributed to agencies that accounts for changes in the monitoring and reporting program in the second Watershed Permit, including the following: <ul style="list-style-type: none"> ○ The second watershed permit reporting period will now be based on water year, through September 30, instead of permit year, through June 30. The first Group Annual Report under the new permit was submitted Feb 1, 2020. ○ Agencies with flows greater than 10mgd are required to conduct influent monitoring. ○ Organic nitrogen and soluble reactive phosphorus are no longer required to be monitored in effluent. • Agencies with plans to substantially reduce nutrients are recognized in 2nd Watershed Permit Fact Sheet. 	<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, which was updated with the monitoring and reporting requirements in the second Nutrient Watershed Permit. • Agencies with plans to implement projects that will substantially reduce nutrient loads should keep the Regional Water Board and BACWA apprised, to get credit for “early actions”. • Work with team led by HDR to provide information to be used for Nutrient Removal by Recycled Water Evaluation and the Nature Based Systems study. HDR is expected to issue a request for information to permittees in May 2020. • Begin discussions about development of a potential Nutrient Trading framework. 	<p>Second Nutrient Watershed Permit: https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2019/May/6_ssr.pdf</p> <p>Optimization/Upgrade Study Final Report: https://bacwa.org/wp-content/uploads/2018/06/BACWA_Final_Nutrient_Reduction_Report.pdf</p> <p>Optimization/Upgrade Report Presentation: https://bacwa.org/wp-content/uploads/2019/03/bacwa_brochure_presentation_20190312.pptx</p> <p>Optimization/Upgrade Report Brochure: https://bacwa.org/wp-content/uploads/2019/03/BACWA-2019-Nutrient-Brochure_Final_20190301.pdf</p> <p>BACWA Nutrient Annual Reports: http://bacwa.org/document-category/nutrient-annual-reports/</p>
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CHLORINE RESIDUAL COMPLIANCE			
<ul style="list-style-type: none"> The Basin Plan chlorine residual effluent limit is 0.0 mg/L. Chlorine residual is the most frequent parameter for violations for Region 2 POTWs, however, because there are 24 hourly reporting events each day, the “opportunities” for violations are enormous. However, the actual violation rates are infinitesimal (~0.001%). Agencies are overdosing their effluent with the dechlorination agent, sodium bisulfite, to prevent chlorine violations, a practice which costs more than \$1 million regionally each year. 	<ul style="list-style-type: none"> The Regional Water Board is working with BACWA to develop a Basin Plan amendment. BACWA has retained consultant support for this effort. The Basin Plan amendment will include: <ul style="list-style-type: none"> Adopting a 0.013 mg/L Water Quality Objective, which will be applied as a WQBEL in permits, calculated incorporating dilution. The WQBEL will be applied as a one hour average. Possibly establishing a Minimum Level (ML), or Reporting Limit of 0.05mg/L for online continuous monitoring system. The proposed 0.05 mg/L ML is unrealistically low; Regional Water Board is open to hearing from member agencies about the technical basis for a higher ML. A CEQA scoping meeting is scheduled for May 22, 2020 with an anticipated draft BPA in July and adoption in November of this year. 	<ul style="list-style-type: none"> Work with the consultant and Regional Water Board to proceed with tasks in the Scope of Work to support the Basin Plan Amendment. Respond to information requests from BACWA and the Regional Water Board to support this initiative. Shallow water dischargers (no dilution credits) may be esp. interested in advancing information to the Board in support of increasing the proposed 0.05 mg/L ML (although these agencies will still benefit from the proposed one-hour averaging period). 	<p>Basin Plan Amendment support Scope of Work: https://bacwa.org/wp-content/uploads/2018/01/EOA-Inc.-SOW-Budget.pdf</p> <p>SF RWQCB CEQA Scoping meeting May 22: https://www.waterboards.ca.gov/sanfranciscobay/press_room/R2%20TRC%20BPA%20CEQA_Scoping_Mtg%20Lyris%20Notice.pdf</p>

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PESTICIDES			
<ul style="list-style-type: none"> • Pesticides are regulated via FIFRA, and not the Clean Water Act. POTWs do not have the authority to regulate pesticide use in their service area, but may be responsible for pesticide impacts to their treatment processes or to surface water. • Through BAPPG, BACWA aims to proactively support a scientifically sound pesticide management program that will not impact POTWs' primary functions of collecting and treating wastewater, recycling water, and managing biosolids. 	<ul style="list-style-type: none"> • Beginning 2016, EPA has been reviewing the registration of several key pesticides, a task it conducts once about every 15 years. • BACWA has funded consultant support to write comment letters advocating for the consideration of POTW and surface water issues during EPA's risk assessments as part of reregistration. Funding was increased from \$30K to \$60K in FY20/21. Most recently, BACWA submitted comments on Pyrethroids and Pyrethrins as well as noenicitinoid pesticides. • With chronic toxicity limits likely in the near term, POTWs will be in compliance jeopardy if pesticides contribute to toxicity. • Baywise.org has launched webpages on flea and tick control messaging to pet owners and veterinarians. 	<ul style="list-style-type: none"> • Continue to comment on pesticide reregistrations. • Work with veterinary associations on messaging with respect to flea and tick control alternatives. • Continue to develop summary of EPA actions on pesticides. 	<p>BACWA Pesticides Regulatory Update and Call to action: https://bacwa.org/wp-content/uploads/2016/02/BACWA-Pesticide-Regulatory-Update-2016-1.pdf</p> <p>BACWA Pesticide Regulatory Support Page: https://bacwa.org/document-category/pesticides-regulatory-support/</p> <p>Baywise flea and tick pages: https://baywise.org/</p>

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MERCURY/PCB WATERSHED PERMIT			
<ul style="list-style-type: none"> Mercury/PCB Watershed Permit was reissued on 11/8/17 with 1/1/18 effective date. The Watershed Permit is based on the TMDLs for each of these pollutants. Aggregate PCB and mercury loads have been well below waste load allocations through 2016. Method 1668C for measuring PCB congeners has not been promulgated by EPA. Data collected during the first permit term varied widely depending on which laboratory performed the analyses. 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"> The 2017 watershed permit reduces monitoring frequencies via Method 1668C for agencies with design flows of less than 50 mgd. It also incorporates the laboratory guidance from the BACWA PCB Protocol. The permit requires continued risk reduction program funding and annual reporting of effort. BACWA is repeating its grant program that it established as part of the previous permit. In summer 2018, two \$25,000 grants were awarded, to APA Family Support Services (now complete) and the California Indian Environmental Alliance (ongoing through 2020). 	<ul style="list-style-type: none"> Continue outreach to dentists on amalgam separation through BAPPG and BACWA's pretreatment committee. Schedule risk reduction presentations by the grantees to the Regional Water Board 2020. 	<p>2017 Mercury/PCB Watershed Permit: http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2012/R2-2012-0096.pdf</p> <p>Risk Reduction Materials from 2012 and 2017 Permit term: https://bacwa.org/mercury-pcb-risk-reduction-materials/</p> <p>Updated BACWA PCBs Protocol: https://bacwa.org/wp-content/uploads/2014/02/PCBs-Sampling-Analysis-and-Reporting-Protocols-Dec13.pdf</p>
ENTEROCOCCUS LIMITS			
<ul style="list-style-type: none"> In August 2018, the State Water Board adopted new statewide bacteria water quality objectives and implementation options to protect recreational users from the effects of pathogens in California water bodies. The objectives and implementation options are a new part 3 of the Water Quality Control Plan for the SIP and Ocean Plan. The Objectives were approved by the Office of Administrative Law in February 2019 and by EPA in March 2019 	<ul style="list-style-type: none"> The new enterococcus objective for saline waters is a six-week rolling geometric mean of enterococci not to exceed 30 cfu/100 mL, calculated weekly, with a statistical threshold value of 110 cfu/100 mL, not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner. The Regional Water Board has been granted dilution credit upon request when implementing the new objectives in NPDES permits. 	<ul style="list-style-type: none"> BACWA is working with SFEI to perform a study of background enterococcus levels in the San Francisco Bay. SFPUC has volunteered use of their boat for collecting samples. This study is being funded by BACWA. The first round of samples found enterococcus levels near the detection limit in most locations. BACWA is awaiting the report from the second round of sampling. 	<p>SWB Bacterial Objective page: https://www.waterboards.ca.gov/bacterialobjectives/</p>

STATE WATER BOARD TOXICITY PROVISIONS

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| <ul style="list-style-type: none"> • The State Water Board has been working since before 2012 to establish Toxicity Provisions in the SIP that would introduce uniform Whole Effluent Toxicity Requirements for the State • Draft State Toxicity Provisions posted October 19, 2018, would establish: <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 whether to require RPAs for acute toxicity • During individual permit reissuances since 2015, the Regional Water Board has been performing RPAs for chronic toxicity and giving chronic toxicity limits to agencies with Reasonable Potential. | <ul style="list-style-type: none"> • Key issues for BACWA to discuss with the State Water Board continue to be: <ul style="list-style-type: none"> ○ reasonable potential analysis methodology, ○ MMEL testing schedule and laboratory capacity, ○ test species variability ○ sensitive species screening requirements • Since 2016, agencies have had the option to skip sensitive species screening upon permit reissuance and pay the avoided funds to the RMP to be used for CECs studies. If agencies are required by the provisions to do sensitive species screening, this will reduce RMP funds by approximate \$100K per year. • BACWA has joined SCAP, CVCWA and NACWA in a lawsuit alleging EPA did not follow proper procedure in requiring use of the TST, which has not been officially promulgated. The lawsuit was dismissed on Statute of Limitation grounds, but the group has filed an appeal. • The State Water Board is considering removing <i>C. dubia</i> tests for MMEL compliance purposes until a study on its accuracy and variability is complete. The State Water Board has tentatively agreed to a study examining <i>C. dubia</i> test variability. • BACWA hosted a toxicity workshop for its members in September 2017. | <ul style="list-style-type: none"> • BACWA has met with State Water Board staff and Regional Water Board staff to request that sensitive species screening not be required for agencies. • Continue tracking State Water Board activities pertaining to the <i>Ceriodaphnia dubia</i> test. • Continue to work with Regional Water Board on language for implementing Toxicity Provisions in Region 2 NPDES Permits. | <p>SWRCB Toxicity Page: http://www.swrcb.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.shtml</p> <p>Toxicity Workshop Presentations: https://bacwa.org/bacwa-toxicity-workshop-september-18-2017/</p> <p>CASA <i>Ceriodaphnia dubia</i> White Paper: https://bacwa.org/document/casa-white-paper-on-ceriodaphnia-dubia/</p> <p>BACWA Dec 2018 Comments on Toxicity Provisions: https://bacwa.org/document/bacwa-comments-on-toxicity-provisions-12-21-18/</p> <p>BACWA Feb 2020 Comments on MMEL scheduling: https://bacwa.org/wp-content/uploads/2020/02/BACWA-Tox-Provisions-App-K-to-Staff-Report-comments-2-10-2020.pdf</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 considering 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. Much of what the State Water Board is considering for its Pilot Monitoring Plan is already being implemented in Region 2 through the RMP. 	<ul style="list-style-type: none"> The Regional Water Board has stated that voluntary participation in RMP CECs studies is key to avoiding regulatory mandates for CECs monitoring. These studies are informational and not for compliance purposes. Microplastics have been a focus of the RMP in recent years. BACWA has participated in the Workgroup and developed a POTW Fact Sheet. One conclusion of the RMP work is that POTWs contribute much lower microplastic loads than stormwater. DDW has proposed a definition of Microplastics in Drinking Water (expected to apply to other matrices such as wastewater and stormwater). It's expected to be adopted June 2020. 	<ul style="list-style-type: none"> Continue to participate in the RMP CEC Workgroup and solicit agency participation for future studies. Finalize a White Paper for use by the RMP in selecting representative POTWs for participation in CEC studies, and develop a proposal for ongoing monitoring. Continue tracking SWRCB actions re: microplastics. 	<p>RMP CEC Workgroup: http://www.sfei.org/rmp/ecwg#tab-1-4</p> <p>BACWA Microplastics Fact Sheet: https://bacwa.org/wp-content/uploads/2019/09/BACWA-Microplastics-flyer.pdf</p> <p>SFEI Microplastics Science Strategy: www.sfei.org/documents/microplastic-monitoring-and-science-strategy-san-francisco-bay</p> <p>SWRCB Microplastics in Drinking Water page https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/microplastics.html</p>

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PER- AND POLYFLOUROALKYL SUBSTANCES (PFAS)			
<ul style="list-style-type: none"> Per- and polyfluoroalkyl substances made substances (PFAS) are a large group of human-made substances that are very resistant to heat, water, and oil. PFAS have been used extensively in surface coating and protectant formulations; common PFAS-containing products are non-stick cookware, cardboard/paper food packaging, water-resistant clothing, carpets, and fire-fighting foam. Perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) are two types of PFAS that are no longer manufactured in the US; however, other types of PFAS are still produced and used in the US. All PFAS are persistent in the environment, can accumulate within the human body, and have demonstrated toxicity at relatively low concentrations. PFOA and PFOS were found in the blood of nearly all people tested in several national surveys. Regulatory efforts to address PFAS focus on drinking water in order to minimize human ingestion of these chemicals, although regulators have also expressed concern about uptake into food from land applied biosolids. 	<ul style="list-style-type: none"> In Aug 2019, DDW lowered the drinking water notification levels (NLs) to 6.5 ng/L for PFOS and 5.1 ng/L for PFOA (lowest detection possible at the time). In Feb 2020, DDW also lowered the 'response levels' (RLs) to 10 ng/L for PFOA and 40 ng/L for PFOS. Under AB756 (July 2019), DDW can order public water systems to monitor PFAS, consumers must be notified if NLs/RLs are exceeded, and water sources must be removed from service or blended/ treated if RLs are exceeded (if possible). DDW has requested OEHHA develop NLs for seven other PFAS compounds and public health goals (PHGs) for both PFOA and PFOS, the next step in establishing drinking water MCLs. In 2019, the SWRCB developed a phased investigation action plan requiring testing of drinking water systems and site investigations at high risk locations for PFAS. Investigative orders are issued as follows: <ul style="list-style-type: none"> Mar/Apr 2019 - landfills and airports and adjacent public water systems Oct 2019 - chrome-platers TBD late 2020 - POTWs TBD late 2020 - refineries & bulk terminals 	<ul style="list-style-type: none"> As part of its investigation plan, SWRCB is pushing for two years of quarterly influent, effluent, and biosolids sampling for all POTWs >1MGD. BACWA is working with Regional Water Board staff on a proposal to conduct a regional study through the RMP that would investigate regionally-relevant PFAS questions, since Bay Area POTW effluent does not impact drinking water sources. BACWA is collaborating with CASA and other statewide counterparts in holding discussions with SWRCB. CASA is working on a proposal that would provide monitoring offramps for agencies without significant industrial sources, and with no nexus between their effluent and drinking water. BACWA will continue tracking developments at the State and Regional level, including an upcoming PFAS informational workshop at the Regional Water Board meeting on May 13, 2020. 	<p>CASA Factsheet: https://casaweb.org/wp-content/uploads/2019/10/4-CASA_PFAFactSheet4.pdf</p> <p>SWRCB website: https://www.waterboards.ca.gov/pfas/</p> <p>OEHHA Notification Levels for Drinking Water: https://oehha.ca.gov/water/notification-levels-chemicals-drinking-water</p> <p>EPA PFAS Resources https://www.epa.gov/pfas</p> <p>EPA PFAS Action Plan (updated Feb 2020) https://www.epa.gov/sites/production/files/2020-01/documents/pfas_action_plan_feb2020.pdf</p>

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SSS WDR REISSUANCE			
<ul style="list-style-type: none"> • The State Water Board plans to reissue the SSS WDR in 2021. • They have sought out early stakeholder engagement through outreach to CASA and the Regional Associations, and NGOs. • Goals for the update are: <ul style="list-style-type: none"> ○ Effective spill response ○ Proactive planning and management ○ Transparent reporting ○ “Feasible and reasonable” regulations - good faith effort to comply - personnel, budget, equipment by governing board 	<ul style="list-style-type: none"> • The State Water Board has identified the following as key issues to be included: <ul style="list-style-type: none"> ○ Reporting of PSL spills ○ Improvement of CIWQS data quality ○ Study of the impact of exfiltration ○ Updated SSMPs that are more enforceable ○ Potential incentives for well performing systems • CASA provided proposed redlines to the SSS WDR on the text of the SSS WDR, as well as the proposed SSMP outline. They have been meeting with the State Water Board regularly during 2019. 	<ul style="list-style-type: none"> • Comment on draft SSS WDR when available for public comment (now likely in mid to late 2020.) • Discuss response to issues such as exfiltration via BACWA’s Collection Systems Committee. 	<p>SWB SSS WDR page: https://www.waterboards.ca.gov/water_issues/programs/sso/</p> <p>CASA SSS WDR Redlines: https://bacwa.org/document/sss-wdr-casa-redlines-8-29-18/</p> <p>CASA SSS WDR MRP Redlines: https://bacwa.org/document/casa-sss-mrp-redlines-08-29-18/</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 (SCCWRP) 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. • The Environmental Laboratory Technical Advisory Committee (ELTAC) was established to assist ELAP in technical matters that impact the laboratory community. The committee is composed of representatives from the laboratory community and data users, and have represented the POTW laboratory community during this process. • AB 1438 was signed into law on Sept 28, 2017 and became effective January 1, 2018. The bill sets the stage for ELAP to adopt TNI standards. 	<ul style="list-style-type: none"> • Draft Regulations that included adopting most of the TNI standard for laboratories were released for public comment on October 11, 2019. Minimal revisions were proposed in February 2020 and regulations were adopted May 2020. • Adoption of TNI standards poses a challenge since there are more than 1000 individual requirements in the full document. Initial costs may include <ul style="list-style-type: none"> ○ hiring staff to handle TNI-related paperwork; ○ hiring consultants to setup the TNI documentation framework; ○ purchasing Laboratory Information Management System (LIMS) software; ○ purchasing documents and training material from TNI, etc. • The new standards could be a particular burden on small municipal laboratories, which may choose to close if they cannot economically meet the new standards. • BACWA submitted comments on the draft regulations aimed at improving clarity and implementability of TNI. The comments also addressed the enforcement provisions and lack of due process therein. • BACWA attended January 17, 2020, stakeholder meeting with State Water Board members and staff to review in more depth the CA QMS alternative. 	<ul style="list-style-type: none"> • The newly-adopted regulations are estimated to take effect October 2020, although a date has not yet been set. BACWA will track progress (review by Office of Administrative Law). • Work through BACWA's Laboratory Committee to explore ways to mitigate the burden of the newly-adopted requirements. 	<p>State Water Board's ELAP page: http://www.waterboards.ca.gov/drinking_water/certification/labs/elap_regulations.shtml</p> <p>BACWA Comment letter on Draft Regulations: https://bacwa.org/wp-content/uploads/2019/12/BACWA-comments-ELAP-Regs-12-20-19.pdf</p>

PHASE-OUT OF BIOSOLIDS AS ALTERNATIVE DAILY COVER

<ul style="list-style-type: none"> • Regulatory drivers are indicating that biosolids used as alternative daily cover (ADC) or disposed in landfills will be phased out: <ul style="list-style-type: none"> ○ AB 341 set a goal to recycle 75% of solid waste by 2020 and CalRecycle’s plan to achieve that goal called for a marked, but unquantified, reduction of organics to landfills. ○ SB 1383, adopted in September 2016 requires organics diversion: -50% by 2020 (relative to 2014) -75% by 2025 (relative to 2014) ○ In 2020, CalRecycle will count green waste as disposal (per AB 1594), rather than diversion, even when used as ADC. 	<ul style="list-style-type: none"> • While the regulations don’t explicitly forbid biosolids disposal/reuse in landfills, it is assumed that since biosolids are a relatively “clean” waste stream that can be easily diverted, landfills will stop accepting biosolids. • In the 2018 BACWA Biosolids survey, more agencies reported that they are developing plans for the phase-out than in the 2016 Survey. • The latest draft of proposed regulations was posted on April 20, 2020, with adoption on July 1, 2020. The regulation will become effective in 2022, and enforceable in 2024. Issues of concern are: <ul style="list-style-type: none"> ○ Diverted biosolids must be anaerobically digested and/or composted to qualify as landfill reduction. ○ Language that would prohibit local ordinances restricting biosolids land application has been softened. ○ Procurement of renewable natural gas for renewable energy generation, use as a low carbon fuel, and pipeline injection has been included in the draft language. Regarding biosolids cake/products, procurement requirements are implied for biosolids compost only. ○ Current regulatory language implies that incineration and surface land disposal sites are “landfills” for accounting purposes. 	<ul style="list-style-type: none"> • Consider ways to build a market for compost and other soil amendment products from biosolids, using lessons learned in the Pacific Northwest and Midwest. • Actively work through CASA with California Air Resource Board, CalRecycle, State Water Resource Control Board, and California Department of Food and Agriculture to mutually develop sustainable long-term options for the beneficial use of biosolids. • Follow efforts of the BABC, investigating all-weather options for biosolids management (including innovative technologies generating energy and other useful bioproducts from biosolids). BABC is a BACWA Project of Special Benefit, beginning in FY20. • Participate in BAAQMD's Methane Expert Panel to educate their staff on how to address implementation of SB 1383 at the Air District level. • Following the release of the next draft regulation, participate in discussions/efforts with CASA and CalRecycle to modify the regulatory language that implies incineration and surface land disposal sites are landfills. 	<p>BACWA 2016 Biosolids Trends Survey Report: https://bacwa.org/wp-content/uploads/2017/08/BACWA-2016-Biosolids-survey-report.pdf</p> <p>2018 BACWA Biosolids Survey: https://www.surveymonkey.com/r/7Q3PDY9</p> <p>CASA White Paper on Biosolids Use in Landfills: https://bacwa.org/wp-content/uploads/2017/01/1-11-17-Sustainability-for-biosolids-use-at-landfills.pdf</p> <p>BABC website: http://www.bayareabiosolids.com/</p> <p>CASA Comments on proposed SB 1383 Implementation Regulation: https://bacwa.org/wp-content/uploads/2019/09/7-17-19-CASA-Comments-SB-1383-Regs3.pdf</p>
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CLIMATE CHANGE MITIGATION

<ul style="list-style-type: none"> • CARB's Climate Change Scoping Plan Update lays out the approach for the State to meet its greenhouse gas (GHG) emissions reduction targets through 2030, including additional policies to achieve 40% reduction below 1990 levels by 2030: <ul style="list-style-type: none"> ○ Short-lived climate pollutants (i.e., methane) ○ Carbon sequestration on Natural and Working Lands ○ Largest emitters (transportation, electricity, and industrial sectors) • SB 1383 (Short-Lived Climate Pollutant Reduction) calls for: <ul style="list-style-type: none"> ○ 40% methane reduction by 2030 ○ 75% diversion of organic waste from landfills by 2025 ○ Policy and regulatory development encouraging production/use of biogas • BAAQMD developed a Clean Air Plan that requires GHG emissions reduction on track with CARB's 2030 and 2050 targets. • BAAQMD has proposed the development of Regulation 13 (climate pollutants) targeting GHG emission reductions related to organics diversion and management. 	<ul style="list-style-type: none"> • CARB states POTWs are part of the solution for reducing fugitive methane, and encourages diversion of organics to POTWs to use excess digester capacity and produce biogas. However, diversion also increases biosolids, which also need to be diverted from landfills. • Many POTWs are exploring energy generation, but BAAQMD TAC regulations could make such programs more difficult to implement. Direct injection of biogas to PG&E's pipelines or use as a transportation fuel may be more efficient. OSHA's PSM Standards, triggered by use of biogas offsite (if managing over 10k lbs of biogas onsite), may cause pipeline injection to be cost-prohibitive. CalOSHA may provide options for being exempt from PSM standards. • CARB's previous interest in nitrous oxide emission estimates and/or emission factors for POTWs has shifted to toxic air contaminants. See BAAQMD Rule 11-18. • BAAQMD is developing a suite of Rules under Regulation 13 for climate pollutants methane and nitrous oxide <ul style="list-style-type: none"> ○ Rule 13-1 (significant methane releases) - Postponed indefinitely in favor of source specific rules. ○ Rule 13-2 (organic material handling) – Postponed indefinitely to develop Rules 13-3 and 13-4. ○ Rule 13-3 (composting operations) and Rule 13-4 (anaerobic digestion and sewage treatment) – Suspended due to COVID-19. 	<ul style="list-style-type: none"> • 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. Note: CASA has been discussing the barriers to pipeline injection with CPUC staff and they have proposed reducing their standard from 990 Btu/scf to 970 Btu/scf. • Engage in development of Regulation 13 Rules, which are intended to govern climate pollutants, odors, VOCs and TACs from POTWs and anaerobic digesters. Continue to work with BAAQMD staff to provide information and education about anaerobic digesters and POTW operations. Participate in the Methane Expert Panel and the Organic Recovery Technical Working Group, as well as comment on draft Rules. 	<p>Climate Change Scoping Plan: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf</p> <p>CARB Short Lived Climate Pollutant Reduction Strategy: https://www.arb.ca.gov/cc/shortlived/meetings/03142017/final_slcp_report.pdf</p> <p>SB 1383: http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb_1351-1400/sb_1383_bill_20160919_chaptered.htm</p> <p>BAAQMD Clean Air Plan: http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans</p> <p>BAAQMD Regulation 13 http://www.baaqmd.gov/rules-and-compliance/rules/regulation-13-climate-pollutants</p> <p>BACWA Comments on Regulation 13: https://bacwa.org/wp-content/uploads/2019/07/BACWA-AIR_FINAL_Comment-Letter_Regulation13_Rules_24_071219.pdf</p>
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CLIMATE CHANGE ADAPTATION

<ul style="list-style-type: none"> • In 2017, the State Water Board adopted a Climate Change Resolution addressing mitigation and adaptation. One of the requirements is that Regional Water Boards will make recommendations to the State Water Board on the need to modify permits and other regulatory requirements to reduce vulnerability of water and wastewater infrastructure to flooding, storm surges, and sea level rise. • The Regional Water Board identified Climate Change and Wetland Policy Update as the highest priority Basin Planning project in their 2018 Triennial Review. • In April 2019, Governor Gavin Newsom signed Executive Order N-10-19 directing State Agencies to recommend a suite of priorities and actions to build a climate-resilient water system and ensure healthy waterways through the 21st century. 	<ul style="list-style-type: none"> • The State Water Board is planning a data request that they will send to all permitted facilities (collection systems and POTWs) in the State to better understand to what extent agencies are performing climate change vulnerability assessments and/or investing in adaptation measures. They plan to use this information to determine the need for funding assistance or permit requirements for climate change planning. • The Regional Water Board hosted a workshop on its Wetlands Policy 94-086 on August 14 and solicited stakeholder input on potential revisions to the Policy. • BACWA provided the Regional Water Board staff specific case studies of wetlands projects that are being considered as well as written comments regarding Policy revisions that would help incentivize the development of wetlands projects by wastewater agencies, and reduce permitting hurdles. 	<ul style="list-style-type: none"> • Continue to coordinate with State Water Board on the status of their data request on climate change planning, so members can provide the information they request as effectively as possible. • Continue to work with Regional Water Board to look for regulatory solutions to encourage wetlands projects for shoreline resiliency. • BACWA to review Governor's Water Resilience Portfolio initiative, released in 2020. 	<p>State Water Board 2017 Climate Change Resolution: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0012.pdf</p> <p>Regional Water board Wetlands Policy Page: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/climate_change/wetland_policies.html</p> <p>BACWA Comments on Wetlands Policy: https://bacwa.org/wp-content/uploads/2018/09/BACWA-comments-Wetland-Policy-9-14-18.pdf</p> <p>Governor's Draft Water Resilience Portfolio: http://waterresilience.ca.gov/</p> <p>BACWA Comments on Resilience Portfolio: https://bacwa.org/wp-content/uploads/2019/10/BACWA-Water-Resilience-Portfolio-10-01-19.pdf</p>
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TOXIC AIR CONTAMINANTS - BAAQMD RULE 11-18 AND AB 617

<ul style="list-style-type: none"> • Regulation 11, Rule 18 (Rule 11-18), adopted November 15, 2017, is BAAQMD's effort to protect public health from toxic air pollution from existing facilities, including POTWs. • Per the Rule, BAAQMD will use toxic emissions inventories and proximity to the nearest receptor (residents or offsite workers) to conduct site-specific Health Risk Screening Analyses (HRSA). From HRSA's, BAAQMD will determine each facility's prioritization score (PS). BAAQMD will conduct Health Risk Assessments (HRAs) for all facilities with a cancer PS>10 or non-cancer PS>1.0. After verifying the model inputs, if the facility still has PS above that threshold, that facility would need to implement a Risk Reduction Plan that may include employing Best Available Retrofit Control Technology for Toxics (TBARCT). • AB 617 (Community Air Protection Program) – requires CARB to harmonize community air monitoring, reporting, & local emissions reduction programs for CAPs and TACs (and GHGs). Oakland and Richmond. POTWs within these communities may have to accelerate implementation of risk reduction measures. 	<ul style="list-style-type: none"> • BACWA developed a White Paper on the BAAQMD Rule to describe its potential impacts on the POTW community. • In response to a request by BAAQMD, the AIR Committee delivered a letter report summarizing specific challenges that POTWs would face in complying with the rule due to budgeting and planning constraints related to being public agencies. • In response, BAAQMD moved all POTWs to Phase 2 to give sufficient time to update the model's inputs, and plan for emissions reduction or TBARCT, as needed. Phase 2 begins in 2020 with data collection and verification, followed by the development of HRAs for facilities with a cancer PS>10 or non-cancer PS>1.0. Implementation of the Rule for Phase 2 facilities will be spread out over two years depending on the prioritization score. • AIR Committee gathered data on proximity factors from each facility and submitted to BAAQMD for updating prioritization scores, which will be use in HRA development. • Best Available Retrofit Control Technology (BARCT) Implementation Schedule for industrial Cap-and-Trade facilities was adopted by BAAQMD's Board of Directors at a public hearing on December 19, 2018. 	<ul style="list-style-type: none"> • Priority: Agencies should use the tool developed by the AIR Committee's Emissions Inventory Subcommittee to address emission contributions from influent flows, which will be used to update emissions inventory values. • Respond to BAAQMD data request in early 2020. There will be a 60-day turn-around to comply with the data request. • Track both AB 617's regulation development and expansion of the toxics compound list under AB 2588's Air Toxics Hot Spots Program. Draft regulatory language under AB 617 stated all uncovered POTWs >5 MGD and covered (primary) POTWs >10 MGD must monitor and report all compounds listed under AB 2588. The language had been temporarily removed, but 2020 amendments propose bring the language back. CARB has agreed to work with the wastewater sector to develop a short-list of relevant compounds and perform a pooled emissions estimating effort to update outdated default emission factors. CASA is facilitating development of a work group to pursue this effort. Results could inform Rule 11-18 HRA's. 	<p>BAAQMD Rule 11-18 page: http://www.baaqmd.gov/rules-and-compliance/rule-development/rules-under-development/regulation-11-rule-18</p> <p>Rule 11-18 Process Flowchart: https://bacwa.org/document/baaqmd-11-18-process-flowchart-08-17-17/</p> <p>BACWA White Paper: https://bacwa.org/wp-content/uploads/2017/01/11-18-White-Paper_final-2.pdf</p> <p>BAAQMD page on AB 617: http://www.baaqmd.gov/rules-and-compliance/rule-development/barct-implementation-schedule</p> <p>CARB page on AB 617: https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting/ctr-regulation</p> <p>CARB page on AB 2588: https://ww3.arb.ca.gov/ab/2588/2588quid.htm</p>
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Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
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. • In May 2018, the State Water Board released Recycled Water Policy Amendments for Public Comment. The Recycled Water Policy governs the Recycled Water General Order. • The Amendments were adopted in December 2018. 	<ul style="list-style-type: none"> • Key issues in the Recycled Water Policy Amendments are: <ul style="list-style-type: none"> ○ Introduces goal to increase recycled water where wastewater is otherwise discharged to ocean, bays, and estuaries. ○ Terminates Region 2 96-011 Recycled Water General Order three year after Policy Amendment adoption (April 2020). ○ Adds to the procedural burdens in obtaining Wastewater Change Petition. ○ Removes requirement for priority pollutant monitoring. • On April 8, 2020, SF Regional Water Board transitioned 96-011 permittees to the State General Order by issuing a NOA and modified MRP. BACWA had previously provided comments on the draft NOA and MRP documents. All permittees were transitioned with the exception of City of Livermore, Delta Diablo, Napa Sanitation, and SASM who have older Title 22 Engineering Reports; they will be enrolled at a later date following a review by DDW. 	<ul style="list-style-type: none"> • Support member agencies as they implement new monitoring and reporting requirements. 	<p>2016 State Recycled Water General Order: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2016/wgo2016_0068_dw.pdf</p> <p>State Recycled Water Policy Amendment Page: https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/index.html#amendment</p> <p>BACWA comments on Recycled Water Policy Amendments: https://bacwa.org/wp-content/uploads/2018/06/BACWA-RW-Policy-comments-6-26-18.pdf</p> <p>State Water Board 2001 Engineering Report Guidelines: https://bacwa.org/wp-content/uploads/2019/09/Engineering-Report-Preparation-Guidelines.pdf</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
BTU/SCF	British thermal units per standard cubic foot
CARB	California Air Resources Board
CASA	California Association of Sanitation Agencies
CAP	Criteria Air Pollutant
CEC	Compound of Emerging Concern
CIWQS	California Integrated Water Quality System
CVCWA	Central Valley Clean Water Agencies
CWEA	California Water Environment Association
EC25/IC25	25% Effect Concentration/25% Inhibition Concentration
ELAP	Environmental Laboratory Accreditation Program
ELTAC	Environmental Laboratory Technical Advisory Committee
EPA	United States Environmental Protection Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FY	Fiscal Year
GHG	Greenhouse Gas
HRSA	Health Risk Screening Analyses
HRA	Health Risk Assessment
MCL	Minimum Contaminant Level (Drinking Water)
NACWA	National Association of Clean Water Agencies
NELAC	National Environmental Laboratory Accreditation Conference
PCB	Polychlorinated Biphenyl
POTW	Publically Owned Treatment Works
PS	Prioritization Score
QMS	Quality Management System
RMP	Regional Monitoring Program
RPA	Reasonable Potential Analysis
SCAP	Southern California Alliance of POTWs
SF Bay	San Francisco Bay
SFEI	San Francisco Estuary Institute
TAC	Toxic Air Contaminant
TMDL	Total Maximum Daily Load
TIN	Total Inorganic Nitrogen
TNI	The NELAC Institute
TST	Test of Significant Toxicity