KEY REGULATORY ISSUE SUMMARY
Updated February 9, 2026

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

Contents

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			
• 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.	• 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.	• **Share the recently-completed summary of the NMS science program with interested community members.** • **Share outreach materials related to nutrients with the general public, such as this BACWA video on clean water infrastructure.** • **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.	Science to Inform Management: An Overview of the Nutrient Management Strategy BACWA Nutrients Page SFEI Nutrient Management Strategy Page NMS Steering Committee Meeting Materials FY26 Program Plan and 2025-2030 Science Plan NMS Work Products Data Visualizations, including remote sensing of algae blooms Baywise Website

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
SF BAY NUTRIENTS WATERSHED PERMIT			

• The 2024 Nutrients Watershed Permit requires:
  ○ 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.
	• Through the nutrient surcharge levied on permittees, BACWA funds compliance with the following provisions of the 2024 Nutrients Watershed Permit on behalf of its members:
	  ○ 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.
	• 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. In late 2025, The Freshwater Trust completed 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. BACWA compiled member feedback and shared it with the Regional Water Board.
		• **Respond to a Request for Information from HDR related to nutrient removal planning. Responses to the current Request for Information are due February 13, 2026.** HDR is assisting BACWA with these Requests for Information to support compliance milestone reporting and the Regional Planning Study.
		• Follow guidance on reporting 5-month average dry season TIN loads to CIWQS with each agency's annual self-monitoring report. BACWA provided members with updated tips for reporting TIN loads in December 2025, reflecting a minor permit modification related to TIN reporting.
		• BACWA will continue to facilitate information-sharing on technical topics, such as the 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.
		• Work with the Regional Water Board to support completion of CEQA Substitute Environmental Documentation for the planned Basin Plan Amendment.
		• BACWA intends to apply for recently announced grant funding from EPA's San Francisco Bay program to fund innovative regional efforts to reduce nutrients.
			2024 Nutrients Watershed Permit
			
			2024 Resolution on Extending Compliance Schedule
			
			BACWA Nutrients Page
			
			Resources from Dr. David Jenkins Technical Series Nutrient Seminar (2024)
			
			2024 Group Annual Report
			
			Request for Information for 2025 Group Annual Report
			
			Scoping Plan for Regional Planning Study
			
			May 13, 2025 Letter from Regional Water Board on Group Annual Report
			
			May 30, 2025 Clarification from Regional Water Board on Early Actors
			
			December 5, 2025 Minor Permit Modification
			
			Resources from Linda County Tour of Innovative Treatment Technologies
			
			EPA Notice of Funding Opportunity

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
OCEAN ACIDIFICATION & HYPOXIA			
• 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 (OPC) is the main State agency supporting scientific efforts related to Ocean OAH along the California coast.	• 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. Stakeholders are now in the process of implementing the expert panel's recommendations to improve the model and make it suitable for application in a regulatory context. • 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. • OPC's Strategic Plan for 2026-2030, adopted in late 2025, calls for "multi-benefit infrastructure upgrades" to "reduce nutrients to California's coast and ocean."	• 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.	State Water Resources Control Board's California Ocean Plan Timelines for Planning, Policy, and Permitting Efforts at the State and Regional Water Boards Ocean Acidification and Hypoxia - California Ocean Protection Council Strategic Plan for 2026-2030, California Ocean Protection Council National Water Research Institute - Expert Review Panel

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
PESTICIDES			

• 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.
• 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 Regulation (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 Jan. 2025 presentation).
	• Based on the most recent (2024) BAPPG/BACWA Pesticide Watch List, the pesticides of highest concern in wastewater are:
	  • Pyrethroids (21 chemicals)
	  • Fipronil
	  • Imidacloprid
	  The "moderate concern" tier includes pesticides with copper, zinc, and silver, the preservative carbendazim, and Quaternary Ammonium Compounds.
	• 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.
	• In December 2025, CalDPR released a draft aquatic life risk assessment for fipronil in pet products. Fipronil is one of BACWA's the highest-concern pesticides; CalDPR monitoring data shows fipronil is typically present in treated effluent at levels that exceed toxicity thresholds.
		• Submit comments on CalDPR's draft aquatic risk assessment for fipronil, including suggestions for next steps to mitigate aquatic life toxicity risks.
		• **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. BAPPG's spring 2026 digital ad campaign will also be targeted at pet pesticides.
		• Advocate for implementation of specific actions from the CalDPR Sustainable Pesticide Management Roadmap.
		• Seek CalDPR grant funding related to outreach on flea and tick pet pesticides.
		• Continue to comment on and develop summaries of 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.
		• 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.
			BACWA Pesticide Regulatory Support Page
			
			Toolkits for Member Outreach on Flea and Tick Pest Control
			
			Baywise flea and tick pages
			
			CalDPR Sustainable Pest Management Roadmap
			
			BAPPG/BACWA Pesticides Watch List (2024)
			
			EPA Proposal: Common Effects Approach for Aquatic Life Protective Values for Pesticides
			
			January 2025 Presentation from S. Hughes to BAPPG on Pesticides
			
			February 2025 Pesticides Update to BACWA Executive Board
			
			CalDPR Aquatic Life Risk Assessment for Fipronil in Pet Products
			(Draft, December 2025)

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
MERCURY AND PCBS			
• 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.	• 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. • In January 2026, the Regional Water Board issued a draft Basin Plan Amendment to incorporate tribal and subsistence fishing beneficial uses into the Basin Plan. Comments are due March 6, 2026. A subsequent Basin Plan Amendment will be required to designate the new beneficial uses for specific water bodies within the Bay Area. • 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. In August 2025, BACWA contracted with SFEI to complete a pilot study 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.	• 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.	2022 Mercury & PCBs Watershed Permit (Effective Feb. 1, 2023) BACWA Risk Reduction Materials Mercury and PCB Load Trends 2013- 2024 Updated July 2025 Basin Plan Amendment - Tribal and Subsistence Fishing Beneficial Uses Fish Consumption Survey of Subsistence Fishers BACWA Guidance on PCB Congeners Sampling, Analysis, and Reporting Protocols (October 2024) EPA Methods Update Rules

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
STATE WATER BOARD TOXICITY PROVISIONS			
• 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: ○ 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 *Ceriodaphnia dubia* 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.	• 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 *Ceriodaphnia dubia* testing. Upon completion of the study, the State Water Board compiled resources related to the study for dischargers that plan to use *C. dubia* for monitoring. • In 2024, the State Water Board received a staff report on implementation of the provisions, which stressed the importance of laboratories being ready to complete 3 chronic toxicity tests within a calendar month when there is a "fail" result. • In 2025, the BACWA Permits Committee provided member training on using the TST to interpret test results. • In August 2025, a California Appellate court ruled that the TST is not authorized under the federal Clean Water Act, but that it was properly adopted under State law. The State Water Board appealed the decision, and in November 2025 the CA Supreme Court granted the State Water Board's petition for review. • Pending the CA Supreme Court's review, the Regional Water Board is continuing to reissue NPDES permits that contain effluent limitations and monitoring requirements based on the TST.	• **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. • Continue to follow progress of the CA Supreme Court case regarding the validity of the TST as an approved method under the Clean Water Act. • Members hiring a contract laboratory to perform testing using *Ceridaphnia dubia* 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.	State Water Board Toxicity Page EPA Approval of Statewide Toxicity Provisions Ceriodaphnia dubia Study Resources, including link to *Quality Assurance Guidance Recommendations* CASA Webinar on Lessons from Ceriodaphnia Study Lab Committee Tips on Sensitive Species Screening State Water Board November 2024 Status Report on Implementation of Toxicity Provisions February 2025 Permits Committee Training on Using the Test of Significant Toxicity (McCampbell Analytical) CA Supreme Court Docket for State Water Board's appeal of Fifth Appellate District opinion

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CONTAMINANTS OF EMERGING CONCERN (CECS)			
• 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 has also expressed support for similar risk-based monitoring strategies 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.	• 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). • 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 2024, both the RMP Annual Meeting and the RMP's annual publication, *The Pulse of the Bay*, focused on CECs in San Francisco Bay. •	• 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. In September 2025, the RMP authorized funding for a study on the co-benefits of regional nutrient upgrades on CECs removal. The first phase of the study will begin in 2026 and will focus on a literature review of expected CECs removal benefits based on existing and planned treatment technology in the Bay Area.	RMP Emerging Contaminant Workgroup BACWA CECs White Paper (2024 version) 2021 NPDES Permit Amendment for Monitoring and Reporting State Water Board CECs webpage SFEI Report on QACs in Wastewater The Pulse of the Bay 2024 – Contaminants of Emerging Concern RMP 2024 Annual Meeting Materials RMP Report: Contaminants of Emerging Concern in San Francisco Bay – A Strategy for Future Investigations (2024 version) Emerging Contaminants Update from SFEI (Presentation to BAPPG) August 2025

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
MICROPLASTICS			
• 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.	• 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 not 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 October 2025, the Governor vetoed AB 823. The legislation would have expanded the existing ban on microbeads in rinse-off personal care products (per AB 888 (2015) to include cleaning products and leave-on personal care products.	• 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 microplastics. The add-on study report is expected in February 2026. • Continue tracking State Water Board and Ocean Protection Council actions via the CASA Microplastics Workgroup.	BACWA Microplastics Fact Sheet RMP Microplastics Workgroup Ocean Protection Council Microplastics Strategy SCCWRP Report on Microplastics in California Wastewater Treatment Plants (2024) 2024 California Integrated Report / 303(d) List 2026 Draft California Integrated Report / 303(d) List

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)			
• 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.	• In 2024, EPA finalized Maximum Contaminant Levels (MCLs) for several PFAS compounds in drinking water. In 2025, EPA announced its intent to retain the MCLs for PFOS and PFAS only, and to rescind the MCLs for the other PFAS compounds. The CA Division of Drinking Water California is working to adopt state drinking water limits, a 2025 priority. 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. • In December 2024, EPA released draft national recommended human health water quality criteria for PFOS, PFOA, and perfluorobutanesulfonic acid (PFBS). • In October 2025, Governor Newsom vetoed SB 682 (Allen), which would have required that PFAS be phased out of some consumer products, such as cookware. • The Regional Water Board's Site Cleanup Program has established Environmental Screening Levels for 16 PFAS compounds. • The Regional Water Board adopted a general NPDES permit for groundwater dischargers containing technology-based effluent limits for PFAS -- the first NPDES Permit with PFAS effluent limits in California. • The Water Boards are beginning to develop a strategy for controlling PFAS in wastewater.	• **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. BACWA will continue to share resources on this topic, such as those shared at a BACWA webinar in November 2025. • **Members should use Clean Water Act methods (EPA Method 1633 or 1621) for monitoring effluent, biosolids, or industrial wastewater.** • Work with Members and SFEI to develop a Sampling and Analysis plan for Phase 3 of BACWA's regional PFAS study. The effort will support the "PFAS Sources to Solutions" project being led by SFEI and the California Department of Toxic Substances Control. The project will be carried out in 2026 and 2027 and will be focused on sewershed sources of PFAS, such as specific residential or industrial loads. • Work the BACWA Pretreatment Committee, the State Water Board, and the Regional Water Board to develop concepts for controlling industrial sources of PFAS in wastewater.	BACWA PFAS Study Summary State Water Board PFAS Resources EPA PFAS Resources EPA Drinking Water Limits EPA POTW Influent Study EPA NPDES Permitting Guidance (Dec. 2022) Presentation on BACWA's Regional PFAS Study at RMP 2023 Annual Meeting "PFAS Sources to Solutions" Project Overview Baywise Website for PFAS BACWA PFAS Materials Regional Water Board Environmental Screening Levels Resources from November 2025 BACWA PFAS Webinar

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
SANITARY SEWER SYSTEMS			

• 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:
  ○ 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.
	• 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 were required to provide the State Water Board with a Geographic Information System (GIS)-based service area boundary map by December 31, 2025. In the future, the State Water Board intends to share these sewershed maps via an online platform. Agencies that have changes to their service area boundary should provide an updated GIS map along with their Annual Report.
	• 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.
		• 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.
		• Work with State Water Board staff to review online viewing tools for sewershed mapping, as such tools are developed.
		• 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.
		• Additional actions related to sea level rise and other climate-related flood risks are listed under Climate Change Adaptation (see page 13).
			State Water Board SSS-WDR page
			
			Reissued SSS-WDR (General Order 2022-0103-DWQ), Effective June 5, 2023
			
			Materials from Clean Water Summit Partners Webinars on Reissued SSS-WDR
			
			SSMP and Audit Due Dates Lookup Tool from State Water Board
			
			Guide for Developing and Updating Sewer System Management Plans (2024)
			
			BACWA Private Sewer Lateral Survey Results (2024)
			
			State Water Board guidance document on submitting boundary maps
			
			Underground Safety Board Draft GIS Regulatory Language and Staff Report

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
LABORATORY ACCREDITATION			
• 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).	• 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 Methods Update Rule 22 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.	• Continue to work through BACWA's Laboratory Committee to support members as they navigate laboratory accreditation under the new TNI standards. • Keep members up-to-date on proposed changes to Clean Water Act methods as part of the EPA Methods Update Rule 22. • Publicize training opportunities offered by consultants, ELAP, and others.	State Water Board's ELAP regulations page, including links to timeline and relocation guidance tools ELAP Implementation of 2021 Method Update Rule EPA Methods Update Rules ELAP Fees – Stakeholder Meeting Information Materials from BACWA TNI Training Sessions 2021-2024 - *request password from BACWA staff* BACWA Laboratory Committee Meeting Materials

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
BIOSOLIDS			
• 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: ○ Diverted biosolids must be anaerobically digested and/or composted to qualify as landfill reduction. ○ CalRecycle can determine whether specific treatment technologies qualify 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.	• Jurisdictions that divert organic waste must also procure the end products of diversion, such as biogas, biomethane, and compost (but not biosolids). Proposed State legislation (AB 643) would widen the procurement options to include California-licensed fertilizers made from organic residuals such as biosolids. • In September 2025, EPA affirmed its determination of PFOA and PFOS as CERCLA hazardous substances. Congress is considering liability protections for "passive receivers" – entities that did not manufacture or use PFAS – through HR 1267. • Concern over PFAS in biosolids is leading some other states to introduce restrictions on land application. These bans typically result in increased landfilling of biosolids. The Bay Area Biosolids Coalition (BABC) is working with other biosolids stakeholders to support completion of technical analysis on the full economic and environmental costs of potential land application bans, for use by legislators and other policy-makers. • In early 2025, EPA released a draft risk assessment for PFOA and PFOS in biosolids. EPA is now reviewing the numerous comments submitted by those in the wastewater sector and beyond. Many commenters found EPA's approach to estimating the risk of PFOA and PFAS in biosolids was overly conservative.	• 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.** • Continue to follow emerging science and regulatory developments regarding PFAS, including EPA's draft risk assessment and potential CERCLA liability exemptions for passive receivers. • 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.	BACWA Biosolids Trends Surveys Bay Area Biosolids Coalition CASA White Paper on SB 1383 Implementation CalRecycle - Short-Lived Climate Pollutant Reduction Strategy CalRecycle Procurement FAQ (Updated by AB 1985) SB1383 Article 2 Determination EPA National Sewage Sludge Survey EPA Draft Risk Assessment for PFOA and PFOS in Biosolids

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CLIMATE CHANGE ADAPTATION			
• 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, mostly recently 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.	• In 2024, the Ocean Protection Council (OPC) adopted updated SLR guidance. • 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 offers a Plan Resources website and training events, such as three "Planning Essentials" webinars planned for spring 2026. • 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. • 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. As of December 2025, the Basin Plan Amendment is now in effect. • SFEI offers resources to support planning of nature-based shoreline adaptation projects, such as the Baylands Resilience Metrics Mapbook. • OneShoreline (San Mateo County) is developing Resilient Public Infrastructure Guidance to help local stormwater, wastewater, and transportation agencies adapt to changing climate conditions.	• **Understand and 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. For example, OneShoreline (San Mateo County) is developing infrastructure guidance • 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.	Regional Water Board Basin Plan Amendment on Climate Change and Aquatic Habitat OPC 2024 Sea Level Rise Guidance California Coastal Commission Sea Level Rise Policy Guidance Update (Nov. 2024) California Climate Adaptation Strategy (2025) BayCAN Funding Tracker BCDC Resources for Regional Shoreline Adaptation Plans Bay Adapt SFEI Shallow Groundwater Mapping (March 2025) Valley Water - Groundwater Response for Santa Clara County SFEI - Baylands Resilience Metrics Mapbook OneShoreline Resilient Public Infrastructure Guidance

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CLIMATE CHANGE MITIGATION			
• 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.	• 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 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 early 2026, CARB is expected to release a revised draft regulatory package (15-day notice) for amendments to the Advanced Clean Fleets and Low Carbon Fuel Standards regulations. CASA is continuing to advocate for a pathway for use of renewable natural gas as a transportation fuel in the context of these 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 could be shared in the first half of 2026. • 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 spring 2026. • Carbon Mapper is a new tool to track methane emissions via satellite. Agencies can check for methane plumes around their facility using such tools.	• **Work with the Clean Water Summit Partners to elevate policymaker understanding of the connections between regulations for Biosolids, Air, Climate, Energy & Nutrients (BACEN). A webinar on the topic will be held on February 11th,** including several talks related to the nexus between climate change mitigation nutrient removal, and biosolids. • Continue to track implementation of the Advanced Clean Fleets rule. A revised draft regulatory package is expected in early 2026. • 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 2026. • 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.	CARB Climate Change Scoping Plan CARB Low Carbon Fuel Standard Amendments (Effective July 1, 2025) CARB Advanced Clean Fleets Rule CARB Rulemaking on Advanced Clean Fleets to incorporate AB 1594 (July 2025) CARB's ZEV Purchase Exemption List CalRecycle and SB 1383 Bay Area Clean Air Plan Bay Area Comprehensive Climate Action Plan Bay Area Air District's Regulation 13 for Climate Pollutants EPA Renewable Fuel Standards PG&E Procurement Carbon Mapper

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
TOXIC AIR CONTAMINANTS			
• 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.	• In 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 contractors to conduct HRAs, if allowed by the Air District. In August 2025, the Air District released draft amendments to Rule 11-18 that aim to improve program efficiency and accelerate the preparation of HRAs by requiring facility owners to conduct HRAs (rather than the Air District). BACWA submitted comments on the draft amendments in October 2025. A proposed rule package is expected in Summer 2026. • 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, and are providing financial support totaling about $620,000 in FY26. • Throughout 2025, the project team met 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 was submitted to CAPCOA (a coalition of regional air district staff) in Fall 2025; after CAPCOA review is complete, the draft study plan will be submitted to CARB. The draft study plan is available to participating BACWA members upon request.	• **Review the proposed amendments to Rule 11-18.** BACWA's AIR Committee will review the proposed rule package when the Air District releases it in early 2026. The Air District is not planning to hold additional workshops. • **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 poled 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.	Bay Area Air District Facility Risk Reduction Program Amendments (Rule 11-18) BACWA Comment Letter on Rule 11-18 Amendments Bay Area Air District New Source Review of Toxic Air Contaminants (Rule 2-5) CARB page on AB 617 and AB 2588 and Final Statement of Reasons CASA Handout on Pooled Emissions Study CARB List of Approved Independent Contractors for Test Methods Timing of Rule 11-18 vs. Process for AB 617 July 2024 BACWA Update to Air District Stationary Source Committee BACWA AIR Committee website

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
AIR DISTRICT PERMITTING			
• 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 (CO_2) emissions standards. • The Bay Area Air District has launched 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.	• BACWA has been working with the Air District to provide better transparency for future BACT determinations. The Air District plans to hire a BACT / Consistency Coordinator in FY26 to support the effort. • BACT for all standby generators >50 bhp is now Tier 4 emissions standards. The Air District issued a BACT determination for Tier 4 emissions standards for large standby generators (≥ 1,000 bhp) in 2020, and for midsize standby generators (> 50 bhp and < 1,000 bhp) in 2024. Options to comply 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. • BACWA is participating in an early, no-fee phase of the Engineering Program Manager Pilot Program throughout the first half of 2026, which could expedite permit processing for three participating BACWA members. • The Air District recently established a Permit Efficiency Taskforce to address efficiency issues in the permit process. The Permit Efficiency Taskforce will meet monthly. The Kick-off meeting was in January 2026.	• **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. • Execute a Memorandum of Understanding with the Air District to participate in a pre-development phase of the Engineering Program Manager Pilot Program. • Participate in the Air District's Permitting Efficiency Taskforce. Member agencies are able to view the meetings virtually.	Air District BACT/TBACT Workbook Air District October 2024 Workshop on BACT Determination Slides and Video CARB Tier 5 Rulemaking Air District Engineering Program Manager Pilot Program Flyer and Webinar Recording Air District Strategic Plan

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
RECYCLED WATER			
• 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.	• In November 2025, the State Water Board adopted regulations for Onsite Nonpotable Reuse in multi-family, mixed use, and commercial buildings. The new regulations will go into effect only after they are approved by the Office of Administrative Law and adopted into the state's building code by the CA Dept. of Housing and Community Development, which could occur as soon as 2027. After that, local jurisdictions can establish local programs that reference the updated state building code. • 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. • In October 2025, Governor Newsom signed SB31, which aims to provide more flexibility for the use of disinfected tertiary recycled water in outdoor eating areas, residential common areas, decorative water bodies, and around food handling facilities. The Division of Drinking Water has not yet identified a pathway to implement the legislation, so agencies should wait to update their permitting and inspection practices.	• Assist with implementation of the new Onsite Nonpotable Reuse regulations by working with regulators and other stakeholders on 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.	Water Boards Recycled Water Policy and Regulations Direct Potable Reuse Regulations Rulemaking for Onsite Nonpotable Reuse Regulations (updated November 2025) BACWA Special Studies of Recycled Water and Nature-Based Systems California's Water Supply Strategy (2022) Basin Plan Amendment affecting Water Recycling (now also incorporated into the Basin Plan) Meeting Materials from April 2025 Joint Workshop with WateReuse Northern California SB 31 – Legislative Changes to Water Code for Nonpotable Recycled Use

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

ACRONYMS

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