



KEY REGULATORY ISSUE SUMMARY

Updated September 15, 2025

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

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New updates in this version are shown in Purple highlighting – [Link to Previous Versions](#)

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
NUTRIENTS IN SAN FRANCISCO BAY			
<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. In the early 2000s, monitoring data of the Bay suggested that this historic resilience could be weakening. In 2012, stakeholders in the region formed the Nutrient Management Strategy (NMS) to prioritize scientific studies and ensure that all science to be used for policy decisions is conducted under one umbrella. Program management of the NMS is led by the San Francisco Estuary Institute (SFEI). In summer 2022, a harmful algae bloom in San Francisco Bay brought increased public attention to this topic. 	<ul style="list-style-type: none"> For FY26, BACWA is contributing \$2.2M to fund scientific research by the NMS science team, fulfilling a requirement of the 2024 Watershed Permit. In recent years, the NMS has been successful in attracting funding from other sources, such as NOAA and EPA, complementing BACWA's contributions. Continued federal funding is uncertain. The focus of current scientific efforts is improving model representation of biogeochemistry, light attenuation, dissolved oxygen, and harmful algal bloom dynamics. In May 2025, the NMS Steering Committee finalized a multi-year 2025-2030 Science Plan, as well as a more detailed work plan for the near term in the FY26 Program Plan. Recent progress is summarized in the NMS FY26 Annual Report. 	<ul style="list-style-type: none"> Share the recently-completed summary of the NMS science program with interested community members. Science to Inform Management: An Overview of the Nutrient Management Strategy is suitable for wide distribution. Continue to participate in NMS steering committee, planning subcommittee meetings, and technical workgroups. Provide funding for scientific studies via the Nutrient Surcharge. Continue to leverage BACWA members and technical consultants to provide review of recent work products and charge questions for the science team. Continue to work with NMS scientists to obtain summaries of scientific accomplishments for public use. 	<p>Science to Inform Management: An Overview of the Nutrient Management Strategy</p> <p>BACWA Nutrients Page</p> <p>SFEI Nutrient Management Strategy Page</p> <p>NMS Steering Committee Meeting Materials</p> <p>FY26 Program Plan and 2025-2030 Science Plan</p> <p>NMS Work Products</p> <p>Data Visualizations, including remote sensing of algae blooms</p> <p>Baywise Website</p>

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SF BAY NUTRIENTS WATERSHED PERMIT			
<ul style="list-style-type: none"> • The 2024 Nutrients Watershed Permit requires: <ul style="list-style-type: none"> ○ Continued individual POTW nutrient monitoring and reporting; ○ Continued funding for science; ○ Effective in the 2025 dry season, interim performance-based effluent limits for Total Inorganic Nitrogen (TIN); ○ Effective in the 2035 dry season, final water quality-based effluent limits for TIN; ○ Continued group annual reporting for each water year (Oct. 1 – Sep. 30), with additional reporting related to the permit’s 10-year compliance schedule; ○ Recognition of “early actors” that began implementing nutrient removal projects before October 1, 2024; and ○ Completion of a regional planning study. • The final effluent limits in the 2024 Nutrients Watershed Permit are 40% lower than actual loads from the 2022 dry season, when San Francisco Bay experienced a harmful algae bloom. • More information related to the first (2014) and second (2019) Nutrients Watershed Permits is available on the BACWA website. 	<ul style="list-style-type: none"> • Through the nutrient surcharge levied on permittees, BACWA will fund compliance with the following provisions of the 2024 Nutrients Watershed Permit on behalf of its members: <ul style="list-style-type: none"> ○ Funding for scientific studies ○ Group Annual Reporting ○ Regional Planning Study • BACWA has hired the consulting firm HDR to assist with the Group Annual Reports and Regional Planning study. T • In June 2025, BACWA submitted a Scoping Plan for the Regional Planning Study to the Regional Water Board. The Regional Planning study is due in March 2029 and will address elements such as schedule, capital costs, rate impacts, cross-media impacts to air and biosolids, opportunities for multi-benefit projects, nutrient trading, and more. The Freshwater Trust is completing a water quality trading feasibility assessment as one of the initial tasks of the Regional Planning Study. • The 2024 Permit contains a 10-year compliance schedule for complying with the final effluent limits. Some agencies will have difficulty meeting this deadline due to the magnitude and complexity of anticipated projects. • The Regional Water Board is working on a Basin Plan Amendment that will allow compliance schedules longer than 10 years in limited circumstances. A draft Basin Plan Amendment was shared with BACWA members in August 2025, and BACWA is currently compiling member feedback for Regional Water Board staff consideration. 	<ul style="list-style-type: none"> • Review the Draft Basin Plan Amendment circulated in August 2025. BACWA’s Nutrient Strategy Team will next convene on October 9th to discuss BACWA’s comments on the draft. • Prepare to respond to Requests for Information from HDR related to nutrient removal planning, as required by the Permit and the subsequent letters provided by the Regional Water Board on May 13, 2025 and May 30, 2025. These RFIs will support compliance milestone reporting and the Regional Planning Study. • Agencies will continue to report nutrient monitoring data directly to CIWQS through monthly self-monitoring reports, which HDR will compile for Group Annual Reports. • Follow guidance on reporting annual TIN loads to CIWQS with each agency’s annual self-monitoring report. CIWQS reporting guidance will be shared soon via the BACWA Lab and Permits Committees. • BACWA will continue to facilitate information-sharing on technical topics, such as the August 2024 technical seminar on nutrient removal technology at Bay Area wastewater treatment plants, and the June 2025 tour of innovative treatment technologies at Linda County Water District. 	<p>2024 Nutrients Watershed Permit</p> <p>2024 Regional Water Board Resolution on Extending Compliance Schedule</p> <p>BACWA Nutrients Page</p> <p>Resources from Dr. David Jenkins Technical Series Nutrient Seminar (August 2024)</p> <p>2024 Group Annual Report (Submitted April 1, 2025, Corrected July 21, 2025)</p> <p>Scoping Plan for Regional Planning Study</p> <p>May 13, 2025 Letter from Regional Water Board on Group Annual Report</p> <p>May 30, 2025 Clarification from Regional Water Board on Early Actors</p>

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OCEAN ACIDIFICATION & HYPOXIA			
<ul style="list-style-type: none"> • Ocean acidification (low pH) is one of the potentially harmful effects of climate change in water bodies. It is caused by the uptake of carbon dioxide from the atmosphere and other sources. Ocean acidification threatens the survival of many marine organisms, especially those with carbonate shells which can dissolve under low-pH conditions. • Nutrients from wastewater and other sources can cause algae blooms which can lead to hypoxia (low dissolved oxygen) when the algae decays and exerts biological oxygen demand. This process can also lead to acidification when the carbon from the algae is released into the ocean as carbon dioxide. Because nutrient inputs and algal production can contribute to both problems, they are grouped together under the umbrella term “Ocean Acidification & Hypoxia” (OAH). • State Water Board policy regarding discharges to the Ocean are contained in the California Ocean Plan. Currently, no regulations in the Ocean Plan directly address OAH caused by wastewater discharges. However, future regulations could limit coastal discharges of nutrients in order to reduce the potential for OAH. The Ocean Protection Council is the main State agency supporting scientific efforts related to Ocean OAH along the California coast. 	<ul style="list-style-type: none"> • The Ocean Protection Council has funded the Southern California Coastal Water Research Project (SCCWRP) to conduct research and modeling on OAH due to nutrient pollution in southern California and along the San Francisco and Monterey coasts. Early modeling results show that the anthropogenic nutrient contributions to OAH is small in this region. • In 2023-2024, the National Water Research Institute convened an expert review panel to review the modeling efforts led by SCCWRP. Because of the work’s relevance to northern California wastewater agencies that discharge to coastal waters, BACWA’s Executive Director is assisting with the Project Steering Committee. The expert panel provided a final report with recommendations for improving the model to make it suitable for application in a regulatory context, such as quantifying uncertainty. Stakeholders are now in the process of prioritizing the implementing the expert panel’s recommendations. • In FY26, BACWA is financially contributing to a study of coastal nutrient loading led by CASA and HDR. The effort will characterize current and future nutrient loads by coastal POTWs to the coastal ocean between Monterey Bay and the Golden Gate. HDR will also provide an independent review of ROMS-BEC model parameters and run model scenarios. 	<ul style="list-style-type: none"> • Continue to track refinement of SCCWRP’s modeling tools, which could be used to establish State Water Board policy on nutrient discharges to the coastal ocean. The wastewater community is advocating for model improvements to accurately capture the impacts of wastewater discharges, and to inform monitoring work that will support our understanding of ocean impacts of nutrients. • Continue to participate in the San Francisco Bay Nutrient Management Strategy, which is already addressing many related issues. 	<p>State Water Resources Control Board’s California Ocean Plan</p> <p>Timelines for Planning, Policy, and Permitting Efforts at the State and Regional Water Boards</p> <p>Ocean Acidification and Hypoxia - California Ocean Protection Council</p> <p>National Water Research Institute - Expert Review Panel</p>

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PESTICIDES			
<ul style="list-style-type: none"> Pesticides are regulated via the Federal Insecticide, Fungicide, and Rodenticide Act (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. EPA reviews all registered pesticides at least once every 15 years. Each review allows an opportunity for public comment. Through the Bay Area Pollution Prevention Group (BAPPG) Pesticides Committee, 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. Based on the most (2024) BAPPG/BACWA Pesticide Watch List, the pesticides of highest concern in wastewater are: <ul style="list-style-type: none"> Pyrethroids (21 chemicals) Fipronil Imidacloprid 	<ul style="list-style-type: none"> BACWA continues to fund consultant support to write comment letters advocating for the consideration of POTW and surface water issues by EPA and the California Department of Pesticide Registration (CalDPR). The Regional Water Board leverages BACWA's efforts to provide their own comment letters. The BAPPG Pesticides Committee has developed a workplan for outreach on pet pesticides (see January 2025 meeting presentation). Additions to the BAPPG/BACWA Pesticides Watch List "moderate concern" tier in 2024 included the preservative carbendazim and Quaternary Ammonium Compounds (see CECs, pg. 7). In December 2024, EPA released a proposal to use aquatic life benchmarks from the Office of Pesticide Programs in the Clean Water Act program, where they could be used as recommended water quality criteria. If adopted, the Clean Water Act program would have new recommended water quality criteria for more than 750 pesticides. CalDPR is beginning to implement its Sustainable Pest Management Roadmap by setting up a process for pesticide prioritization. The prioritization process is to be led by a scientific advisory committee and will involve public engagement. BACWA submitted a comment letter on the process. CalDPR is also planning to issue grants through the SPM Grants Program. 	<ul style="list-style-type: none"> BACWA members are encouraged to conduct public and veterinary office outreach using flea and tick outreach toolkits. Baywise.org has flea and tick control messaging for pet owners and veterinarians. In addition, the BACWA website offers member agencies toolkits for conducting outreach to pet owners and veterinary offices. Consider working with member agencies or other partners to seek CalDPR grant funding related to outreach on flea and tick pet pesticides. Advocate for implementation of specific actions from the CalDPR Sustainable Pesticide Management Roadmap. Continue to comment on EPA pesticide re-registrations and CalDPR actions. Engage with EPA on proposed changes to the regulatory approval process for pesticides. Work with veterinary associations on messaging with respect to flea and tick control alternatives. Continue to develop summaries of EPA actions on pesticides. Look for opportunities to work with CalDPR on pesticides research. Work with other regional associations, such as CASQA, to collaborate on funding pesticide regulatory outreach. 	<p>BACWA Pesticide Regulatory Support Page</p> <p>Toolkits for Member Outreach on Flea and Tick Pest Control</p> <p>Baywise flea and tick pages</p> <p>CalDPR Sustainable Pest Management Roadmap</p> <p>BAPPG/BACWA Pesticides Watch List (2024)</p> <p>EPA Proposal: Common Effects Approach for Aquatic Life Protective Values for Pesticides</p> <p>January 2025 Presentation from S. Hughes to BAPPG on Pesticides</p> <p>February 2025 Pesticides Update to BACWA Executive Board</p>

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MERCURY AND PCBs			
<ul style="list-style-type: none"> • The Mercury & PCBs Watershed Permit is based on Total Maximum Daily Loads (TMDLs) for San Francisco Bay for each of these pollutants. • The Mercury & PCBs Watershed Permit was most recently reissued in December 2022, and it continues to require discharger support for risk reduction activities. BACWA is funding risk reduction activities on behalf of its members to comply with this permit provision. • Aggregate mercury and PCBs loads have been well below waste load allocations through 2023, the last year for which data have been compiled. • EPA Method 1668C for measuring PCB Congeners has not been promulgated by EPA. Effluent limitations are based on PCB Aroclors quantified using EPA Methods 625.1 or 608.3. BACWA prepared a guidance document to assist members with reporting results from EPA Method 1668C, which Water Board staff endorsed. • 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 in 2020. 	<ul style="list-style-type: none"> • The Regional Water Board plans to designate three new beneficial uses for Bay Area water bodies: Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB) and Subsistence Fishing (SUB). Water bodies with these beneficial uses could also be assigned lower mercury objectives. • The May 2025 Triennial Review identifies the effort to designate tribal and subsistence fishing beneficial uses as the Regional Water Board's highest priority for Basin Plan amendments. • In 2024, SFEI worked with stakeholders to develop a fish consumption survey for subsistence fishers that is needed for designation of the new beneficial use. BACWA funded completion of a small pilot project in March 2025 related to this fish consumption survey. In August 2025, BACWA contracted with SFEI to complete a larger pilot of the fish consumption survey in 2025-2027. • In late 2024, EPA proposed a Methods Update Rule that would withdraw the existing analytical methods for Aroclors (PCB mixtures) and promulgate a new method for PCB Congeners (Method 1628). The Mercury & PCBs permit uses Aroclors for compliance monitoring. Even if the proposed rule were finalized, there will be no change to monitoring until the Permit is reissued (2027+). • The Regional Water Board tentatively plans to re-open the Mercury TMDL in 2028, and to re-open the PCBs TMDL in 2030. 	<ul style="list-style-type: none"> • Keep members up-to-date on progress of the fish consumption survey that SFEI is piloting. This effort is being used to satisfy the risk reduction activities required for BACWA members to comply with the Mercury & PCBs watershed permit. • Work with Regional Water Board staff to understand the potential impact of a withdrawal of the EPA analytical method for PCBs Aroclors. • 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. 	<p>2022 Mercury & PCBs Watershed Permit (Effective Feb. 1, 2023)</p> <p>BACWA Risk Reduction Materials</p> <p>Mercury and PCB Load Trends 2013- 2024 Updated July 2025</p> <p>2024 Triennial Review Staff Report</p> <p>Planning for Fish Consumption Survey of Subsistence Fishers</p> <p>BACWA Guidance on PCB Congeners Sampling, Analysis, and Reporting Protocols (October 2024)</p> <p>EPA Methods Update Rules</p>

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STATE WATER BOARD TOXICITY PROVISIONS			
<ul style="list-style-type: none"> • The State Water Board adopted the Statewide Toxicity Provisions in 2021 as state policy for water quality control for all inland surface waters and estuaries. The Provisions establish: <ul style="list-style-type: none"> ◦ Use of Test of Significant Toxicity (TST) as statistical method to determine toxicity, replacing EC25/IC25; ◦ Numeric limits for chronic toxicity for POTWs >5 MGD and with a pretreatment program; smaller POTWs will 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 <i>Ceriodaphnia dubia</i> as the most sensitive species, numeric targets rather than limits were initially in effect until completion of a statewide quality assurance study in 2023. • The Statewide Toxicity Provisions became effective in June 2023, following EPA approval. Individual NPDES permits reissued in the San Francisco Bay Region are implementing the Toxicity Provisions and requiring use of the TST for chronic toxicity testing. Reissued permits no longer require acute toxicity monitoring. 	<ul style="list-style-type: none"> • EPA has not yet approved the Alternate Test Procedure for whole effluent toxicity testing. Until the Alternate Test Procedures are approved, the Regional Water Board has advised that dischargers should use the full five-concentration series for all tests, including routine monitoring and Species Sensitivity Screening Studies. • The State Water Board collaborated with stakeholders on a special study to improve the quality of <i>Ceriodaphnia dubia</i> testing. Upon completion of the study, the State Water Board compiled resources related to the study for dischargers that plan to use <i>Ceriodaphnia dubia</i> for chronic toxicity monitoring. • In 2024, the State Water Board received a report from staff on implementation of the provisions. The report stressed the importance of laboratories being ready to complete 3 chronic toxicity tests within a calendar month, as required when there is a “fail” result. • In February 2025, the BACWA Permits Committee provided member training on using the TST to interpret test results. • In August 2025, a California court ruled that the TST is not authorized under the federal Clean Water Act, but that it was properly adopted under State law. NPDES permit language will need to be adjusted to reflect this court ruling. For example, if TST-based effluent limits were enforceable under State law only, citizen suits would be impermissible. 	<ul style="list-style-type: none"> • Review Draft NPDES Permit language that will reflect the recent court invalidation of the TST under federal law. Individual NPDES permits may be reissued with this language in the San Francisco Bay region as soon as Oct. 2025, so draft language could be available as early as Sept. 2025. • Conduct toxicity testing using the Statewide Toxicity Provisions. All member agencies with individual NPDES permits reissued after August 2022 have transitioned to the new toxicity testing requirements. • Plan to conduct a species sensitivity screening to comply with the Toxicity Provisions, which require a study no more than 10 years old be used to determine a “Tier I” species for use in compliance monitoring. The BACWA laboratory committee has compiled tips related to sensitivity screening studies for member agencies’ use. • Members hiring a contract laboratory to perform testing using <i>Ceriodaphnia dubia</i> should utilize the Ceriodaphnia dubia Quality Assurance Guidance Recommendations from the multi-laboratory study, including the performance metrics listed in Appendix E of the report. 	<p>State Water Board Toxicity Page</p> <p>EPA Approval of Statewide Toxicity Provisions</p> <p>Ceriodaphnia dubia Study Resources, including link to Quality Assurance Guidance Recommendations</p> <p>CASA Webinar on Lessons from Ceriodaphnia Study</p> <p>Lab Committee Tips on Sensitive Species Screening</p> <p>State Water Board November 2024 Status Report on Implementation of Toxicity Provisions</p> <p>February 2025 Permits Committee Training on Using the Test of Significant Toxicity (McCampbell Analytical)</p> <p>Court Opinion on TST from Fifth Appellate District Court of California August 2025</p>

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CONTAMINANTS OF EMERGING CONCERN (CECs)			
<ul style="list-style-type: none"> Pharmaceuticals and other trace contaminants of emerging concern (CECs) are ubiquitous in wastewater at low concentrations and have unknown effects on aquatic organisms. The San Francisco Bay region has a CECs strategy focusing on monitoring/tracking concentrations of constituents with high occurrence and high potential toxicity. The State Water Board's Pretreatment and CECs Unit is also developing a similar monitoring strategy for use around the state. The Regional Water Board has stated that wastewater agencies' 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 support facility selection for these studies. The white paper was updated in 2024 to include statistical information about POTWs to assist with future CECs study design. 	<ul style="list-style-type: none"> Bay dischargers are continuing to provide supplemental funding for RMP CECs studies through the NPDES Permit Amendment adopted in 2021 by the Regional Water Board (R2-2021-0028). The State Water Board has recently increased its focus on CECs. In 2023, a State Water Board Science Advisory Panel released a report identifying risk-based and occurrence-based monitoring strategies in aquatic ecosystems. Similar approaches are already in use in the Bay Area by the RMP. In the Bay Area, the RMP has designated organophosphate esters (OPEs) and PFAS as CECs of "high" concern. CECs of "moderate" concern include alkylphenols and alkylphenol ethoxylates, bisphenols, fipronil and its degradates, imidacloprid, and microplastics. Carbendazim, a preservative used in paints and other products, was added to the "moderate" concern tier in 2024. Quaternary Ammonium Compounds (QACs) are one of several classes of chemicals categorized as a "potential concern" due to lack of data. Monitoring studies of Bay water and stormwater are planned in coming years. A report on QACs in wastewater was published by SFEI in 2024. In Fall 2024, both the RMP Annual Meeting and the RMP's annual publication, <i>The Pulse of the Bay</i>, focused on CECs in San Francisco Bay. 	<ul style="list-style-type: none"> Continue to participate in the RMP Emerging Contaminants Workgroup. Participate in RMP studies by collecting wastewater samples at member facilities. For 2026, the Emerging Contaminants Workgroup is focusing mainly on stormwater-related studies, including a study of PFAS in precipitation. The workgroup also plans to conduct wastewater and stormwater monitoring of biocidal preservatives, including carbendazim and isothiazolinones. Work with RMP staff to assist with study design for any new studies of CECs in wastewater. For example, in the future (2027+) the RMP may conduct a study on the co-benefits of regional nutrient upgrades on CECs removal. The study will not receive RMP funding for 2026 due to budget constraints. 	<p>RMP Emerging Contaminant Workgroup</p> <p>BACWA CECs White Paper (2024 version)</p> <p>2021 NPDES Permit Amendment for Monitoring and Reporting</p> <p>State Water Board CECs webpage</p> <p>SFEI Report on QACs in Wastewater</p> <p>The Pulse of the Bay 2024 – Contaminants of Emerging Concern</p> <p>RMP 2024 Annual Meeting Materials</p> <p>RMP Report: Contaminants of Emerging Concern in San Francisco Bay – A Strategy for Future Investigations (2024 version)</p> <p>Emerging Contaminants Update from SFEI (Presentation to BAPPG) August 2025</p>

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MICROPLASTICS			
<ul style="list-style-type: none"> • Microplastic pollution is an 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. 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 2022, the Ocean Protection Council (OPC) adopted a Statewide Microplastics Strategy that calls for increased water recycling, additional monitoring of wastewater, source control in wastewater, and additional scientific research. • OPC funded a study of microplastic removal through wastewater treatment processes, with participation from several BACWA member agencies. The study was completed in August 2024 and found overall removal efficiencies between influent and effluent averaged 95% 99%, and 99.9% for primary, secondary, and tertiary treatment, respectively. • Ongoing microplastics investigations by the RMP are focused on tire particles in stormwater. 	<ul style="list-style-type: none"> • The 2024 California Integrated Report (303(d) List) adopted by the State Water Board notes that San Francisco Bay is “potentially threatened” by microplastics. Due to data limitations, the Bay was <u>not</u> listed as an impaired water body during this listing cycle. • Unlike the 2024 Integrated Report, the 2026 Draft California Integrated Report (303(d) List) did not include an assessment of impairment due to microplastics. • Additional research to improve scientific understanding of microplastics in aquatic ecosystems will be needed to support a future impairment determination for the Bay. The Water Boards and OPC are supporting allocation of funding towards these research efforts. • In September 2025, AB 823 passed the California legislature, and will now go to the Governor for consideration. The bill would expand the AB 888 (2015) microbeads ban, which covered rinse-off personal care products, to include cleaning products and leave-on personal care products. 	<ul style="list-style-type: none"> • Continue to participate in the RMP Microplastics Workgroup. The workgroup is currently focused on monitoring efforts in the Bay and in urban stormwater. • Review and share the results of CASA-funded work being completed at the Southern California Coastal Water Research Project (SCCWRP) that is an add-on component to the recently completed OPC microplastics study. The add-on study will assess how well autosampling equipment, typically used by POTWs to collect wastewater samples for monitoring and compliance purposes, may provide representative samples for microplasticsJ. • Continue tracking State Water Board and Ocean Protection Council actions via the CASA Microplastics Workgroup. 	<p>BACWA Microplastics Fact Sheet</p> <p>RMP Microplastics Workgroup</p> <p>Ocean Protection Council Microplastics Strategy</p> <p>SCCWRP Report on Microplastics in California Wastewater Treatment Plants (2024)</p> <p>2024 California Integrated Report / 303(d) List</p> <p>2026 Draft California Integrated Report / 303(d) List</p>

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PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)			
<ul style="list-style-type: none"> Per- and polyfluoroalkyl substances (PFAS) are a group of human-made substances that are very resistant to heat, water, and oil. PFAS are used 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. PFAS in consumer products are a major source of PFAS to POTWs. Perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) are two types of PFAS no longer manufactured in the US; however, other types of PFAS are still produced and used in the US. PFAS are persistent in the environment, can accumulate within the human body, and have demonstrated toxicity at relatively low concentrations. 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 through food, especially fish. In 2020, the State Water Board issued an investigative order for POTWs. At that time, BACWA obtained approval to fund and conduct a Regional PFAS Study in lieu of the investigative order. In 2021, EPA released a PFAS Strategic Roadmap. 	<ul style="list-style-type: none"> In 2024, EPA finalized Maximum Contaminant Levels (MCLs) for several PFAS compounds in drinking water. In May 2025, EPA announced its intent to extend the MCL compliance deadlines for PFOS and PFAS, and to rescind the MCLs for the other PFAS compounds. California has not yet adopted the EPA's drinking water limits, although the issue is a 2025 priority of the Division of Drinking Water. Drinking water limits will not be applicable to wastewater discharges to the Bay, but they could be used in NPDES permits for inland dischargers. EPA identified industrial source control actions under Preliminary Effluent Guidelines Program Plan 16, but these efforts may be deferred by the current federal administration. 7 In December 2024, EPA released draft national recommended human health water quality criteria for PFOS, PFOA, and perfluorobutanesulfonic acid (PFBS). BACWA submitted a comment letter. In September 2025, SB 682 (Allen) passed the California legislature. If signed by the Governor, the bill would require that PFAS be phased out of six categories of consumer products: cleaning products, cookware, dental floss, juvenile products, food packaging, and ski wax. The Regional Water Board's Site Cleanup Program released Environmental Screening Levels for 16 PFAS compounds. The Regional Water Board is considering adoption of a general NPDES permit for groundwater dischargers containing technology-based effluent limits for PFAS. 	<ul style="list-style-type: none"> Member agencies are encouraged to support PFAS source control efforts, including legislation, regulations, and public outreach. BACWA is focused on source control as the best way to reduce PFAS in wastewater. A source control approach can be used for residential, commercial, and industrial sources, as well as legacy sources like landfill leachate and contaminated groundwater. Members should use Clean Water Act methods (EPA Method 1633 or 1621) for monitoring effluent, biosolids, or industrial wastewater. Develop a sampling plan for the next phase of BACWA's regional PFAS study to support the "PFAS Sources to Solutions" project being led by SFEI and the California Department of Toxic Substances Control. In FY26, BACWA plans to sponsor additional wastewater sampling focusing on sewershed sources of PFAS. Review EPA's January 2025 draft risk assessment for PFOA and PFOS in biosolids (see Biosolids page). 	<p>BACWA PFAS Study Summary</p> <p>State Water Board PFAS Resources</p> <p>EPA PFAS Resources</p> <p>EPA Drinking Water Limits</p> <p>EPA POTW Influent Study</p> <p>EPA NPDES Permitting Guidance (Dec. 2022)</p> <p>Presentation on BACWA's Regional PFAS Study at RMP 2023 Annual Meeting</p> <p>UC Irvine Report on PFAS in Residential Wastewater</p> <p>"PFAS Sources to Solutions" Project Overview</p> <p>Senate Bill 682 (Allen) – Environmental health: Product Safety: PFAS</p> <p>Baywise Website for PFAS</p> <p>BACWA PFAS Materials</p> <p>Regional Water Board Environmental Screening Levels</p>

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SANITARY SEWER SYSTEMS			
<ul style="list-style-type: none"> • In 2022, the State Water Board reissued the statewide Sanitary Sewer Systems General Order (SSS-WDR). The reissued order replaced the 2006 Order and the 2013 Monitoring and Reporting Program. • The 2022 SSS-WDR became effective in June 2023 and contains numerous new and modified requirements, such as: <ul style="list-style-type: none"> ○ A prohibition on discharges to groundwater ○ Reduced spill reporting requirements for small spills (spills from laterals or <50 gallons) ○ New spill monitoring requirements such as photo documentation and faster water quality sampling ○ New requirements for preparation of Sewer System Management Plans (SSMPs), including a focus on system resiliency, prioritizing corrective actions, and coordinating with stormwater agencies ○ Modified annual reporting requirements ○ New mapping requirements ○ Modified timelines for preparation of audits and SSMPs. 	<ul style="list-style-type: none"> • Due dates for audits and SSMPs under the reissued SSS-WDR vary by agency. The State Water Board has prepared an online tool to assist agencies in determining compliance dates. • Sewer system agencies must provide the State Water Board with a Geographic Information System (GIS)-based service area boundary map. In July 2025, the State Water Board opened the portal for submitting the maps and released a guidance document. • Maintaining an updated SSMP is a core requirement of the SSS-WDR. SSMP updates are required every six years, and must contain the 11 elements described in the reissued SSS-WDR. BACWA has prepared a Guide for Developing and Updating SSMPs, now available through the BACWA and State Water Board websites. • In 2024, BACWA completed a member survey of sewer lateral ordinances. Agencies are using sewer lateral replacement ordinances and incentive programs to address ongoing concerns about infiltration and inflow (I&I). • The California Underground Safety Board is developing GIS standards for subsurface installations, including sewer pipelines. In July 2025, the Board released draft GIS Regulatory Language for stakeholder comment. The draft language requires agencies to record geospatial coordinates to a horizontal accuracy of 100 mm for all new subsurface installations. 	<ul style="list-style-type: none"> • Upload a sewer system boundary map to the State Water Board’s portal by the due date of December 31, 2025. • Participate in review of GIS regulatory language applicable to installation of new sewer system infrastructure. The Underground Safety Board recently collected comments on an initial draft, and formal rulemaking will follow at a later date. • Continue to use the Collections System Committee as a forum for discussing best practices for completing audits and SSMPs. • Continue to coordinate with CASA and CWEA on training opportunities for members to address compliance with new requirements in the 2022 SSS-WDR. 	<p>State Water Board SSS-WDR page</p> <p>Reissued SSS-WDR (General Order 2022-0103-DWQ), Effective June 5, 2023</p> <p>Materials from Clean Water Summit Partners Webinars on Reissued SSS-WDR</p> <p>SSMP and Audit Due Dates Lookup Tool from State Water Board</p> <p>Guide for Developing and Updating Sewer System Management Plans (2024)</p> <p>BACWA Private Sewer Lateral Survey Results (2024)</p> <p>State Water Board guidance document on submitting boundary maps</p> <p>Underground Safety Board Draft GIS Regulatory Language and Staff Report</p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
LABORATORY ACCREDITATION			
<ul style="list-style-type: none"> • In 2020, the State Water Board adopted new regulations for the Environmental Laboratory Accreditation Program (ELAP). • The new ELAP regulations replaced the previous state-specific accreditation standards with a national laboratory standard established by The NELAC Institute (TNI). • Compliance with TNI standards was required beginning January 1, 2024. • The TNI standards pose a particular challenge to small laboratories, many of which have closed because they cannot economically meet the new standards. This reduction has contributed to significant ELAP fee increases for the remaining laboratories. • From 2021 to 2024, the BACWA Lab Committee hosted 30 virtual sessions on the TNI standards. Diane Lawver of Quality Assurance Solutions, LLC, provided the training. The training sessions were recorded, and are available to download with a password (available upon request). 	<ul style="list-style-type: none"> • The TNI standards apply to every ELAP-certified laboratory, regardless of certificate expiration date and regardless of location. Some laboratories have not yet been assessed to the TNI standard. Starting January 1, 2024, ELAP will be sending laboratories a written request asking for information about assessment plans and requesting a TNI-compliant Quality Assurance manual. • In FY25, ELAP restructured its fees to increase fees for large laboratories with more than 500 fields of accreditation. Smaller laboratories had no fee increase. No increases to ELAP fees are expected in FY26. • ELAP is now implementing EPA's 2021 Method Update Rule, and advised labs to update any outdated methods by February 2024. • In April 2024, EPA finalized a routine Methods Update Rule (rMUR 2). In October 2024 and April 2025, the BACWA Laboratory Committee provided member training on changes to Standard Methods affected by this Methods Update Rule. This Methods Update Rule will be implemented by ELAP at a later date. • In December 2024, EPA proposed a Methods Update Rule to promulgate EPA Method 1633A for 40 PFAS compounds, EPA Method 1621 for adsorbable organic fluorine, and Method 1628 for 209 PCB Congeners. The action also proposes to withdraw the existing methods for PCB Aroclors. 	<ul style="list-style-type: none"> • 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. 	<p>State Water Board's ELAP regulations page, including links to timeline and relocation guidance tools</p> <p>ELAP Implementation of 2021 Method Update Rule</p> <p>EPA Methods Update Rules</p> <p>ELAP Fees – Stakeholder Meeting Information</p> <p>Materials from BACWA TNI Training Sessions 2021-2024 - request password from BACWA staff</p> <p>BACWA Laboratory Committee Meeting Materials</p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
BIOSOLIDS			
<ul style="list-style-type: none"> Regulatory drivers are leading to the phase-out of biosolids used as alternative daily cover (ADC) or disposed in landfills. SB 1383, requiring reductions in the amount of organic material deposited in landfills, went into effect in 2022. CalRecycle is the state agency responsible for implementation. Local enforcement of SB 1383 began in 2024, and compliance was required by January 1, 2025. Requirements include: <ul style="list-style-type: none"> Diverted biosolids must be anaerobically digested and/or composted to qualify as landfill reduction. CalRecycle is accepting applications to qualify other specific treatment technologies as landfill reduction (per Article 2 of SB 1383). Local ordinances restricting land application are disallowed. 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. 	<ul style="list-style-type: none"> Jurisdictions that divert organic waste must also procure the end products of diversion, such as biogas, biomethane, and compost (but not biosolids). Procurement rules are being phased in over three years (2023 to 2025) and there are interim rules regarding procurement of biogas from POTWs. CalRecycle and biosolids stakeholders are continuing to conduct outreach to counties with ordinances that restrict land application of biosolids. CalRecycle reviews technologies that may be equivalent to landfill diversion/reduction per Article 2 of SB 1383. CalRecycle has also provided clarification on technologies that <i>already</i> comply with SB 1383, and need not apply under Article 2 (e.g., land application of biosolids that have not been anaerobically digested). In 2024, BACWA prepared an updated Biosolids Trends Survey Report for calendar years 2021-2023. In early 2025, EPA released a draft risk assessment for PFOA and PFOS in biosolids. Public comments were due in August 2025. The draft risk assessment estimates human health risks arising from biosolids land application and surface disposal. The assessment considers risks via surface water, ground water, fish consumption, and milk consumption pathways, among others. If EPA determines that regulation of biosolids disposal is needed to reduce risk, this will occur in a future phase. 	<ul style="list-style-type: none"> As of July 2025, the Bay Area Biosolids Coalition (BABC) merged with BACWA and became BACWA's biosolids committee. The committee discusses topics such as communication, scientific research, land application, and regionalization of biosolids treatment. All members are invited to participate. If requested, respond to EPA's Influent Study of POTWs, which will also function as a nationwide sewage sludge survey. Facilities larger than 10 MGD may be required to participate in the survey and conduct sampling. EPA had planned to conduct the survey in 2025, but the current status is uncertain due to the change in EPA administration. Continue to follow emerging science and regulatory developments regarding PFAS, including EPA's draft risk assessment and CERCLA hazardous waste designations for PFOA and PFOS. Engage through CASA and BABC to follow new legislation affecting biosolids processing and disposal. Actively work through CASA with State agencies to develop sustainable long-term options for biosolids beneficial use. Meet with Air District staff regularly to discuss alignment of state and local regulations that affect biosolids treatment and end uses. 	<p>BACWA Biosolids Trends Surveys</p> <p>Bay Area Biosolids Coalition</p> <p>CASA White Paper on SB 1383 Implementation</p> <p>CalRecycle - Short-Lived Climate Pollutant Reduction Strategy</p> <p>CalRecycle Procurement FAQ (Updated by AB 1985)</p> <p>SB1383 Article 2 Determination</p> <p>EPA National Sewage Sludge Survey</p> <p>EPA Draft Risk Assessment for PFOA and PFOS in Biosolids</p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CLIMATE CHANGE ADAPTATION			
<ul style="list-style-type: none"> Climate change and water resilience are strategic priorities of both the State Water Board and Regional Water Board. The State's Climate Change Assessment is the scientific foundation for climate-related vulnerability. Each assessment also includes details specific to the Bay Area region. The Fifth Climate Change assessment for California is currently underway. The State's Climate Adaptation Strategy is updated every three years. The 2024 update was released in September 2025. Bay Area coordination occurs through Bay Adapt, the Bay Area Climate Adaptation Network (BayCAN), and other venues. BACWA has signed a letter of support for the Bay Adapt Joint Platform. The Regional Water Board is modifying the Basin Plan to address climate change and wetland policy. The changes will occur through multiple Basin Plan amendments. Shallow groundwater response to SLR is a concern in low-lying Bay Area communities. Information and maps about current and future depth-to-groundwater is available for five Bay Area counties from Pathways Climate Institute and SFEI (plus Solano County mapping is underway), while Valley Water offers information on Santa Clara County. 	<ul style="list-style-type: none"> In June 2024, the Regional Water Board adopted a Climate Change Basin Plan amendment addressing dredge and fill procedures near the region's shorelines, especially for climate adaptation projects. Regional Water Board staff plan to seek Office of Administrative Law approval by the end of 2025. In 2024, the Ocean Protection Council (OPC) adopted updated SLR guidance. Compared to the 2018 version, projections for extreme SLR (i.e., H++ scenario) were removed, and the range of projections has narrowed considerably, especially for 2050. In 2024, the Bay Conservation and Development Commission (BCDC) adopted Sea Level Rise planning guidelines for the Bay Area as part of the Regional Shoreline Adaptation Plan. To comply with SB 272, the Plan requires cities and counties to develop subregional sea level rise adaptation plans by 2034. BCDC hosted a series of informational webinars in summer 2025. In late 2024, the California Coastal Commission updated its sea level rise policy guidance to conform to OPC's new guidance. The guidance document also contains specific recommendations related to wastewater infrastructure. SFEI offers resources to support planning of nature-based shoreline adaptation projects, such as the Baylands Resilience Metrics Mapbook. 	<ul style="list-style-type: none"> Understand and begin planning to participate in the development of Subregional Shoreline Adaptation Plans. These adaptation plans are required for cities and counties per BCDC's 2024 Regional Shoreline Adaptation Plan; special districts should also participate in their development. Plans are due by 2034. Begin using the OPC's updated Sea Level Rise Guidance. Updates to the Coastal Commission's "Critical Infrastructure at Risk" SLR planning guidance are expected to follow. Continue to develop committee content on technical topics related to climate change, such as sea level rise projections and changes in precipitation. Work with Regional Water Board staff and BACWA members to update and revisit the Climate Change Information Request first sent to NPDES permittees in 2021. Continue to work with Regional Water Board and other resource agencies to look for regulatory solutions to encourage wetlands projects for shoreline resiliency. SFEI recently began developing a decision support tool to help accelerate the implementation of nature-based shoreline projects. 	<p>Regional Water Board Basin Plan Amendment on Climate Change and Aquatic Habitat</p> <p>OPC 2024 Sea Level Rise Guidance</p> <p>California Coastal Commission Sea Level Rise Policy Guidance Update (Nov. 2024)</p> <p>California Climate Adaptation Strategy (Sep. 2025)</p> <p>BayCAN Funding Tracker</p> <p>BCDC's Regional Shoreline Adaptation Plan (2024)</p> <p>BCDC Webinars on Regional Shoreline Adaptation Plans</p> <p>Bay Adapt</p> <p>SFEI Shallow Groundwater Mapping (March 2025)</p> <p>Valley Water - Groundwater Response for Santa Clara County</p> <p>SFEI - Baylands Resilience Metrics Mapbook</p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CLIMATE CHANGE MITIGATION			
<ul style="list-style-type: none"> • The California Air Resources Board's (CARB's) 2022 Climate Change Scoping Plan Update lays out the approach for the State to meet its greenhouse gas (GHG) emissions, including policies addressing short-lived climate pollutants, carbon sequestration, and the largest emitters (transportation, electricity, and industrial sectors). • CalRecycle is implementing SB 1383 (Short-Lived Climate Pollutant Reduction) to reduce methane emissions. SB 1383 requires diversion of organic waste from landfills, and re-routing organics from landfills to digesters at POTWs is one way to accomplish this. • The Bay Area Air District developed a Clean Air Plan that outlines local strategies to address climate pollutants. The Air District is currently leading an effort to develop a Comprehensive Climate Action Plan for eight counties in the region. • The Air District proposed the development of Regulation 13 (climate pollutants) targeting methane and nitrous oxide reductions. After a pause of several years, the Air District began revisiting Regulation 13 in 2024. • The State Water Board's 2017 Climate Change Resolution addresses adaptation, ecosystem resilience, water use and efficiency, and greenhouse gas emissions. 	<ul style="list-style-type: none"> • CARB has pursued rapid fleet conversion to zero-emission vehicles (ZEVs), including medium and heavy-duty vehicles, through the Advanced Clean Fleets Regulation. • In January 2025, CARB withdrew its waiver requests to EPA for key portions of the Advanced Clean Fleets rule. CARB has announced that it plans to continue to enforce the State and Local Government Agency Fleets portion of the regulation. • In 2024, CARB re-opened the Advanced Clean Fleets regulations to incorporate requirements of AB 1594 by expanding ZEV purchase and daily usage exemptions for public agency utilities. In late July, CARB released a draft regulatory package for 45-day review. • In addition to pushing for ZEVs, CARB recently revised the Low Carbon Fuel Standard to emphasize hydrogen rather than biomethane as a transportation fuel, effective July 1, 2025. • CASA is continuing to advocate for a pathway for renewable natural gas in the context of the Advanced Clean Fleet and Low Carbon Fuel Standard amendments. • As a first step in revisiting Regulation 13, the Air District is developing a white paper on anaerobic digesters and potentially associated emissions. A draft version of the white paper is expected in October 2025. • The State Water Board is crafting a new Climate Change Resolution that will address Water Boards actions on climate change mitigation and adaptation. A draft is expected in Fall 2025. 	<ul style="list-style-type: none"> • Continue to track implementation of the Advanced Clean Fleets rule. Comments are due Sept. 15th for a suite of proposed amendments that would exempt some traditional utility-specialized vehicles used by public agency utilities, per AB 1594. BACWA members are invited to coordinate with CASA to speak at the public hearing for the Advanced Clean Fleets amendments on September 25. • Support the Air District's development of a white paper on anaerobic digestion by providing applicable information on digestion and associated energy generation infrastructure. Review and provide comments on the draft white paper once it is released later in 2025. • Work with PG&E and the Air District to explore options for POTWs to inject biogas into PG&E pipelines under the utility's state-mandated biomethane procurement program. • Work with CASA to review and provide comments on the State Water Board's Climate Change Resolution. 	<p>CARB Climate Change Scoping Plan</p> <p>CARB Low Carbon Fuel Standard Amendments (Effective July 1, 2025)</p> <p>CARB Advanced Clean Fleets Rule</p> <p>CARB Rulemaking on Advanced Clean Fleets to incorporate AB 1594 (July 2025)</p> <p>CARB's ZEV Purchase Exemption List</p> <p>CalRecycle and SB 1383</p> <p>Bay Area Clean Air Plan</p> <p>Bay Area Comprehensive Climate Action Plan</p> <p>Bay Area Air District's Regulation 13 for Climate Pollutants</p> <p>EPA Renewable Fuel Standards</p> <p>PG&E Procurement</p> <p>State Water Board Comprehensive Response to Climate Change Resolution (2017)</p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
TOXIC AIR CONTAMINANTS			
<ul style="list-style-type: none"> ● Regulation 11, Rule 18 (Rule 11-18), adopted in 2017, is the Air District's local effort to protect public health from toxic air pollution from existing facilities, including POTWs. ● Per the Rule, the Air District will determine each facility's prioritization score (PS). Health Risk Assessments (HRAs) will be conducted for all facilities with a cancer PS>10 or non-cancer PS>1. Facilities verified to be above a threshold will have to implement a Risk Reduction Plan. ● 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) established a statewide program for the inventory of air toxics emissions from individual facilities, as well as requirements for risk assessment and public notification. ● Since 2022, Air District staff and BACWA representatives have been meeting about 3-4 times per year to address concerns related to toxic air contaminants and associated rule-making. Workgroup materials are available on the AIR Committee website. 	<ul style="list-style-type: none"> ● In April 2024, the Air District finalized updated Implementation Procedures for Rule 11-18 describing how the Air District will conduct HRAs. It also established rules for vendors or contractors to conduct HRAs, if allowed by the Air District. In August 2025, the Air District released draft amendments to Rule 11-18, draft amendments to the Implementation Procedures, and a Preliminary Staff Report. The draft amendments aim to improve program efficiency and accelerate the preparation of HRAs by requiring facility owners to conduct HRAs (rather than the Air District). Comments are due Oct. 13. ● To comply with provisions of AB 617 and AB 2588, the wastewater sector has until 2028 to perform a Pooled Emissions Study to update outdated default emission factors for toxic air contaminants. CASA is directing the Pooled Emissions Study with consultant support from Yorke Engineering. 27 BACWA member agencies are participating in the study by providing financial contributions. In FY26, BACWA plans to collect approximately \$620,000 from participating member agencies. ● In 2025, the project team has been meeting with CARB and staff from regional Air Districts to discuss the study plan. Regulator approval of the study plan is required before sampling can begin. The draft study plan for the Pooled Emissions Study will be submitted to CAPCOA (a coalition of regional air district staff) in Fall 2025, then later to CARB. 	<ul style="list-style-type: none"> ● Review the proposed amendments to Rule 11-18. BACWA's AIR Committee is preparing a comment letter on the amendments, and members are invited to share their comments. The Air District will also hold a virtual workshop on the evening of Thursday, October 2nd to explain the draft amendments and receive public comments. ● Review and understand the updated Rule 11-18 Implementation Procedures. For most POTWs with a relatively low prioritization score, the HRAs will not occur right away. These POTWs will likely be able to use updated emissions factors from the statewide pooled emissions study, as described below ● Report "business as usual" for air toxics through 2028 (through year 2027 data). The wastewater sector has until 2028 to perform the statewide Pooled Emissions Study. ● Continue participating in the BACWA-Air District workgroup to discuss toxic air contaminants, rule development, and related air quality regulatory issues. 	<p>Bay Area Air District Facility Risk Reduction Program Amendments (Rule 11-18)</p> <p>Bay Area Air District New Source Review of Toxic Air Contaminants (Rule 2-5)</p> <p>CARB page on AB 617 and AB 2588 and Final Statement of Reasons</p> <p>CASA Handout on Pooled Emissions Study</p> <p>CARB List of Approved Independent Contractors for Test Methods</p> <p>Timing of Rule 11-18 vs. Process for AB 617</p> <p>July 2024 BACWA Update to Air District Stationary Source Committee</p> <p>BACWA AIR Committee website</p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
BEST AVAILABLE CONTROL TECHNOLOGY			
<ul style="list-style-type: none"> • Best Available Control Technology (BACT) is a requirement for major new or modified sources of air pollution. • BACT is defined locally as part of the Air District's Rule 2-2, "New Source Review." BACT is established based on the most stringent level of emissions control that is achieved in practice and that is technologically feasible & cost effective. • CARB is working on proposed amendments to the off-road new diesel engine standards, called "Tier 5" rulemaking. The Tier 5 rulemaking aims to reduce oxides of nitrogen (NOx), particulate matter, and may also include first-time carbon dioxide (CO₂) emissions standards. • The Bay Area Air District is launching a three-year Engineering Program Manager Pilot Program with the intent of improving the permitting process for complex applications. This program will dedicate two Air District managers to work with selected facilities on challenging permit applications to ensure more efficient reviews, better communication, and improved transparency. Participating facilities will pay to cover the costs of Air District personnel. 	<ul style="list-style-type: none"> • BACWA has been working with the Air District to provide better transparency for future BACT determinations. The Air District plans to hire a BACT Coordinator in FY26 for more consistency in this program. • BACT for all standby generators >50 bhp is now Tier 4 emissions standards. In December 2020, the Air District issued a BACT determination for Tier 4 emissions standards for large standby generators (≥ 1,000 bhp). In October 2024, the Air District issued a BACT determination for Tier 4 emissions standards for midsize standby generators (> 50 bhp and < 1,000 bhp). The BACT determination went into effect on December 2, 2024. Options to comply with the new standards include: (a) an EPA-certified Tier 4 engine (b) a Tier 4-compliant engine that is packaged by the engine manufacturer with abatement equipment, or (c) A lower tier engine that has been retrofitted with after-market abatement equipment to meet Tier 4 standards. • In 2024, CARB began working on proposed amendments to the off-road diesel engine emissions standards (Tier 5 rulemaking). A workshop was held in October 2024. Based on CARB's schedule, Tier 5 standards would go into effect in the 2029-2034 timeframe. • Air District is gauging interest from facilities that may be interested in participating in the Engineering Program Manager Pilot Program. BACWA has already provided early feedback to the Air District about this pilot program. 	<ul style="list-style-type: none"> • Design new or modified standby generators to meet Tier 4 emissions standards. • Continue to coordinate with CASA to participate in review and public comment on CARB's Tier 5 rulemaking. • Provide feedback to Air District about BACWA membership's interest in participation in the Engineering Program Manager Pilot Program. 	<p>Air District BACT/TBACT Workbook</p> <p>Air District October 2024 Workshop on BACT Determination Slides and Video</p> <p>CARB Tier 5 Rulemaking</p> <p>Air District Engineering Program Manager Pilot Program Flyer and Webinar Recording</p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
RECYCLED WATER			
<ul style="list-style-type: none"> Approximately 10 percent of the municipal wastewater of Bay Area POTWs is currently recycled. Expansion of recycled water projects is a goal of many BACWA members, but implementation is slowed by high costs and administrative requirements. In 2018, the State Water Board adopted uniform water recycling criteria for two types of Indirect Potable Reuse: surface water augmentation and groundwater augmentation. In 2023, the State Water Board adopted uniform water recycling criteria for two types of Direct Potable Reuse: raw water augmentation and treated water augmentation. As of 2020, virtually all recycled water in the Bay Area was produced at centralized facilities using municipal wastewater, and was treated to meet standards for non-potable reuse. There are not yet any Indirect or Direct Potable Reuse projects in the Bay Area, although several are in the planning stage. 	<ul style="list-style-type: none"> The State Water Board is currently developing standards for onsite treatment and reuse of non-potable water in multi-family, mixed use, and commercial buildings. The rulemaking process for Onsite Nonpotable Reuse began in March 2025. Revised draft regulations were released in August 2025. State Water Board staff anticipates board adoption by the end of 2025 (at the earliest) and completion of rulemaking in April 2026. In 2023, BACWA completed a Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling, as required by the 2nd Nutrients Watershed Permit. In 2024 the Regional Water Board finalized a Basin Plan Amendment that will allow greater flexibility for NPDES permitting of reverse osmosis concentrate discharges to San Francisco Bay. Direct Potable Reuse regulations were finalized in 2024 and are now in effect. 	<ul style="list-style-type: none"> Continue to track adoption of regulations for Onsite Nonpotable Reuse. Once the regulations are adopted, BACWA intends to work with regulators and other stakeholders on implementation guidance for wastewater agencies. Continue to provide members with technical resources related to interagency coordination, such as cost-sharing agreements and permitting. These topics are based on feedback from BACWA's 2023 workshop on interagency collaboration in which wastewater and water agency representatives convened to discuss challenges and opportunities for expanding water recycling in the Bay Area. Continue to track the role of recycled water projects in diverting nutrient loads from San Francisco Bay. Significant nutrient load reductions and annual reporting on recycled water nutrient load diversions are required by the 2024 Nutrients Watershed Permit. BACWA will continue to compile information on recycled water nutrient load diversions as part of the Regional Planning Study due in 2029 (see page 2). Track California legislation with potential impacts on recycled water funding, mandates, or regulations. 	<p>Water Boards Recycled Water Policy and Regulations</p> <p>Direct Potable Reuse Regulations</p> <p>Rulemaking for Onsite Nonpotable Reuse Regulations (updated August 2025)</p> <p>BACWA Special Studies of Recycled Water and Nature-Based Systems</p> <p>California's Water Supply Strategy (2022)</p> <p>Basin Plan Amendment affecting Water Recycling (now also incorporated into the Basin Plan)</p> <p>Meeting Materials from April 2025 Joint Workshop with WaterReuse Northern California</p>

Previously covered issues with no updates can be found in previous [BACWA issues summaries](#).

ACRONYMS

ADC	Alternate Daily Cover	PCB	Polychlorinated Biphenyl
BABC	Bay Area Biosolids Coalition	PFAS	Per- and Polyfluoroalkyl Substances
BACT	Best Available Control Technology	PFHxS	Perfluorohexane Sulfonic Acid
BCDC	Bay Conservation and Development Commission	PFNA	Perfluorononanoic Acid
bhp	brake horsepower	PFOA	Perfluorooctanoic Acid
CalDPR	California Department of Pesticide Registration	PFOS	Perfluorooctane Sulfonic Acid
CARB	California Air Resources Board	POTW	Publicly-Owned Treatment Works
CASA	California Association of Sanitation Agencies	PS	Prioritization Score
CEC	Compound of Emerging Concern	QAC	Quaternary Ammonium Compound
CIWQS	California Integrated Water Quality System	RMP	Regional Monitoring Program
CWEA	California Water Environment Association	RPA	Reasonable Potential Analysis
EC25/IC25	25% Effect Concentration/25% Inhibition Concentration	SF Bay	San Francisco Bay
ELAP	Environmental Laboratory Accreditation Program	SFEI	San Francisco Estuary Institute
ELTAC	Environmental Laboratory Technical Advisory Committee	SLR	Sea Level Rise
EPA	United States Environmental Protection Agency	SSMP	Sewer System Management Plan
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act	TMDL	Total Maximum Daily Load
FY	Fiscal Year	TIN	Total Inorganic Nitrogen
GHG	Greenhouse Gas	TNI	The NELAC Institute
HFPA-DA	Hexafluoropropylene Oxide (HFPO) Dimer Acid, also known as GenX	TST	Test of Significant Toxicity
MCL	Minimum Contaminant Level (Drinking Water)	WQO	Water Quality Objective
MGD	Million Gallons per Day	ZEV	Zero-Emission Vehicle
NELAC	National Environmental Laboratory Accreditation Conference		
NMS	Nutrient Management Strategy		
OAH	Ocean Acidification and Hypoxia		
OEHHA	Office of Environmental Health Hazard Assessment		
OPC	Ocean Protection Council		