EAST BAY DISCHARGERS AUTHORITY
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A Joint Powers Public Agency

ITEM NO. 16

REGULATORY AFFAIRS COMMITTEE AGENDA

Wednesday, September 17, 2025

2:00 P.M.

East Bay Dischargers Authority
2651 Grant Avenue, San Lorenzo, CA 94580

Committee Members: Johnson (Chair); Andrews

RA1. Call to Order

RA2. Roll Call

RA3. Public Forum

RA4. EBDA NPDES Compliance – See Item No. OM4
(The Committee will review NPDES Permit compliance data.)

RA5. NACWA Peak Performance Award
(The Committee will receive information on EBDA's recent award.)

RA6. BACWA Key Regulatory Issues Summary
(The Committee will review BACWA's issues summary.)

RA7. PFAS Updates
(The Committee will receive an update on regulatory efforts.)

RA8. First Mile Horizontal Levee Site Tour
(The Committee will receive information on a site tour planned by Save the Bay.)

RA9. Adjournment

Any member of the public may address the Committee at the commencement of the meeting on any matter within the jurisdiction of the Committee. This should not relate to any item on the agenda. Each person addressing the Committee should limit their presentation to three minutes. Non-English speakers using a translator will have a time limit of six minutes. Any member of the public desiring to provide comments to the Committee on any agenda item should do so at the time the item is considered. Oral comments should be limited to three minutes per individual or ten minutes for an organization. Speaker's cards will be available and are to be completed prior to speaking.

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 17, 2025

In compliance with the Americans with Disabilities Act of 1990, if you need special assistance to participate in an Authority meeting, or you need a copy of the agenda, or the agenda packet, in an appropriate alternative format, please contact the Administration Manager at (510) 278-5910 or juanita@ebda.org. Notification of at least 48 hours prior to the meeting or time when services are needed will assist the Authority staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service.

In compliance with SB 343, related writings of open session items are available for public inspection at East Bay Dischargers Authority, 2651 Grant Avenue, San Lorenzo, CA 94580. For your convenience, agenda items are also posted on the East Bay Dischargers Authority website located at http://www.ebda.org.

Next Scheduled Regulatory Affairs Committee Meeting
Wednesday, November 19, 2025

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 17, 2025

ITEM NO. RA5 NACWA PEAK PERFORMANCE AWARD

Recommendation
For the Committee's information only; no action is required.

Strategic Plan Linkage
1. **Regulatory Compliance:** Proactively meet or exceed regulatory requirements for protection of the environment and public health.
    b. Maintain consistent compliance with EBDA's National Pollutant Discharge Elimination System (NPDES) Permit.

Background
As shown above, one of EBDA's key strategic goals is to maintain consistent compliance with the Authority's NPDES Permit. Through collaboration with the Member Agencies, EBDA has been able to maintain compliance for many years.

The National Association of Clean Water Agencies (NACWA), which EBDA rejoined in 2023, issues Peak Performance Awards to agencies to recognize consistent NPDES compliance. Silver facilities reported five or fewer violations of their NPDES permit in one year. Gold facilities achieved one year of perfect (100%) compliance with their NPDES permits. The Platinum level is reached in the 5th year of achieving consecutive Gold.

Discussion
This year, EBDA was honored with a Gold Award. 2025 Peak Performance Awards reflect permit compliance for calendar year 2024. NACWA recognized 512 treatment facilities at 198 of its member public agencies for outstanding levels of compliance and performance related to their NPDES permit. A full list of NACWA's 2025 Peak Performance Awards can be found here.

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 17, 2025

ITEM NO. RA6 BACWA KEY REGULATORY ISSUES SUMMARY

Recommendation
For the Committee's information only; no action is required.

Strategic Plan Linkage
1. **Regulatory Compliance:** Proactively meet or exceed regulatory requirements for protection of the environment and public health.
    a. Represent EBDA and the Member Agencies' interests by preemptively engaging in development of emerging regulations and permits and advocating for reasonable, science-based decisions.
    c. Ensure compliance with non-NPDES permits and regulatory requirements, including air quality and hazardous waste.
    e. Track and share scientific and regulatory developments related to emerging contaminants, and advocate for source control.

Background
Periodically, BACWA's Regulatory Program Manager updates a Key Regulatory Issues Summary that contains succinct information on regulatory issues of interest to Bay Area wastewater agencies. The Summary matrix contains background, challenges and recent updates, next steps for BACWA, and links to key resources and documents.

Discussion
The most recent issue summary is attached, with updates from the prior version highlighted in purple. The Committee will discuss key updates at the September 17 meeting.

KEY REGULATORY ISSUE SUMMARY
Updated May 1, 2025

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 will contribute $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. • The science team is currently working with stakeholders to develop a multi-year work plan for 2025-2029, as well as a more detailed plan for FY26.	• **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.	Science to Inform Management: An Overview of the Nutrient Management Strategy BACWA Nutrients Page SFEI Nutrient Management Strategy Page NMS FY25 Science Program Plan Materials NMS Steering Committee Meeting Materials NMS Work Products Real-Time Satellite Data on Harmful Algae Blooms Baywise Website

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

• The Nutrient Watershed Permit was first adopted in 2014. It required effluent monitoring and a regional study on Nutrient Treatment by Optimization and Upgrades, completed in 2018.
• The 2019 Nutrient Watershed Permit required continued monitoring and reporting of nutrient loads, funding for scientific studies, and completion of a regional assessment of nutrient diversions through nature-based systems and recycled water, completed in 2023.
• The Nutrient Watershed Permit was reissued in 2024 and 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 Nutrient Watershed Permit are 40% lower than actual loads from the 2022 dry season, when San Francisco Bay experienced a harmful algae bloom.
	• The 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.
	• To address this challenge, the Regional Water Board is working to identify a regulatory mechanism to extend the compliance schedule beyond 10 years where necessary. This commitment is outlined in a Board resolution.
	• Through the nutrient surcharge levied on permittees, BACWA will fund compliance with the following provisions of the 2024 Nutrient Watershed Permit behalf of its members:
	  ○ Funding for scientific studies
	  ○ Group Annual Reporting, including compliance milestone reporting
	  ○ Completion of a regional planning study
	BACWA has hired the consulting firm HDR to assist with the completion of Group Annual Reports and the Regional Planning study.
	• In August 2024, BACWA assisted with hosting a technical seminar on nutrient removal technology at Bay Area wastewater treatment plants.
		• **Review the Draft Scoping Plan, which will be circulated in May 2025.** BACWA's Nutrient Strategy Team will convene on May 12th to discuss the draft. The scoping plan is due by July 1st, and will outline the approach BACWA intends to take on regional planning to reduce TIN loads. The Regional Planning study, due in March 2029, 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.
		• Continue to work with Regional Water Board staff and other stakeholders to identify a regulatory mechanism for extending compliance schedules beyond 10 years. Regional Water Board staff have shared that their preferred approach is a Basin Plan Amendment that would supersede the State's 2008 Compliance Schedule Policy in specific instances. BACWA is coordinating with the Regional Water Board to define the scope of this effort.
		• Agencies will continue to report nutrient monitoring data directly to CIWQS, which HDR will compile for Group Annual Reports. For the 2025 Group Annual Report and beyond, separate submittal of nutrient monitoring data to BACWA is no longer needed.
			2024 Nutrient Watershed Permit
			
			2024 Regional Water Board Resolution on Extending Compliance Schedule
			
			BACWA Nutrients Page
			
			Resources from Dr. David Jenkins Technical Series Nutrient Seminar (August 2024)
			
			2024 Group Annual Report (Submitted April 1, 2025)

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." • 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 Ocean Acidification & Hypoxia caused by wastewater discharges. However, future regulations could limit coastal discharges of nutrients in order to reduce the potential for Ocean Acidification & Hypoxia.	• The Ocean Protection Council is the main State agency supporting scientific efforts related to Ocean Acidification & Hypoxia along the California coast. • The Ocean Protection Council has funded the Southern California Coastal Water Research Project (SCCWRP) to conduct research and modeling on Ocean Acidification & Hypoxia due to nutrient pollution in southern California and along the San Francisco and Monterey coasts. • 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. In 2024, 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 convening to discuss which technical efforts should be prioritized to implement the expert panel's recommendations. • The State Water Board is scoping an amendment to the California Ocean Plan amendment to address ocean acidification, hypoxia, and the effects of anthropogenic sources of nutrients in ocean waters. However, the effort is not likely to advance until the cost of wastewater upgrades to Southern California POTWs is better quantified.	• 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 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.
• Based on the most (2024) BAPPG/BACWA Pesticide Watch List, the pesticides of highest concern in wastewater are:
  • Pyrethroids (21 chemicals)
  • Fipronil
  • Imidacloprid
	• 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:
	  • Carbendazim, a preservative found in paints and other products
	  • 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 plans to submit comments by the May 8th deadline.
		• **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.
		• Advocate for implementation of specific actions from the CalDPR Sustainable Pesticide Management Roadmap.
		• Continue to comment on EPA pesticide re-registrations and CalDPR actions.
		• Work with the Collection System Committee to communicate with members about the risk of using chlorpyrifos in manholes, which is the only remaining registered use in California.
		• 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.
			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

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. • The Triennial Review determines the prioritization of Basin Plan amendments, including designation of new beneficial uses. The February 2025 revised draft Triennial Review staff report identified this effort as a high priority. • 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 pilot project in March 2025 related to this fish consumption survey. • 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 or beyond). • The Regional Water Board tentatively plans to re-open the Mercury TMDL in 2028, and to re-open the PCBs TMDL in 2030.	• Identify fish consumption risk reduction activities for FY26 and FY27, which could involve working with a community-organization on outreach messaging or supporting activities related to the new subsistence fishing beneficial use. Risk reduction activities are required for compliance with the Mercury & PCBs watershed permit. For FY26, BACWA has budgeted $12,500 to support risk reduction. • 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. • Continue to track the outcome of the 2024 Triennial Review of the Basin Plan. The Triennial Review is currently scheduled to be considered for adoption in May 2025.	2022 Mercury & PCBs Watershed Permit (Effective Feb. 1, 2023) BACWA Risk Reduction Materials Mercury and PCB Load Trends 2013- 2023 Updated June 2024 2024 Triennial Review of the Basin Plan Planning for 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. • From 2016 to 2023, agencies had the option to skip sensitive species screening upon permit reissuance and pay the avoided funds to the RMP to be used for CECs studies. Under the Toxicity Provisions, agencies are now required by the provisions to do sensitive species screening once every 15 years. • 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 *Ceriodaphnia dubia* for chronic toxicity monitoring. • In November 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.	• **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 some tips related to sensitivity screening studies for member agencies' use. • 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)

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'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.	• 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 April 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, *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 2025, the Emerging Contaminants Workgroup plans to support studies of plastic additives in Bay water and sediment (OPEs, bisphenols, and other plastic additives); QACs in Bay water and sediment; synthetic dyes in Bay sediment, water, wastewater, and stormwater; and several other stormwater-related studies. • Work with RMP staff to assist with study design for any new studies of CECs in wastewater. Concepts for future wastewater studies in 2026+ include biocides (including carbendazim and isothiazolinones) and the co-benefits of regional nutrient upgrades on CECs removal.	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)

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 February 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. • AB 823 has been introduced into the California Assembly this legislative session. 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.	• Continue to participate in the RMP Microplastics Workgroup. • 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. • 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 for several PFAS compounds in drinking water. 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 industrial source control efforts under Preliminary Effluent Guidelines Program Plan 16 may be deferred by the current federal administration. Plan 16 describes efforts to develop pretreatment standards for industrial users (Metal Finishing, Organic Chemicals, Plastics and Synthetic Fibers, and landfills) and to conduct a nationwide POTW Influent PFAS Study to collect nationwide data on industrial and domestic sources of PFAS. • In December 2024, EPA released draft national recommended human health water quality criteria for PFOS, PFOA, and perfluorobutanesulfonic acid (PFBS). If finalized, local regulators could apply these criteria to San Francisco Bay and other inland water bodies for use in NPDES permitting. The draft criteria for PFOS and PFOA are several orders of magnitude lower than measured concentrations in wastewater effluent, measured concentrations in San Francisco Bay, and method detection limits. The comment deadline is April 29. .	• **Member agencies are encouraged to support legislative efforts to limit the use of PFAS in consumer products.** SB 682 (Allen), which is currently an active bill in the 2025 California legislative session, would "phase out the sale of products with avoidable PFAS use." CASA is leading efforts on the bill, and BACWA has signed a letter of support. • BAPPG's spring outreach campaign focused on PFAS. The Baywise website has been updated to serve as a landing page for the digital campaign. • **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).	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 UC Irvine Report on PFAS in Residential Wastewater "PFAS Sources to Solutions" Project Overview Senate Bill 682 (Allen) – Environmental health: Product Safety: PFAS Baywise Website for PFAS BACWA PFAS Materials, including materials from April 2025 BAPPG outreach campaign

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
SANITARY SEWER SYSTEMS GENERAL ORDER			
• 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.	• The first annual reports under the reissued SSS-WDR were due April 1, 2024. • Due dates for the first audits and SSMPs under the reissued SSS-WDR vary by agency. Audit due dates began in 2024, and SSMP due dates began in 2025. The State Water Board has prepared an online tool to assist agencies in determining compliance dates. • Later in 2025, agencies will be required to provide the State Water Board with a GIS-based service area boundary map. The State Water Board plans to open a portal for submitting the maps in July 2025. • Maintaining an updated SSMP continues to be a core requirement of the SSS-WDR. SSMP updates are now required every six years (instead of five) and must contain the 11 updated elements described in the reissued SSS-WDR. BACWA has assisted members by preparing 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 in the region. Agencies are using sewer lateral replacement ordinances and incentive programs to address ongoing concerns about infiltration and inflow (I&I).	• 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. The Summit Partners are planning to host the next virtual workshop on SSS-WDR compliance on May 29, 2025.	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)

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. • For FY25, ELAP restructured its fees to increase fees for large laboratories with more than 500 fields of accreditation. Smaller laboratories had no fee increase. The State Water Board is currently conducting stakeholder outreach related to FY26 ELAP fees. • 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.	• 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.	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 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.	• 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 *already* 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. 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.	• In 2025, the Bay Area Biosolids Coalition (BABC) is merging with BACWA and will serve as BACWA's Biosolids Committee. **All members are invited to participate.** • Continue to review the draft risk assessment for PFOA and PFOS in biosolids, and consider submitting comments. Comments are due August 14, 2025. • **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.	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. The 2024 update is underway. • 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 about current and future depth-to-groundwater maps is summarized in a January 2023 report now available from Pathways Climate Institute and SFEI.	• 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 will submit the amendment to the Office of Administrative Law for 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 December 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. • 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.	• **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 webinars on technical topics related to climate change, such as sea level rise projections and changes in precipitation. The BACWA Climate Change Community of Practice will provide a forum to discuss these topics. • 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.	Regional Water Board Basin Plan Amendment on Climate Change and Aquatic Habitat Regional Water Board Staff Update on Shoreline Climate Change Resilience Planning (April 2025) SFEI Report on Shallow Groundwater Response (2023) OPC 2024 Sea Level Rise Guidance California Coastal Commission Sea Level Rise Policy Guidance Update (Nov. 2024) California Coastal Commission's Critical Infrastructure at Risk (2021) BayCAN Funding Tracker BCDC's Regional Shoreline Adaptation Plan (2024) Bay Adapt including information about the Regional Shoreline Adaptation Plan

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CLIMATE CHANGE MITIGATION			
• The California Air Resources Board's (CARB's) Climate Change Scoping Plan Update lays out the approach for the State to meet its greenhouse gas (GHG) emissions reduction targets through 2030. The latest Scoping Plan was updated in 2022 targeting carbon neutrality by 2045, including policies addressing: ○ Short-lived climate pollutants ○ Carbon sequestration on Natural and Working Lands ○ 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 proposed the development of Regulation 13 (climate pollutants) targeting methane and nitrous oxide reductions related to organics diversion and management. After a pause of several years, the Air District began revisiting Regulation 13 in 2024.	• 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. CARB plans to release a draft regulatory package for 45-day review in mid-2025. • In early 2025, CARB released a streamlined ZEV purchase exemption list identifying vehicles that are not currently available as ZEVs, so no exemption request would be required. • In addition to pushing for ZEVs, CARB is revising the Low Carbon Fuel Standard to emphasize hydrogen rather than biomethane as a transportation fuel. In April 2025, CARB released a modified version of the proposed regulations to respond to comments from the Office of Administrative Law, which disapproved the previous version in February 2025. • As a first step in revisiting Regulation 13, Air District staff began developing a white paper on anaerobic digesters and potentially associated emissions. A draft version of the white paper is expected in August 2025.	• 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. • Continue to track implementation of the Advanced Clean Fleets rule. This includes modifications to the rule that will exempt some traditional utility-specialized vehicles used by public agency utilities, per AB 1594. Although CARB plans to enforce the State and Local Government Agency Fleets portion of the regulation, regulatory uncertainty for other portions of the rule could impact ZEV availability. • 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.	CARB Climate Change Scoping Plan CARB Low Carbon Fuel Standard Rulemaking (Updated April 2025) CARB Advanced Clean Fleets Rule (Updated Jan. 2025) CARB's ZEV Purchase Exemption List CARB AB 1594 Information CalRecycle and SB 1383 Bay Area Clean Air Plan Bay Area Air District's Regulation 13 for Climate Pollutants EPA Renewable Fuel Standards PG&E Procurement

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 conduct site-specific Health Risk Screening Analyses and 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 the threshold will have to implement a Risk Reduction Plan that may include employing Best Available Retrofit Control Technology for Toxics (TBARCT). • AB 617 (Community Air Protection Program) – requires CARB to harmonize community air monitoring, reporting, & local emissions reduction programs for air toxics and GHGs). POTWs within communities already impacted by air pollution may have to accelerate implementation of risk reduction measures. • AB 2588 (Air Toxics "Hot Spots" Program) - Establishes a statewide program for the inventory of air toxics emissions from individual facilities, as well as requirements for risk assessment and public notification of potential health risks. 2020 updates expanded compound list from >500 to >1,700.	• In April 2024, the Air District finalized updated Implementation Procedures for Rule 11-18 describing how the Air District will conduct HRAs. It also establishes rules for vendors or contractors to conduct HRAs, if allowed by the Air District. The Air District plans to release new language and a preliminary staff report in the summer 2025. • 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. • 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. • CARB maintains a list of approved independent contractors for source testing. Using the list may be helpful, but is not required.	• **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. Review and provide comment on proposed rule changes expected later in 2025. • **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 Updates (Rule 11-18) 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
BEST AVAILABLE CONTROL TECHNOLOGY			
• 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.	• BACWA has been working with the Air District to provide better transparency for future BACT determinations. • 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 October 2024, CARB proposed amendments to the off-road diesel engine emissions standards (Tier 5 rulemaking). A workshop was also held in October 2024.	• **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.	Air District BACT/TBACT Workbook Air District October 2024 Workshop on BACT Determination Slides and Video CARB Tier 5 Rulemaking

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.	• 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 and must be completed within one year. • In 2023, BACWA completed a Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling, as required by the 2nd Nutrient 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.	• Review draft regulations for Onsite Nonpotable Reuse and submit comments by the due date of May 9, April 2025. • 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 Nutrient Watershed Permit (see page 2). In April 2025, BACWA co-hosted a workshop with WateReuse's Northern California chapter focused on topics related to nutrient removal and recycled water. • Track California legislation with potential impacts on recycled water funding, mandates, or regulations.	Water Boards Recycled Water Policy and Regulations Direct Potable Reuse Regulations Onsite Nonpotable Reuse Regulations BACWA Special Studies of Recycled Water and Nature-Based Systems California's Water Supply Strategy (August 2022) Basin Plan Amendment affecting Water Recycling (now also incorporated into the Basin Plan) Draft Regulations for Onsite Nonpotable Reuse Meeting Materials from Joint Workshop with WateReuse Northern California

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 Registration
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

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 17, 2025

ITEM NO. RA7 PFAS UPDATES

Recommendation
For the Committee's information only; no action is required.

Strategic Plan Linkage
1. **Regulatory Compliance:** Proactively meet or exceed regulatory requirements for protection of the environment and public health.
    a. Represent EBDA and the Member Agencies' interests by preemptively engaging in development of emerging regulations and permits and advocating for reasonable, science-based decisions.
    e. Track and share scientific and regulatory developments related to emerging contaminants, and advocate for source control.

Background
Per- and polyfluoroalkyl substances (PFAS) are a large group of human-made substances that are very resistant to heat, water, and oil. PFAS have been used extensively in surface coating and protectant formulations. Common PFAS-containing products are non-stick cookware, cardboard/paper food packaging, water-resistant clothing, carpets, and fire-fighting foam. All PFAS are persistent in the environment, can accumulate within the human body, and have demonstrated toxicity at relatively low concentrations. Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS), two of the most common PFAS compounds, were found in the blood of nearly all people tested in several national surveys.

The regulatory and legislative landscape for drinking water, wastewater, and biosolids has been evolving quickly over the last several months, as has public awareness. This report provides updates on key initiatives.

Discussion
As science and regulatory efforts related to PFAS continue to move forward, it is helpful to reflect on what is currently known and unknown about PFAS, and their fate in wastewater and the environment. The attached article by the California Association of Sanitation Agencies (CASA)'s Director of Renewable Resources, Maile Lono-Batura, provides an excellent snapshot of this topic and is included here as a helpful reference.

<u>Biosolids Risk Assessment</u>
On January 14, 2025, EPA released its Draft Sewage Sludge Risk Assessment for PFOA and PFOS (see attached EPA Fact Sheet). The Risk Assessment looked at the risk associated with PFOS and PFOA for a hypothetical farm family exposed to PFAS through land application of biosolids on their property. Based on their modeling, which draws on a very limited set of publications, EPA found that there may be human health risks exceeding the EPA's acceptable thresholds when land-applying sewage sludge that

contains 1 part per billion (ppb) of PFOA or PFOS. 1 ppb is considerably lower than the PFAS concentrations found on average in biosolids.

What the draft Risk Assessment fails to do is to put in context the risks that individuals on a farm or elsewhere face from background levels of PFAS found in their food packaging, clothing, cookware, carpeting, and other common sources. Direct home exposure is likely much more significant than biosolids exposure. In addition, the water, fish, and other consumables that EPA assumes the family is eating from their farm would be contaminated with PFAS at background levels above those assumed to be stemming from the biosolids.

In its communication about the Risk Assessment, EPA posits that wastewater treatment plants can control PFAS in biosolids through pretreatment. However, studies in the Bay Area and elsewhere indicate that in areas without PFAS manufacturing or other industrial uses, the primary inputs of PFAS to wastewater systems come from residential and commercial sources – essentially from consumer products – making it essentially impossible for wastewater agencies to take a source control approach in the absence of state or federal regulation of consumer products.

The California Association of Sanitation Agencies (CASA) commissioned an expert panel of academic researchers to review the draft Risk Assessment and develop comments. EBDA submitted the attached comment letter by EPA's deadline of August 14, 2025, using a template developed by CASA. It remains unclear whether the Risk Assessment will be finalized. If it is, the next step would be development of regulations to manage land application of biosolids to reduce risk to acceptable levels.

Statewide Collaborative PFAS Strategy

On September 3, 2025, the EBDA General Manager, along with staff from CASA, Bay Area Clean Water Agencies (BACWA), and the San Francisco Estuary Institute (SFEI) met with a regulatory task force that is evaluating options for addressing PFAS in California wastewater. Representatives from the State Water Resources Control Board, and San Francisco Bay and Central Valley Regional Water Quality Control Boards communicated that they are working proactively to develop a strategy for addressing PFAS in wastewater so that they are not pressured into reactionary regulations via lawsuits or media attention, and so that they avoid ad hoc permit-by-permit approaches. The meeting was very positive, with the regulators expressing support for source control rather than end of pipe treatment and prioritizing maintaining land application as an option for biosolids in California. Participants committed to continuing to work together on the strategy and on effectively telling the story of true sources and solutions for PFAS. The regulatory group is meeting next on September 29 to discuss the strategy, and they will loop back with wastewater representatives following that meeting.

California Legislation - SB 682

SB 682 (Allen) is a bill co-sponsored by CASA along with environmental and public health-

focused non-governmental organizations. The bill was originally drafted to ban all non-essential uses of intentionally-added PFAS in California, mirroring legislation passed in Minnesota, Maine, and New Mexico. Through negotiation with various parties, the bill has been narrowed to ban intentionally added PFAS in specific consumer product categories including cleaning products, cookware, juvenile products, food packaging, ski wax, and dental floss. The bill was passed by the Senate and continues to move through the Assembly. Previous California legislation also bans PFAS in cosmetic products, textiles, certain food packaging and juvenile products, carpets and rugs, and fabric treatments.

PFAS:
What We Know, and What We Don't

By Maile Lono-Batura, California Association of Sanitation Agencies

True to the very nature of per- and polyfluoroalkyl substances, commonly referred to as PFAS, these compounds have become pervasive not only in products used in our daily lives, but also our conversations surrounding the essential public service of delivering clean water, sanitation, and renewable resources.

The most efficient and cost-effective way to move forward is clear: remove these chemicals from the stream of commerce for non-essential uses as soon as possible, and assign liability for cleanup to those responsible for their manufacture and use. To put this concept into perspective, the Minnesota Pollution Control Agency has noted that PFAS can be bought for $50 - $100 per pound, but costs between $2.7 million and $18 million per pound to remove and destroy from municipal wastewater (depending on facility size).[1] The costliest option is treating PFAS at the 'end' of its consumer road trip at the expense of public ratepayer dollars.

The solution for how to deal with the residual legacy of PFAS in our environment and waterways is not as simple. PFAS have been woven into the very fabric of our lives for decades, and we are now tasked with unstitching ourselves from what was once billed as a miracle additive to products of broad-scale use. The pressing question is how to effectively decouple society from this PFAS dependency while reclaiming our natural systems damaged by these compounds, and reimagining the critical role of the circular water economy in modern society.

A good start in discerning options moving forward is knowing what we know and don't know. There has been a great deal of focus, both in the media and elsewhere, surrounding the role of biosolids (the residual solids by-product of the wastewater treatment process) in PFAS exposure. There is also a great deal of misinformation, or misunderstanding, about biosolids generally and the risks and benefits they pose. Compiled here is a 'kick starter' of sorts that can be referred to and built upon as this era of PFAS continues to unfold.

KNOWNS

PFAS released to the environment continues to decline as products containing PFAS are phased out. PFAS exposure to the environment and living beings is higher at the point of manufacture and use. Daily household exposure from a wide variety of products represents a far more direct point of use exposure than biosolids. As such, from a risk assessment perspective, the point of exposure is critical and necessary to consider when comparing daily home exposure to the more attenuated potential impacts of biosolids.

- Non-industrially impacted biosolids have a long history of safe application and no instances of documented adverse health effects. Decades of research on this practice support land application as the best end use of biosolids. Further, all biosolids must meet quality standards mandated by federal and local laws to be utilized.
- The biosolids ban enacted in Maine stems from the historical use of PFAS-contaminated paper mill sludges, and biosolids that received wastewater from a paper plate manufacturing facility before PFAS was a known hazard. There needs to be a clear differentiation between the fate and transport of PFAS from industrially impacted biosolids versus typical municipal biosolids without significant inputs.
- Pretreatment and source control programs at wastewater agencies are very effective at keeping known, targeted and identifiable sources of contaminants from entering the treatment system. This proven, affordable approach works well in addressing industrial sources, but cannot be used to eliminate PFAS from entering our systems altogether.
- Effective sanitation is one of the most essential developments of the twentieth century, and flushing is a reality of modern life. Efforts and proposals limiting management options for byproducts of the wastewater treatment process (i.e. biosolids) will undermine necessary water treatment works, reversing decades of protecting our waterways, ecosystems, and human health.

UNKNOWNS

- While the U.S. EPA recently released its draft PFAS Risk Assessment for biosolids, welcoming public comments through March 17, it is unclear how these comments will shape the final Risk Assessment and when the risk management portion will be released that includes a relative risk baseline assessment, a cost-benefit analysis, and alternative management options such as source control.
- While PFAS treatment options continue to be researched, we do not yet know whether there is an efficient and cost-effective means of removing PFAS on a large-scale during the wastewater treatment process and whether that translates to removal of any residual PFAS from biosolids.
- There are few if any viable alternatives to land application for biosolids management. Land application remains the most effective, efficient and beneficial use for biosolids, and there are no viable alternative solutions to land application in the near term.
- Research on the fate of PFAS in non-industrially impacted land-applied biosolids will be released in 2025 through the National PFAS study from the University of Arizona in addition to numerous other key studies. This promises to be a more representative sample of risk from standard biosolids across the country. Preliminary results find negligible migration of PFAS through the soil profile.

We know why biosolids are produced, we know the options that exist, and we know what will transpire if the end-use options disappear. Coupling this with other real-world conditions like breaking records in population, heat, wildfires, loss of topsoil, and lack of access to water and sanitation, the value of these regenerative resources like biosolids will hopefully become more apparent before we try to wipe them from existence. By grounding the conversation in what we know and what we don't, we can continue the hard work of threading our new vision towards a more circular water society.

With this in mind, CASA, on behalf of the wastewater sector, has been proactively working to limit the uses of PFAS in commerce through various legislation and collaborative efforts with other interested stakeholders in the academic, scientific, and environmental NGO communities. Our objective is to address PFAS contamination at the source and to ensure that the issue of PFAS in wastewater and biosolids is presented factually, with the appropriate context, and in consideration of the best available science.

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REFERENCES

1. Minnesota Pollution Control Agency, 2023. 'Evaluation of Current Alternatives and Estimated Cost Curves for PFAS Removal and Destruction from Municipal Wastewater, Biosolids, Landfill Leachate, and Compost Contact Water.' *www.pca.state.mn.us/news-and-stories/groundbreaking-study-shows-unaffordable-costs-of-pfas-cleanup-from-wastewater.*

EBDA
East Bay Dischargers Authority
50 years of protecting the SF Bay
1974 – 2024

August 14, 2025

Submitted electronically to OW-Docket@epa.gov and biosolidsprogram@epa.gov.
United States Environmental Protection Agency (USEPA)
David Tobias
Office of Science & Technology
Office of Water
1200 Pennsylvania Avenue NW
Washington, DC 20460

Re: East Bay Dischargers Authority Comments on EPA-HQ-OW-2024-0504, USEPA Draft Sewage Sludge Risk Assessment for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS)

Dear Mr. Tobias:

East Bay Dischargers Authority (EBDA) is pleased to submit comments related to the Draft Sewage Sludge Risk Assessment for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS) ("risk assessment"). EBDA is a joint powers public agency made up of the City of San Leandro, Oro Loma Sanitary District, Castro Valley Sanitary District, City of Hayward, and Union Sanitary District. EBDA also provides service by contract to Livermore-Amador Valley Water Management Agency, which serves the City of Pleasanton, Dublin San Ramon Services District, and City of Livermore. EBDA sustainably and cost-effectively manages the discharge of 60 million gallons per day of wastewater from one million Bay Area residents and businesses to the San Francisco Bay. Our member agencies manage over 23,000 wet tons of biosolids each year with a goal of maximizing beneficial reuse and contributing positively to the circular economy.

While we appreciate USEPA's attention to PFAS issues, unfortunately the sewage sludge risk assessment and accompanying communications have created uncertainty and confusion across the nation, and threaten to unnecessarily jeopardize the safe, sustainable, and proven practice of land applying biosolids. This has the effect of driving more of our biosolids to landfill, where they have greater potential to contribute to climate change rather than combatting it the way that land application does.

For the reasons outlined in detail in this letter, EBDA requests that the risk assessment not be finalized until additional data is considered using new or soon to be published credible research on this subject, as we believe it to grossly overestimate actual risk. Moreover, we request that future USEPA communications regarding the risk assessment highlight the fact that it was completed without the essential risk management component, which is unprecedented to our knowledge.

The Risk Assessment Fails to Include the Essential Risk Management Component

Most notably, USEPA released the draft assessment without first conducting a risk management analysis. This is unprecedented and could leave the public with the false impression that biosolids pose a substantial risk from land application or surface disposal. The risk management analysis is critical for putting the actual risk in perspective and for providing context. This includes a risk-benefit analysis, which would consider the risk of PFOA and PFOS from other exposures (carpeting, food packaging, cosmetics, dental floss, cookware, etc.) and the additional incremental risk from an indirect biosolids exposure. It would also evaluate the benefits of biosolids land application such as climate change mitigation via carbon sequestration and the avoidance of fossil fuel intense inorganic fertilizer utilization. Other benefits include improved soil tilth, increased crop yields, reduced need for irrigation, and increased soil organic carbon which also inhibits movement and bioavailability of PFOA and PFOS in the agricultural ecosystems. The risk management piece must be completed and incorporated in advance of releasing any revised risk assessment. We believe the risk management assessment would demonstrate indirect exposures to PFAS from land applied biosolids is an incredibly small fraction of everyday exposures for the general public, and exposure is far more prevalent from an abundance of common household products.

The Risk Assessment Fails to Acknowledge Limited Biosolids Management Options

The risk assessment also fails to mention the practical reality of limited biosolids management options. There are over 15,000 municipal wastewater treatment plants across the nation providing the essential public service of cleaning our water and treating the solids produced from that process. There are only four options for managing the biosolids that are produced daily as a byproduct of treatment. The draft risk assessment identifies three of them (land application and reclamation; surface disposal, and incineration) as likely posing an *unacceptable* risk. The fourth option of municipal solid waste landfilling was not considered given that landfills are regulated elsewhere in 40 CFR part 258. Many states, including California, have identified landfills as significant contributors to climate change due to fugitive GHG emissions (notably methane), and are thus requiring organic waste, including biosolids, to be diverted from landfills for beneficial use. Given the findings of this risk assessment, it is not clear what current, and available alternatives exist for biosolids management if every single option identified for biosolids management poses an “unacceptable risk.” While such practical questions may be beyond the scope of the assessment itself, it is a reality that must be addressed by USEPA and considered as a logical outcome of this assessment.

The Risk Assessment Paints an Unrealistic Scenario Surrounding Land Application

As noted in the attached reviews by seven expert research scientists, there are several elements within the risk assessment that are problematic and need to be improved for accuracy. [Agency Name’s] more detailed suggestions follow, and there are several examples of where the risk assessment is not representative of most biosolids land application practices across the nation.

As a practical example, the “modeled farm family” that serves as the focus of the assessment is assumed to have consumed food crops grown every year on land *contaminated* with PFOA and PFOS laden biosolids. In contrast, the vast majority of land applied biosolids across the nation are *non-contaminated* and typically contain de minimus background levels of PFAS. In addition, existing biosolids land application regulations require waiting periods between biosolids application and harvest. Assuming application of a Class B product, the waiting periods required for harvesting crops grown in the soil (or which may touch the soil) are between 14 and 38 months, and the land required to comply with those requirements would far exceed that of the “modeled family.” The assessment also assumes runoff to a pond used for fishing, though existing regulation does not allow such runoff to occur from compliant land application practices. These elements of the risk assessment (and others), paint an entirely unrealistic scenario without consideration of existing regulations, and it uses that scenario to make inaccurate conclusions about the risks posed by land application of biosolids.

The Risk Assessment Does Not Include Important Recent Research

There is an abundance of recent research or ongoing research near completion conducted on typical biosolids, none of which was included in the risk assessment. This important research must be included before the risk assessment can be finalized. The scant research used in the draft risk assessment was largely based on studies or data from biosolids that were highly contaminated by industrial sources, and/or used unrealistically high application rates. The more current research findings rely on long-term application sites across the country and generally demonstrate that there is limited migration of PFAS to groundwater and negligible crop uptake due in large part to low soil concentrations of PFAS, high organic carbon content, use of agronomic loading rates, and reduced mobility/bioavailability due to interactions with the solid-water and air-water interfaces. The reviews from several expert research scientists below illustrate these critical elements in greater detail and highlight other areas where the risk assessment needs to be improved or refined.

We appreciate your consideration of these comments and hope that EBDA, the California Association of Sanitation Agencies (CASA), and others across the nation can work with USEPA to improve the model for accuracy, incorporate a risk management component, rely on the most up to date research, and contain more realistic and practical discussion of PFAS and the role of biosolids management.

Sincerely,

Jacqueline Zipkin, P.E.
General Manager

CC: Maile Lono-Batura, California Association of Sanitation Agencies
EBDA Member Agencies

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 17, 2025

ITEM NO. RA8 FIRST MILE HORIZONTAL LEVEE SITE TOUR

Recommendation
For the Committee's information only; no action is required.

Strategic Plan Linkage
5. **Resilience:** Champion resilience for communities and the environment through regional leadership and advancing priority programs to support the Member Agencies in achieving their sustainability goals.
    b. Advance concepts for shoreline adaptation and climate resilience.

Background
Wetlands, horizontal levees, and other "Nature-Based Solutions" (NBS) have the potential to provide multiple benefits including water quality improvement through reduction of nutrients and contaminants of emerging concern, creation or restoration of habitat, and protection from sea level rise and coastal flooding.

In June 2019, the San Francisco Estuary Partnership (SFEP), was awarded a grant from the EPA Region IX Water Quality Improvement Fund (WQIF) for the Transforming Shorelines Project. The project contained several components aimed at advancing NBS at wastewater treatment plants, including continued UC Berkeley research at the Oro Loma Horizontal Levee demonstration project, a feasibility study for NBS at the Hayward Ponds, and design of the EBDA "First Mile" Horizontal Levee Project. As a sub-grantee, EBDA was responsible for leading, in close partnership with SFEP, implementation of the Hayward Ponds Study and the First Mile Project. This grant concluded in June 2024. Work products included 30% design drawings and documentation for the First Mile.

In 2024, SFEP was awarded another grant from the EPA Region IX WQIF, this time for the Pivot Points Project. This project includes four components:

Project Component	Lead Organization
Developing an implementation strategy for the Hayward Area Shoreline Planning Agency's (HASPA) Shoreline Adaptation Master Plan and strengthening HASPA's capacity for governance of the NBS projects in the Master Plan in the long-term.	East Bay Regional Park District
First Mile Horizontal Levee design, permitting, and community engagement.	EBDA
Building institutional support and facilitating technology transfer for NBS through regional convenings and outreach to elected officials.	Save the Bay
Creating an NBS 'State of Play' Report to describe the status of NBS around the Bay, identify key challenges and opportunities, and develop design guidelines for horizontal levees.	SFEP

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 17, 2025

In December 2024, EBDA's Commission authorized the General Manager to enter into a new funding agreement to implement the next phase of work on the First Mile Project under the Pivot Points grant. Under the Agreement, which runs through February 14, 2028, ABAG committed to reimbursing EBDA for external project expenses up to $1,175,000 for design and permitting work on the First Mile Project. The Commission subsequently authorized an agreement with Anchor QEA. This consulting firm is currently advancing the First Mile design to 60% and working with the regulatory agencies to inform the design and develop permitting strategies.

In July 2025, the Commission also authorized contracts with Teach Earth Action, a nonprofit based at Chabot College, and Greenbelt Alliance, to conduct community and youth engagement around the suite of shoreline resilience projects contained in the Hayward Shoreline Adaptation Master Plan developed by the Hayward Area Shoreline Planning Agency (HASPA), including the First Mile and the City of Hayward's NBS project.

Discussion
As part of their work to generate support for NBS around the Bay among elected officials, Save the Bay is hosting a tour of the First Mile Horizontal Levee Project site on October 3. The event is being held as part of regional Bay Day celebrations and will include presentations on the First Mile and the HASPA Master Plan, as well as stops at the Oro Loma Horizontal Levee and the First Mile site. The attached flier contains details about the event. Commissioners interested in attending should RSVP to Save the Bay (jquigley@savesfbay.org) and cc the EBDA General Manager.

Celebrate Bay Day with an exclusive tour of the Hayward Shoreline for elected officials and staff!

Friday, October 3rd, 9:30 – 11:30 am

Oro Loma Sanitary District Training Room
2655 Grant Ave, San Lorenzo, CA 94580

RSVP to Josh Quigley
jquigley@savesfbay.org, 510-463-6808

The Need

Sea level rise and climate change are increasing the risk of flooding in our communities. Nature-based shoreline adaptations like horizontal levees and marsh restoration projects can play an important role in preventing flooding, while also creating recreational spaces and improving the health of the Bay. But these types of projects face unique challenges in planning, permitting, and funding that can lead to costly delays and missed opportunities. The Hayward Area Shoreline Planning Agency (HASPA) is currently working to support an innovative nature-based project called the First Mile Horizontal Levee that will increase flood protection and sea level rise resilience, improve water quality, and enhance habitat and recreational opportunities.

The Opportunity

Please join Save The Bay, HASPA, the East Bay Dischargers Authority, East Bay Regional Park District and the SF Estuary Partnership for a briefing and tour of the project site of the First Mile Horizontal Levee project. We will provide an overview of the Hayward Shoreline Adaptation Plan and will tour the site of the First Mile Levee project. This is a great opportunity to see this type of nature-based flood protection and learn what you can do to foster more of these multi-benefit projects across the Bay Area.

You will be walking on uneven terrain and will be outdoors. Please dress for the weather and wear closed-toed shoes. Breakfast will be provided – arrive early!

SAVE THE BAY

HAYWARD AREA SHORELINE PLANNING AGENCY · HAYWARD · CALIFORNIA

EBDA
East Bay Dischargers Authority

SAN FRANCISCO ESTUARY PARTNERSHIP

*Bay Day is a regional holiday celebrating the heart of our home – San Francisco Bay. This one-day shoreline festival event offers a unique opportunity to connect, celebrate, and learn more about the challenges facing the Bay. Visit **BayDay.org** for more information.*