KEY REGULATORY ISSUE SUMMARY
Updated May 3, 2022

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

Contents

New updates in this version are shown in Purple highlighting

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
NUTRIENTS IN SAN FRANCISCO BAY			
• 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 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.	• For FY22, BACWA is contributing $2.2M to fund scientific research needed to make management decisions for the 3rd Watershed Permit. This level of funding is required by the 2nd Watershed Permit. • The focus of current scientific efforts is improving model representation of biogeochemistry, light attenuation, dissolved oxygen, and Harmful Algal Bloom dynamics. Field and lab observations are supporting these improvements. • The science team is developing an Assessment Framework for Open Bay habitats and Lower South Bay sloughs.	• Continue to assist with preparation of a brief "State of the Science" document summarizing the scientific accomplishments of the Nutrient Management Strategy team for public use. • Continue to participate in steering committee, Nutrient Management Strategy, Nutrient Technical Workgroup, and planning subcommittee meetings, and provide funding for scientific studies. • Continue to engage with Nutrient Technical Team and BACWA's Nutrient Management Strategy technical consultant, Mike Connor, to provide review of recent work products and charge questions for the science team.	BACWA Nutrients Page: https://bacwa.org/nutrients/ Nutrient Management Strategy FY22 Program Plan https://drive.google.com/file/d/1zUJLjdefBoFmzD0LZDMB4aH_O30wvebA/view Nutrient Management Strategy Reports and Work Products https://sfbaynutrients.sfei.org/books/reports-and-work-products

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SF BAY NUTRIENT WATERSHED PERMIT			
• The 1st Nutrient Watershed Permit was adopted in 2014, and required a regional study on Nutrient Treatment by Optimization and Upgrades, completed in 2018. • The 2nd Nutrient Watershed Permit was adopted in 2019. It includes: ○ Continued individual POTW 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 2014 to 2017 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: ○ Group Annual Reporting ○ Regional Studies on Nature-Based Systems and Recycled Water ○ Support of scientific studies through the Regional Monitoring Program (RMP) at $2.2M per year through the five-year permit term.	• Studies related to Recycled Water and Nature-Based Systems are underway, and will be completed by the due date of July 1, 2023. • Each year by February 1, BACWA submits a Group Annual Report on behalf of its members. The report summarizes trends in nutrient concentrations and loading for each agency, and for all the agencies as a whole. The annual reporting period in the 2nd Watershed Permit is based on a water year (October 1 – September 30th). The Group Annual Report for October 2020 – September 2021 includes several new sections, including analysis of influent loading trends and data regarding recycled water diverted from San Francisco Bay. The report showed a decline in TIN concentrations compared to the previous year. • Each year by February 1, BACWA and SFEI submit an annual science implementation plan and schedule update, as required by the 2nd Watershed Permit. • Agencies with plans to substantially reduce nutrients are recognized in the Fact Sheet of the 2nd watershed permit.	• BACWA continues to convene a Nutrient Strategy Team (NST) to develop BACWA's key tenets for the 3rd Watershed Permit. • Complete a statistical analysis of historical loading trends, and discuss results with the Nutrient Strategy Team. • Meet with Regional Water Board staff to discuss the statistical analysis and how it might be used to implement load caps in the 3rd 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." • Review draft reports by HDR and SFEI for the Nutrient Removal by Recycled Water Evaluation and the Nature-Based Systems study. Draft agency reports for the Recycled Water Evaluation have already begun to be distributed for agency review, and more are expected in early- to mid-2022.	2nd Nutrient Watershed Permit: https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2019/May/6_ssr.pdf Special Studies of Recycled Water and Nature-Based Systems: https://bacwa.org/document-category/2nd-watershed-permit-studies/ Optimization/Upgrade Study Information: https://bacwa.org/document-category/optimization-and-upgrade-studies/ BACWA Group Nutrient Annual Reports: http://bacwa.org/document-category/nutrient-annual-reports/

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CHLORINE RESIDUAL COMPLIANCE			
• 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. 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. • The Regional Water Board worked with BACWA to develop a Basin Plan Amendment modifying the effluent limit for chlorine residual.	• The Basin Plan Amendment includes: ○ A 0.013 mg/L Water Quality Objective in marine and estuarine waters, which will be applied as a WQBEL in permits and calculated incorporating dilution. The WQBEL will be applied as a one-hour average. ○ A Minimum Level (ML), or Reporting Limit of 0.05 mg/L for online continuous monitoring system. • The Basin Plan Amendment was adopted by the Regional Water Board in November 2020, approved by the State Water Board and Office of Administrative Law in 2021, and is now awaiting final review by EPA. • Sections of the Basin Plan Amendment related to removal of Oil & Grease effluent limits are now in effect. This change is being implemented in reissued NPDES permits. • In October 2021, the Regional Water Board adopted a blanket permit amendment (Order R2-2021-0019) implementing the Basin Plan Amendment within each individual NPDES permit. The order will become effective once the Basin Plan Amendment is approved by the EPA, but the schedule for this approval is currently undetermined.	• Prepare for a short turnaround time for implementation of the new chlorine residual limits, as follows: ○ Ensure compliance with the new minimum required frequency of once every 5 minutes. ○ Ensure the monitoring system complies with the new minimum level of 0.05 mg/L. ○ Members that plan to discharge detectable residual chlorine may need to adapt sampling and analysis procedures for other constituents for which residual chlorine could interfere, such as whole effluent toxicity and ammonia. ○ Use the highest one-hour arithmetic mean as the daily value reported into CIWQS.	Background and Status information about Basin Plan Amendment: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/amendments/chlorinebpa.html Final Amendment adopted by Regional Water Board: https://www.waterboards.ca.gov/sanfranciscobay//water_issues/programs/planningtmdls/amendments/chlorinebpa/2_Chlorine_Resolution_R2-2020-0031.pdf Blanket Permit Amendment for Chlorine and Oil & Grease: https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2021/R2-2021-0019.pdf

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PESTICIDES			
• 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 scientific and regulatory advocacy program so that pesticides will not impact POTWs' primary functions of collecting and treating wastewater, recycling water, and managing biosolids, or impact receiving waters via the "down the drain" route.	• EPA reviews all registered pesticides at least once every 15 years. Each review allows opportunity for public comment. • BACWA continues to fund 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 for pesticide regulatory outreach in FY22 is $60K. • The Regional Water Board leverages BACWA's efforts to provide their own comment letters to EPA. • 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.	• Continue to comment on pesticide re-registrations. • Work with veterinary associations on messaging with respect to flea and tick control alternatives. • Continue to develop summary of EPA actions on pesticides. • Look for opportunities to work with CalDPR on pesticides research. • Work with other regional associations, such as the California Stormwater Quality Association (CASQA), to collaborate on funding pesticide regulatory outreach.	BACWA Pesticides Regulatory Update and Call to action: https://bacwa.org/wp-content/uploads/2016/02/BACWA-Pesticide-Regulatory-Update-2016-1.pdf BACWA Pesticide Regulatory Support Page: https://bacwa.org/bappg-pesticides/ Baywise flea and tick pages: https://baywise.org/residential/pets/keep-pets-free-of-fleas-and-ticks/ https://baywise.org/residential/pets/
ENTEROCOCCUS LIMITS			
• In 2019, new statewide water quality objectives for bacteria were implemented to protect recreational users. The objectives are now part 3 of the Water Quality Control Plan for the SIP and Ocean Plan. • In February 2021, the Regional Water Board amended the Basin Plan to reflect the new statewide objectives. The same order also established a bacteria TMDL for two beaches in the Half Moon Bay area.	• The new enterococcus objective for saline waters is a six-week rolling geometric mean not to exceed 30 CFU/100 mL and a statistical threshold value of 110 CFU/100 mL • In July 2021, the State Water Board approved the Basin Plan Amendment and TMDL. In February 2022, the action received final EPA approval. The water quality objectives have already been in effect since 2019.	• Dischargers may request dilution credits when the new objective is implemented within NPDES permits, based on a study completed by BACWA and SFEI to establish background enterococcus levels in SF Bay. • The study, completed in June 2020, showed all stations in the Bay were below the objective of 30 CFU/100 mL	SFEI Report on Enterococci in SF Bay: https://bacwa.org/wp-content/uploads/2020/08/BACWA-2020_Enterococci-report_final.pdf Regional Water Board Basin Plan Amendment: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/PPH_TMDL.html

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MERCURY AND PCBS			
• The Mercury & PCBs Watershed Permit was reissued in November 2017 with an effective date of January 1, 2018. The Watershed Permit is based on the TMDLs for each of these pollutants. • Aggregate mercury and PCBs loads have been well below waste load allocations through 2020, the last year for which data have been compiled. • 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. • In 2017, EPA adopted federal pretreatment program rules requiring dental offices to install dental amalgam separators. The rule is intended to reduce dental office discharge of mercury. The compliance date was July 14, 2020.	• The 2017 Watershed Permit requires continued risk reduction program funding. For FY22, BACWA granted an extension to an ongoing contract worth $12,500 to the California Indian Environmental Alliance to conduct risk reduction activities related to fish consumption. A previous contract for APA Family Support Services is now complete. • Beginning January 1, 2022, monitoring requirements for mercury have been reduced for most dischargers per Order R2-2021-0028 (see link at right). For most dischargers, this replaces the 2016 *Alternate Monitoring and Reporting Requirements for Municipal Wastewater Dischargers for the Purpose of Adding Support to the San Francisco Bay RMP*. • As part of the 2021 Triennial Review of the Basin Plan, the Regional Water Board has prioritized designation of three new beneficial uses: Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB) and Subsistence Fishing (SUB). Water bodies designated these beneficial uses could also be assigned lower mercury objectives. In September 2021, this basin planning project was ranked as a "high priority" in the Triennial Review	• Synthesize PCBs loading data analyzed via Method 1668C ahead of the 2022 reissuance of the Mercury & PCBs Watershed Permit. This large data set demonstrates compliance with the TMDL, but may also be useful in assessing necessary monitoring frequencies. Data compilation for PCB congeners will begin in Q2 2022. • The 2017 Permit expires in December 2022. Reissuance activities for the Mercury and PCBs Watershed Permit will occur in the second half of 2022. • Continue outreach to dentists BAPPG and BACWA's pretreatment committee. Per federal rules, all dental facilities were required to submit one-time compliance reports by October 2020. • Schedule risk reduction presentations by the grantees to the Regional Water Board in 2022. • Track potential Basin Plan Amendments resulting from the Triennial Review project related to new beneficial use designations. The new designations are not expected to impact the bay-wide mercury TMDL in the near term, but there could be localized or longer-term impacts.	2017 Mercury & PCBs Watershed Permit: https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2017/November/5b_final_to.pdf Risk Reduction Materials: https://bacwa.org/mercurypcb-risk-reduction-materials/ Updated BACWA PCBs Protocol: https://bacwa.org/wp-content/uploads/2014/02/PCBs-Sampling-Analysis-and-Reporting-Protocols-Dec13.pdf One-Time Compliance Report for Dental Offices: https://www.waterboards.ca.gov/water_issues/programs/npdes/docs/drinkingwater/one-time_compliance_report_for_dental_offices.pdf NPDES Permit Amendment for Monitoring and Reporting https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2021/R2-2021-0028.pdf

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STATE WATER BOARD TOXICITY PROVISIONS			
• 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 • 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. • Proposed Final Statewide Toxicity Provisions were released in October 2020, incorporating revisions to previous versions from 2018 to 2020. The Provisions establish: ○ 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); ○ Numeric limits for chronic toxicity for POTWs >5 MGD and with a pretreatment program; smaller POTWs would receive effluent targets and only receive limits if Reasonable Potential is established; ○ Regional Water Board discretion on whether to require RPAs for acute toxicity; ○ For POTWs with *Ceriodaphnia dubia* as most sensitive species, numeric targets rather than limits until after completion of state-wide study on lab/ testing issues (Dec. 31, 2023).	• The State Water Board first adopted the Statewide Toxicity Provisions in December 2020. In October 2021, the State Water Board affirmed that the Statewide Toxicity Provisions were adopted as state policy for water quality control for all inland surface waters and estuaries. The Toxicity Provisions are expected to go into effect no sooner than mid-2022 after EPA approval. • Implementation will be on a permit-by-permit basis as new individual NPDES permits are issued. • 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. Once the Statewide Toxicity Provisions come into effect, agencies will once again be required by the provisions to do sensitive species screening once every 15 years. • BACWA 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. An appeal to the 9th Circuit Court of Appeals was denied in September 2021 on the basis that the EPA guidance document is not a final agency action that can be reviewed by the courts. POTWs' only recourse is to challenge individual permits that include the procedure.	• **Continue to work with Regional Water Board on language for implementing Toxicity Provisions in Region 2 NPDES Permits.** • Regional Water Board staff provided revised draft permit language to BACWA in December 2021, and members provided feedback on this revised draft in January 2022. BACWA will work with the Regional Water Board to finalize the template in Spring 2022, ahead of its first use in mid-2022. The language will ultimately be copied into each newly adopted permit in the region, filling in details about monitoring and screening requirements that the Provisions leave to Regional Water Board discretion. • Share information on the special study on the *Ceriodaphnia dubia* test method with agencies who have that species in their permits.	SWRCB Toxicity Page: http://www.swrcb.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.shtml Toxicity Provisions adopted December 2020: https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/provisions_final.pdf Toxicity Workshop Presentations from 2017 BACWA Workshop: https://bacwa.org/bacwa-toxicity-workshop-september-18-2017/ Regional Water Board presentation on implementation of Statewide Toxicity Provisions from December 2020: https://bacwa.org/wp-content/uploads/2021/01/Slides-from-RWQCB-Regarding-R2-Tox-Language-in-NPDES-Permits-2020-12-08.pdf

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COMPOUNDS OF EMERGING CONCERN (CECS)			
• 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 has formed a Pretreatment and CECs Unit. • 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 monitoring program is already being implemented in Region 2 through the RMP.	• The Regional Water Board has stated that voluntary and representative participation in RMP CECs studies is key to avoiding regulatory mandates for CECs monitoring. These studies are informational and not for compliance purposes. BACWA developed a White Paper on representative participation to be used to support facility selection for these studies. • Bay dischargers are continuing to provide supplemental funding for RMP CECs studies through the NPDES Permit Amendment for Monitoring and Reporting adopted in December 2021 by the Regional Water Board.	• Continue to participate in the RMP Emerging Contaminants Workgroup. • Participate in RMP studies by collecting wastewater samples at member facilities. Studies in 2022 will include ethoxylated surfactants in wastewater, in addition to the Regional PFAS Study and OPC-funded microplastic study (see below). • Provide ongoing updates to White Paper for use by the RMP in selecting representative POTWs for participation in CEC studies, and develop a proposal for ongoing monitoring.	RMP Emerging Contaminant Workgroup: http://www.sfei.org/rmp/ecwg#tab-1-4 BACWA CECs White Paper: https://bacwa.org/document/bacwa-cec-white-paper-updated-june-2020/ NPDES Permit Amendment for Monitoring and Reporting https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2021/R2-2021-0028.pdf
MICROPLASTICS			
• Microplastic pollution is a environmental threat with the potential to impact wastewater disposal and reuse, as well as biosolids end uses. • 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. As a result, the RMP is focusing future microplastics sampling efforts on stormwater pathways.	• In February 2022, the Ocean Protection Council adopted a Statewide Microplastics Strategy that calls for increased water recycling, additional monitoring of wastewater, source control in wastewater, and additional scientific research. • In 2021, the OPC funded a study investigating microplastic removal through wastewater treatment processes. The study is being carried out by SCCWRP. The study commenced in 2021 with a pilot study involving BACWA member agency participation. Full-scale sampling and analysis of influent, effluent, and biosolids is planned for 2022.	• Continue to participate in the RMP Microplastics Workgroup. • One or more BACWA member agencies may be selected to participate in the OPC-funded microplastic study. • Continue tracking State Water Board and Ocean Protection Council actions via the CASA Microplastics Workgroup. CASA is working with SCCWRP to provide additional funding for testing of new sample collection and analysis methods.	BACWA Microplastics Fact Sheet: https://bacwa.org/wp-content/uploads/2019/09/BACWA-Microplastics-flyer.pdf SFEI Microplastics project: https://www.sfei.org/projects/microplastics Ocean Protection Council Microplastics Strategy: https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20220223/Item_6_Exhibit_A_Statewide_Microplastics_Strategy.pdf

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PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)			
• Per- and polyfluoroalkyl 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. • Potential 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. • In April 2021, the formation of an "EPA Council on PFAS" was announced.	• DDW has developed drinking water notification levels (NLs) and response levels for PFOA, PFOS, and Perfluorobutane Sulfonic Acid (PFBS). • At DDW's request, OEHHA is developing NLs for seven other PFAS compounds and public health goals (PHGs) for both PFOA and PFOS as the next step in establishing drinking water MCLs. • In July 2021, OEHHA proposed a PHG of 0.007 ng/L for PFOA and 1 ng/L for PFOS. • In July 2020, the SWRCB issued an Investigative order for POTWs. Investigative orders have also been issued for landfills, airports, chrome platers, and refineries & bulk terminals. The July 2020 SWRCB investigative Order for POTWs is not applicable to Region 2 agencies. • EPA is beginning pretreatment standards rulemaking for two types of industrial users: Metal Finishing, and Organic Chemicals, Plastics and Synthetic Fibers. • In September 2021, EPA released Draft Method 1633 for analysis of PFAS in complex matrices like wastewater. • In October 2021, state legislation passed banning PFAS in children's products (AB 652) and food packaging (AB 1200).	• BACWA worked with RWB staff and obtained State Water Board approval to fund and conduct a Regional PFAS Study in lieu of the statewide investigative order. • SFEI is conducting this study in two phases: ○ In Phase 1, fourteen representative facilities collected samples in Q4 2020 for influent, effluent, RO concentrate, and biosolids. BACWA has prepared a Fact Sheet regarding Phase 1 results (see link at right). ○ Phase 2 of the PFAS Regional Study will be conducted in Spring 2022 and will include sampling of influent, effluent, and biosolids; residential sewersheds, commercial and industrial users; hauled waste; and groundwater. • BACWA's Phase 2 study results will support CASA's legislative efforts related to PFAS, such as sponsorship of AB 2247, which would initiate a publicly accessible reporting platform for PFAS in products. • BACWA will continue tracking developments at the State and Regional level.	BACWA PFAS Documents: https://bacwa.org/pfas-links/ SWRCB PFAS Resources: https://www.waterboards.ca.gov/pfas/ OEHHA Drinking Water: https://oehha.ca.gov/water EPA PFAS Resources https://www.epa.gov/pfas EPA PFAS Strategic Roadmap (Oct 2021) https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024 AB 2247: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB2247

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SSS WDR REISSUANCE			
• The State Water Board plans to reissue the statewide Sanitary Sewer System General Order (SSS-WDR) in 2022. • State Water Board staff sought out early stakeholder engagement through outreach to CASA and the Regional Associations, and NGOs. • The State Water Board's goals for the update are: ○ Updating the 2006 Order ○ Clarifying compliance expectations and enhancing enforceability ○ Addressing system resiliency, including climate change impacts ○ Identifying valuable data and eliminating non-valuable reporting requirements	• A draft for public review and comment was released on January 31, 2022. This version addressed many of BACWA and CASA's comments on the previous February 2021 informal staff draft. • BACWA worked with the Collection Systems committee, CASA, CVCWA, SCAP, and other allies to review the public review draft SSS-WDR, provide oral comments for the State Water Board and its staff, and prepare a detailed comment letter. Written comments were submitted in April 2022.	• Continue to coordinate with State Water Board staff as the revised draft version of the SSS-WDR is prepared. State Water Board staff plan to prepare a response-to-comments document and revised draft for State Water Board consideration by late 2022. • Continue to coordinate with CASA, CVCWA, and SCAP on proposed revisions to the SSS-WDR. • Discuss response to issues such as exfiltration via BACWA's Collection Systems Committee.	State Water Board SSS-WDR page: https://www.waterboards.ca.gov/water_issues/programs/sso/ Public Review Draft of SSS-WDR: https://www.waterboards.ca.gov/water_issues/programs/sso/docs/2022-01-draft-sanitary-sewer-systems-general-order.pdf BACWA Comment Letter on Public Review Draft: https://bacwa.org/wp-content/uploads/2022/04/BACWA-Comments-to-SWRCB-on-Draft-SSS-WDR-2022-04-08.pdf

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ELAP UPDATE			
• In May 2020, the State Water Board adopted new comprehensive regulations for the Environmental Laboratory Accreditation Program. • Adoption of the new regulations was required by AB 1438, legislation that became effective in 2018. • The new ELAP regulations will replace the current state-specific accreditation standards with a national laboratory standard established by The NELAC Institute (TNI).	• The new ELAP regulations became effective as of **January 1, 2021**. Compliance with TNI standards is required beginning **January 1, 2024**. • Adoption of TNI standards poses a challenge since there are more than 1,000 individual requirements. Setup costs may include: ○ Hiring and/or training staff; ○ Hiring consultants to set up the TNI documentation framework; ○ Purchasing Laboratory Information Management System (LIMS) software; ○ Purchasing documents and training material from TNI, etc. • The new standards will be a particular burden on small laboratories, which may choose to close if they cannot economically meet the new standards. • ELAP's "Roadmap to ELAP Accreditation" Program is the outreach and training component of the new regulations. ELAP staff have presented to the Lab Committee in June 2020, February 2021, and April 2021. ELAP has contracted with A2LA Workplace Training to provide training sessions. • The BACWA Lab Committee began providing monthly TNI training sessions beginning in July 2021.	• **Offer monthly training sessions to BACWA members.** The free virtual training sessions are open to BACWA members holding a valid copy of the 2016 TNI Standard, and are occurring on the 3rd Tuesday of each month throughout 2022. Training is provided by Diane Lawver of Quality Assurance Solutions, LLC, and other subject matter experts. • Communicate with ELAP staff on behalf of BACWA's Laboratory Committee as new guidance and training materials are developed for TNI implementation and methods updates (e.g., new timeline tool linked at right) • Continue to work through BACWA's Laboratory Committee to support members as they navigate laboratory accreditation under the new TNI standards. • Publicize training opportunities offered by consultants, ELAP, and others. • Provide a forum for BACWA laboratories to share experiences and lessons learned from various approaches to TNI implementation.	State Water Board's 'Roadmap to ELAP Accreditation' page: https://www.waterboards.ca.gov/drinking_water/certlic/labs/roadmap_to_elap_accreditation.html Roadmap to Accreditation Presentation to BACWA Lab Committee: https://bacwa.org/wp-content/uploads/2020/06/California-ELAP-Regulations-BACWA_06092020.pdf State Water Board's ELAP regulations page: http://www.waterboards.ca.gov/drinking_water/certlic/labs/elap_regulations.shtml Monthly Training Session flyer: https://bacwa.org/wp-content/uploads/2021/07/BACWA-Lab-TNI-Training-Series-Flyer.pdf ELAP Timeline Guidance Tool: https://www.waterboards.ca.gov/drinking_water/certlic/labs/docs/2022/elap-scheduler-1-1.xlsx

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PHASE-OUT OF BIOSOLIDS AS ALTERNATIVE DAILY COVER			
• Regulatory drivers are indicating that biosolids used as alternative daily cover (ADC) or disposed in landfills will be phased out: ○ 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) • Regulations implementing SB 1383 went into effect on January 1, 2022, so the State can begin enforcement on jurisdictions. Jurisdictions can begin local enforcement January 1, 2024, and compliance is required by January 1, 2025. • While the regulations implementing SB 1383 do not 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. • The Bay Area Biosolids Coalition (BABC) was formed to find sustainable, cost-effective, all-weather options for biosolids management. BABC is a BACWA Project of Special Benefit.	• BACWA's 2021 Biosolids Trends Survey Report compiles member agency activities in 2018-2020, as well as survey responses regarding SB 1383 implementation. • Requirements for SB 1383 implementation include: ○ Diverted biosolids must be anaerobically digested and/or composted to qualify as landfill reduction. ○ Beginning Jan 1, 2022, CalRecycle will consider whether other specific treatment technologies can qualify as landfill reduction (per Article 2 of SB 1383). ○ Local ordinances restricting land application are disallowed. ○ Jurisdictions that divert organic waste must also procure the end products of diversion, such as biogas, biomethane, and compost (but not biosolids). • Currently, some County ordinances restrict the beneficial reuse of biosolids. CalRecycle considers bans on land application to be unenforceable, and Cal Recycle has agreed to approach Counties with restrictive ordinances to conduct outreach and assess compliance.	• Follow efforts of the Regional Water Board to revise biosolids permitting requirements for land application and disposal**.** • The recently completed *Biosolids in the Baylands* white paper will soon be released by the San Francisco Bay Joint Venture. The white paper identifies data gaps that may result in agencies with land application sites in the Baylands being required to conduct additional monitoring. • Actively work through CASA with California Air Resource Board, CalRecycle, State Water Board, and California Department of Food and Agriculture to develop sustainable long-term options for biosolids beneficial use. • Participate in BAAQMD's Organics Recovery Technical Working Group to educate their staff on implementation of SB 1383 at the Air District level. • Meet with BAAQMD regularly in 2022 to discuss alignment of state and local regulations. • Work with CASA and others to respond to CCDEH concerns regarding safety standards for land application (see July 2021 letter, link at right).	BACWA 2021 Biosolids Trends Survey Report: https://bacwa.org/wp-content/uploads/2021/12/BACWA-2021-Biosolids-Trends-Survey-Report.pdf BABC website: http://www.bayareabiosolids.com/ CASA White Paper on SB 1383 Implementation: https://bacwa.org/document/summary-of-sb-1383-and-its-implementation-casa-2020/ CASA July 2021 Response Letter to CCDEH https://casaweb.org/wp-content/uploads/2021/07/CASA-Response-to-CCDEH-Letters-071321.pdf CalRecycle website for California Short-Lived Climate Pollutant Reduction Strategy https://www.calrecycle.ca.gov/organics/slcp CalRecycle FAQ for SB 1383 Implementation https://calrecycle.ca.gov/organics/slcp/faq

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CLIMATE CHANGE MITIGATION			
• 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: ○ Short-lived climate pollutants ○ Carbon sequestration on Natural and Working Lands ○ Largest emitters (transportation, electricity, and industrial sectors) The Scoping Plan is being updated in 2022 targeting carbon neutrality by 2045 and, if possible, 2035. • SB 1383 (Short-Lived Climate Pollutant Reduction) calls for: ○ 40% methane reduction by 2030 ○ 75% diversion of organic waste from landfills by 2025 ○ Policy / regulatory development encouraging production/use of biogas • BAAQMD developed a Clean Air Plan requiring GHG emissions supporting CARB's 2050 target. • BAAQMD has proposed the development of Regulation 13 (climate pollutants) targeting GHG reductions related to organics diversion and management. • 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.	• CARB is pursuing rapid fleet electrification, including medium and heavy-duty vehicles, through the Advanced Clean Fleet rule. Complete electrification will be difficult for heavy-duty trucks, and will remove a potential market for biogas. CASA is engaging on this issue through the Scoping Plan Update and other avenues to request continued allowance of biogas as a sustainable transportation fuel. • 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. • The EPA is revisiting procedures for allocation of renewable fuel credits (RINs) for food waste-based and sludge-based biogas, and CASA is engaging on this issue. • CARB's previous interest in nitrous oxide emission estimates and/or emission factors for POTWs has shifted to toxic air contaminants. See Toxic Air Contaminants - BAAQMD Rule 11-18, AB 617, and AB 2588. • BAAQMD is developing a suite of Rules under Regulation 13 for climate pollutants methane and nitrous oxide. However, rule development has been suspended due to COVID-19 and lack of data. The delay is allowing time to summarize information about current best management practices.	• Review a summary of the AIR committee-led survey regarding current methane management practices at anaerobic digesters and sludge lagoons. After committee review, this summary will be shared with BAAQMD staff. • Look for ways to inform BAAQMD on opportunities and challenges for climate change mitigation by Bay Area POTWs, including education about anaerobic digesters and POTW operations. • Work with PG&E and BAAQMD to explore options for POTWs to inject biogas into PG&E pipelines. In February 2022, the CPUC approved a mandatory biomethane procurement program for CA's four large gas IOUs (including PG&E) under SB 1440. CASA has been discussing the barriers to pipeline injection with CPUC staff, proposing a reduction in their standard from 990 Btu/scf to 970 Btu/scf.	Climate Change Scoping Plan, including 2022 Update: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan CARB Short Lived Climate Pollutant Reduction Strategy: https://www.arb.ca.gov/cc/shortlived/meetings/03142017/final_slcp_report.pdf CARB Advanced Clean Fleet Rule: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets/about SB 1383: https://www.calrecycle.ca.gov/organics/slcp BAAQMD Clean Air Plan: http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans BAAQMD Regulation 13 http://www.baaqmd.gov/rules-and-compliance/rules/regulation-13-climate-pollutants

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CLIMATE CHANGE ADAPTATION			
• Climate change and water resilience are a strategic priority of both the State Water Board and Regional Water Board. • The Regional Water Board is planning to modify the Basin Plan to address climate change and wetland policy. The changes will occur through multiple Basin Plan amendments. • In April 2019, Governor 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. • Bay Area coordination occurs through Bay Adapt, BayCAN, and other venues. BACWA has signed a letter of support for the Bay Adapt Joint Platform. • In April 2022, the State released a California Climate Adaptation Strategy, including an updated climate change assessment for the Bay Area.	• The California Coastal Commission's November 2021 Sea Level Rise Planning Guidance recommends that agencies "understand and plan" for 2.7 feet of sea level rise by 2050. • The State Water Board is planning to send a data request 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 February 2022 Executive Officer's Report included a synthesis of the Regional Water Board's 2021 POTW questionnaire regarding climate change vulnerability and adaptation. • In March 2022, the Regional Water released a draft Basin Plan amendment addressing dredge and fill procedures near the region's shorelines, especially for climate adaptation projects. The draft Amendment also references wastewater discharges to horizontal levee projects. BACWA prepared a comment letter supporting the amendment and suggesting minor edits. Although separate from the Basin Plan amendment, the NDPES division concurrently released draft guidance regarding NPDES permitting of nature-based solutions.	• **Discuss follow-on actions to the current draft Basin Plan Amendment** with Regional Water Board staff**.** The current Basin Plan amendment is focused on dredge and fill procedures, not NPDES permitting. Future Basin Plan amendments or other policy adjustments could incentivize wastewater agencies to participate in nature-based climate solutions. • 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. Survey expected to be released in 2022. • Continue to work with Regional Water Board and other resource agencies to look for regulatory solutions to encourage wetlands projects for shoreline resiliency. • Coordinate with BABC, SFEI and Sonoma Land Trust to circulate the final version of the Biosolids in the Baylands white paper (see also Biosolids section, above).	California Coastal Commission's *Critical Infrastructure at Risk* https://documents.coastal.ca.gov/assets/slr/SLR%20Guidance_Critical%20Infrastructure_12.6.2021.pdf "Are Municipal Wastewater Agencies Prepared for Climate Change?" https://www.waterboards.ca.gov/rwqcb2/board_info/agendas/2022/February/5_eo.pdf Draft Climate Change Basin Plan Amendment" https://www.waterboards.ca.gov/sanfranciscobay/public_notices/#basin California Climate Adaptation Strategy https://climateresilience.ca.gov/ Bay Adapt Joint Platform https://www.bayadapt.org/joint-platform/ Bay Area Climate Adaptation Network (BayCAN) https://www.baycanadapt.org/

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TOXIC AIR CONTAMINANTS			
• 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 conduct site-specific Health Risk Screening Analyses (HRSAs) and 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 air toxics and GHGs). POTWs within communities already impacted by air pollution may have to accelerate implementation of risk reduction measures. • AB 2588 (Air Toxics "Hot Spots" Program) - Establishes a statewide program for the inventory of air toxics emissions from individual facilities, as well as requirements for risk assessment and public notification of potential health risks. 2020 updates expanded compound list from >500 to >1,000.	• BACWA developed a White Paper on BAAQMD Rule 11-18 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. • 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. • In the *Final Statement of Reasons* for rulemaking on AB 617 and AB 2588, CARB provided the wastewater sector time to develop a short-list of relevant compounds and perform a pooled emissions estimating effort to update outdated default emission factors (through 2028). • In December 2021, BAAQMD amended Rule 2-5 to reduce allowable levels of toxic air contaminants in new source permitting. In March 2022, BAAQMD and BACWA convened a working group to address concerns related to toxic air contaminants and rule-making, which will meet quarterly.	• Continue participating in the BAAQMD working group to discuss toxic air contaminants, rule development, and related issues. BACWA will provide information to BAAQMD about implementation of the two-step process. • Participate in CASA Subgroup meetings to develop Step 1 of the two-step process. • For Rule 11-18, respond to BAAQMD data request beginning in 2022. There will be a 60-day turn-around to comply with the data request. Following data collection and verification, BAAQMD will develop HRAs for facilities with a cancer PS>10 or non-cancer PS>1.0. • Use the tool developed by the AIR Committee to address emission contributions from influent flows, which will be used to update emissions inventory values. • Report "business as usual" for air toxics through 2028. If BAAQMD requests additional monitoring of air toxics, member agencies should refer to the one-page handout on this topic prepared by CASA. The wastewater sector has until 2028 to perform a statewide "two-step process" in collaboration with CARB and air districts to determine a shortlist of compounds relevant to the wastewater sector to report.	BAAQMD Rule 11-18 page: http://www.baaqmd.gov/rules-and-compliance/rule-development/rules-under-development/regulation-11-rule-18 Rule 11-18 Process Flowchart: https://bacwa.org/document/baaqmd-11-18-process-flowchart-08-17-17/ CARB page on AB 617 and AB 2588: https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting *Final Statement of Reasons* https://ww3.arb.ca.gov/board/15day/ctr/fsor.pdf CASA One-Page Handout on Air Toxics Reporting (Updated) https://bacwa.org/wp-content/uploads/2022/03/CTR-EICG_CASAOnePageIssue-Approach_March2022.pdf BAAQMD Rule 2-5 https://www.baaqmd.gov/rules-and-compliance/rules/reg-2-permits?rule_version=2021%20Amendments

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RECYCLED WATER			
• Approximately 10 percent of the municipal wastewater of Region 2 POTWs is currently recycled. Expansion of recycled water projects is a goal of many BACWA members, but implementation is slowed by high costs, regulatory uncertainty, and administrative requirements. • As of 2018, the State Water Board has adopted uniform water recycling criteria for two types of Indirect Potable Reuse: surface water augmentation and groundwater augmentation. • As of 2020, virtually all recycled water in Region 2 was produced at centralized facilities using municipal wastewater, and was treated to meet standards for non-potable reuse.	• Beginning in 2020, all agencies have been required to report monthly wastewater and recycled water volumes into the State's Geotracker database. • Regulations for Direct Potable Reuse are under development. The State Water Board is required to adopt criteria for raw water augmentation by December 31, 2023. • By the end of 2022, the State Water Board is required to adopt risk-based water quality standards for onsite treatment and reuse of non-potable water in multi-family, mixed use, and commercial buildings. San Francisco has already begun to implement a similar Onsite Non-Potable Reuse program for large developments in the city. • BACWA is currently completing a Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling, as required by the 2nd Nutrient Watershed Permit.	• Review draft regulations for Direct Potable Reuse and Onsite Non-potable Reuse and work through Recycled Water committee to develop comments, as needed. • Track California legislation with potential impacts on recycled water funding, mandates, or regulations. • For the study of nutrient removal via recycled water, review barriers and challenges to recycled water expansion identified by the study, and strategize next steps.	Water Boards Recycled Water Policy and Regulations https://www.waterboards.ca.gov/water_issues/programs/recycled_water/ "Purple Book" of Recycled Water Regulations https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/lawbook/rwregulations.pdf August 2021 Draft DPR Regulations https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/2021/aug2021addendum_ep.pdf Volumetric Annual Reporting Data: https://www.waterboards.ca.gov/water_issues/programs/recycled_water/volumetric_annual_reporting.html

Previously covered issues with no updates can be found in previous BACWA issues summaries.

ACRONYMS

ADC	Alternate Daily Cover
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
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
DDW	Division of Drinking Water, State Water Resources Control Board
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)
MGD	Million Gallons per Day
NACWA	National Association of Clean Water Agencies
NELAC	National Environmental Laboratory Accreditation Conference
OAL	Office of Administrative Law
OEHHA	Office of Environmental Health Hazard Assessment
PCB	Polychlorinated Biphenyl
PFAS	Per- and Polyfluoroalkyl Substances
PFBS	Perfluorobutane Sulfonic Acid
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonic Acid
POTW	Publicly Owned Treatment Works
PS	Prioritization Score
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
WQBEL	Water Quality Based Effluent Limitation
WQO	Water Quality Objective