EAST BAY DISCHARGERS AUTHORITY
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A Joint Powers Public Agency

NOTICE: Pursuant to the Governor's Executive Orders N-25-20 and N-29-20, the Regulatory Affairs Committee meeting scheduled below will be accessible via Zoom video conferencing. Members of the public may participate in the meeting through the Zoom platform or phone number below.

- Zoom link: https://us02web.zoom.us/j/86260440932
- Telephone dial-in: 1(669) 900-6833, meeting ID #862 6044 0932

ITEM NO. 11

REGULATORY AFFAIRS COMMITTEE AGENDA

Monday, September 20, 2021

8:30 A.M.

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

Committee Members: Cutter (Chair); Johnson

RA1. Call to Order

RA2. Roll Call

RA3. Public Forum

RA4. EBDA NPDES Compliance – See Item OM4
(The Committee will review NPDES Permit compliance data.)

RA5. Reporting Checklist
(The Committee will review a checklist of completed regulatory reporting items.)

RA6. BACWA Key Regulatory Issue Summary
(The Committee will review the Bay Area Clean Water Agencies' issue summary.)

RA7. Chlorine Residual Blanket Permit Amendment
(The Committee will receive an update on this change to the Authority's permit limits.)

RA8. PFAS Update
(The Committee will receive an update on a regional study of Per- and Poly-fluoroalkyl Substances.)

RA9. Climate Adaptation Updates
(The Committee will receive an update on regional climate adaptation efforts and state funding.)

RA10. 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.

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 Administrative Assistant 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.

The next Regulatory Affairs Committee meeting is scheduled on Monday, November 15, 2021 at 8:30 a.m.

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 20, 2021

ITEM NO. RA5 REPORTING CHECKLIST

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

Background
Authority staff maintains a checklist of all regulatory reporting and related tasks to ensure timely and complete reporting.

Discussion
The following checklist is extracted from a complete list of routine regulatory activities addressed throughout the year. The following items were completed during the period of May 1 through August 31, 2021; there are no outstanding activities.

Regulatory Authority	*Required Action*	*Occurrence*	*Date Submitte*
Bay Area Air Quality Management District	Complete *Data Update* form Plant #14531	Annual	5/7/2021
Bay Area Air Quality Management District	Renew *Permit to Operate* Plant #14531	Annual	5/7/2021
ADP Business Payroll	Print Payroll Quarter-End Tax Returns	Quarterly	5/24/2021
CalPERS	Post Commission approved Compensation Plan to EBDA website	Annual	6/1/2021
State Compensation Insurance Fund	Workers' Compensation Insurance Renewal	Annual	6/2/2021
County of Alameda, Clerk/Recorder	Statement of Facts/Roster of Public Agencies Filing (FY changes to Commission)	Annual	6/29/2021
Secretary of State	Statement of Facts/Roster of Public Agencies Filing (FY changes to Commission)	Annual	6/30/2021
State Compensation Insurance Fund	Payroll Report, Semi-Annual Jan 01 - Jul 01	Semi-Annual	7/10/2021
Regional Monitoring Program % SFEI	Partipant Fee Quarterly Installment (See: annual invoice)	Quarterly	7/15/2021
Bay Area Air Quality Management District	Pay renewal fee for *Permit to Operate* Plant #14531	Annual	7/15/2021
Department of Toxic Substances Control	EPA ID Number (CAL000072039) Verification Questionnaire and Manifest Fees Assessment	Annual	7/20/2021
State of California	Annual posting of Reimbursements Report to EBDA Website (GC §53065.5)	Annual	7/21/2021
State Water Resources Control Board	NPDES Quarterly Report (Apr-Jun)	Quarterly	7/30/2021
State Water Resources Control Board	NPDES Semi-Annual Report (Jan-Jun)	Semi-Annual	7/30/2021
CalPERS	SSA Annual Information Request	Annual	8/3/2021
ADP Business Payroll	Print Payroll Quarter-End Tax Returns	Quarterly	8/10/2021
Regional Water Quality Control Board	Recycled Water monthly reports	Monthly	8/23/2021
State Water Resources Control Board	NPDES monthly reports	Monthly	8/30/2021
Oro Loma Sanitary District	Lease Fees	Annual	8/31/2021

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 20, 2021

ITEM NO. RA6 BACWA KEY REGULATORY ISSUE SUMMARY

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

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. Previous versions are available at https://bacwa.org/regulatory-issues-summaries/.

KEY REGULATORY ISSUE SUMMARY
Updated July 9, 2021

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

Contents

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
NUTRIENTS IN SAN FRANCISCO BAY			
• San Francisco Bay receives some of the highest nitrogen loads among estuaries worldwide, yet has not historically experienced the water quality problems typical of other nutrient-enriched estuaries. It is not known whether this level of nitrogen loading, which will continue to increase in proportion to human population increase, is sustainable over the long term. • Because of the complexity of the science behind nutrient impacts in the SF Bay, stakeholders in the region are participating in a steering committee to prioritize scientific studies and ensure that all science to be used for policy decisions is conducted under one umbrella.	• For FY22, BACWA is contributing $2.2M to fund scientific research needed to make management decisions for the third Watershed Permit. This level of funding is required by the second Watershed Permit. • The focus of current scientific efforts is improving model representation of biogeochemistry, light attenuation, dissolved oxygen, and Harmful Algal Bloom dynamics. Field and lab observations are supporting these improvements. • The science team is developing an Assessment Framework for deep subtidal habitats and Lower South Bay sloughs. • The science team is assessing the geographic zone of influence of each plant's discharge, which will aid in developing management approaches.	• BACWA and the Regional Water Board are discussing the possibility of an extension of the current permit term to increase scientific certainty prior to making management decisions. • Continue to participate in steering committee, Nutrient Management Strategy, Nutrient Technical Workgroup, and planning subcommittee meetings, and provide funding for scientific studies. • Continue to engage with Nutrient Technical Team and BACWA's Nutrient Management Strategy technical consultant, Mike Connor, to provide review of work products and charge questions for the science team.	BACWA Nutrients Page: https://bacwa.org/nutrients/ SFEI Nutrient Science Plan Documents: http://sfbaynutrients.sfei.org/books/reports-and-work-products

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
SF BAY NUTRIENT WATERSHED PERMIT			
• The 1st Nutrient Watershed Permit was adopted in 2014, and required a regional study on Nutrient Treatment by Optimization and Upgrades, completed in 2018. • The 2nd Nutrient Watershed Permit was adopted in 2019. It includes: ○ Continued individual POTW nutrient monitoring and reporting; ○ Continued group annual reporting; ○ Significantly increased funding for science; ○ Regional assessment of the feasibility and cost for reducing nutrients through nature-based systems and recycled water; ○ Establishing current performance for TIN, and "load targets" for nutrient loads based on 2014 to 2017 load data plus a 15% buffer for growth and variability ○ Recognition of "early actors" who are planning projects that will substantially decrease TIN loads. • Through the nutrient surcharge levied on permittees, BACWA funds compliance with the following provisions on behalf of its members: ○ Group Annual Reporting ○ Regional Studies on Nature-Based Systems and Recycled Water ○ Support of scientific studies through the Regional Monitoring Program (RMP) at $2.2M per year through the five-year permit term.	• Studies related to Recycled Water and Nature-Based Systems are underway, and will be completed by the due date of July 1, 2023. • Each year by February 1, BACWA submits a Group Annual Report on behalf of its members. The report summarizes trends in nutrient concentrations and loading for each agency, and for all the agencies as a whole. The annual reporting period in the 2nd Watershed Permit is based on a water year (October 1 – September 30th). • Each year by February 1, BACWA and SFEI submit an annual science implementation plan and schedule update, as required by the 2nd Watershed Permit. • Agencies with plans to substantially reduce nutrients are recognized in the Fact Sheet of the 2nd watershed permit.	• **Agencies continue to report nutrient monitoring to the Water Boards through CIWQS and to BACWA via the data sheet.** • **Agencies with plans to implement projects that will substantially reduce nutrient loads should keep the Regional Water Board and BACWA apprised, to get credit for "early actions".** • **Work with HDR and SFEI as needed to collect information for Nutrient Removal by Recycled Water Evaluation and the Nature-Based Systems study. O**utreach to individual agencies is being conducted in several waves in 2021. • Continue working with HDR to develop compliance feasibility information about the use of subembayment vs. individual agency load limits in the 3rd Watershed Permit. • Continue discussions about development of a potential nutrient trading framework. • BACWA has reconvened the Nutrient Strategy Team (NST) that will negotiate with the Regional Water Board to develop the tenets for the 3rd Watershed Permit.	2nd Nutrient Watershed Permit: https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2019/May/6_ssr.pdf Special Studies of Recycled Water and Nature-Based Systems: https://bacwa.org/document-category/2nd-watershed-permit-studies/ Optimization/Upgrade Study Final Report: https://bacwa.org/wp-content/uploads/2018/06/BACWA_Final_Nutrient_Reduction_Report.pdf Optimization/Upgrade Report Brochure: https://bacwa.org/wp-content/uploads/2019/03/BACWA-2019-Nutrient-Brochure_Final_20190301.pdf BACWA Group Nutrient Annual Reports: http://bacwa.org/document-category/nutrient-annual-reports/

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CHLORINE RESIDUAL COMPLIANCE			
• The Basin Plan chlorine residual effluent limit is 0.0 mg/L. Chlorine residual is the most frequent parameter for violations for Region 2 POTWs. Because there are 24 hourly reporting events each day, the "opportunities" for violations are enormous. However, the actual violation rates are infinitesimal (~0.001%). • Agencies are overdosing their effluent with the dechlorination agent, sodium bisulfite, to prevent chlorine violations, a practice which costs more than $1 million regionally each year.	• The Regional Water Board worked with BACWA to develop a Basin Plan Amendment (BPA) modifying the effluent limit for chlorine residual. • The draft BPA includes: ○ A 0.013 mg/L Water Quality Objective in marine and estuarine waters, which will be applied as a WQBEL in permits and calculated incorporating dilution. The WQBEL will be applied as a one-hour average. ○ A Minimum Level (ML), or Reporting Limit of 0.05 mg/L for online continuous monitoring system. • The BPA was adopted by the Regional Water Board on November 18, 2020, and was approved by the State Water Board on May 18, 2021. It will not go into effect until it is approved by the Office of Administrative Law and EPA, which is expected by late 2021. • The Regional Water Board is planning to issue a blanket permit amendment to implement the Basin Plan Amendment within each individual NPDES permit. An administrative draft of this blanket permit amendment was circulated for review in June 2021.	• Review the Tentative Order (public review draft) of a regional blanket permit amendment that will implement the new BPA for all Region 2 dischargers at one time. This approach will accelerate implementation compared to a slower, permit-by-permit rollout. • The Tentative Order review period is expected to occur in summer 2021. The earliest possible effective date for a blanket permit amendment is November 1, 2021.	Background and Status information about BPA on Regional Water Board site: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/amendments/chlorinebpa.html Final BPA adopted by Regional Water Board https://www.waterboards.ca.gov/sanfranciscobay//water_issues/programs/planningtmdls/amendments/chlorinebpa/2_Chlorine_Resolution_R2-2020-0031.pdf Final BPA Staff Report: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/amendments/chlorinebpa/3_Chlorine_BPA_Final_staff_report.pdf BACWA Comment Letter on draft BPA: https://bacwa.org/document/chlorine-basin-plan-amendment-bacwa-comment-letter/

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
PESTICIDES			
• Pesticides are regulated via FIFRA, and not the Clean Water Act. POTWs do not have the authority to regulate pesticide use in their service area, but may be responsible for pesticide impacts to their treatment processes or to surface water. • Through BAPPG, BACWA aims to proactively support a scientific and regulatory advocacy program so that pesticides will not impact POTWs' primary functions of collecting and treating wastewater, recycling water, and managing biosolids, or impact receiving waters via the "down the drain" route.	• EPA reviews all registered pesticides at least once every 15 years. Each review allows opportunity for public comment. • BACWA continues to fund consultant support to write comment letters advocating for the consideration of POTW and surface water issues during EPA's risk assessments as part of reregistration. Funding for pesticide regulatory outreach in FY22 is $60K. • The Regional Water Board leverages BACWA's efforts to provide their own comment letters to EPA. • With chronic toxicity limits likely in the near term, POTWs will be in compliance jeopardy if pesticides contribute to toxicity. • Baywise.org has launched webpages on flea and tick control messaging to pet owners and veterinarians.	• Continue to comment on pesticide re-registrations. • Work with veterinary associations on messaging with respect to flea and tick control alternatives. • Continue to develop summary of EPA actions on pesticides. • Look for opportunities to work with CalDPR on pesticides research. • Work with other regional associations, such as the California Stormwater Quality Association (CASQA), to collaborate on funding pesticide regulatory outreach.	BACWA Pesticides Regulatory Update and Call to action: https://bacwa.org/wp-content/uploads/2016/02/BACWA-Pesticide-Regulatory-Update-2016-1.pdf BACWA Pesticide Regulatory Support Page: https://bacwa.org/document-category/pesticides-regulatory-support/ Baywise flea and tick pages: https://baywise.org/
ENTEROCOCCUS LIMITS			
• In August 2018, the State Water Board adopted new statewide bacteria water quality objectives and implementation options to protect recreational users from the effects of pathogens in California water bodies. The objectives and implementation options are a new part 3 of the Water Quality Control Plan for the SIP and Ocean Plan. • The Objectives were approved by the Office of Administrative Law in February 2019 and by EPA in March 2019	• The new enterococcus objective for saline waters is a six-week rolling geometric mean of enterococci not to exceed 30 cfu/100 mL, calculated weekly, with a statistical threshold value of 110 cfu/100 mL, not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner. • The Regional Water Board has been granting dilution credit upon request when implementing the new objectives in NPDES permits.	• BACWA worked with SFEI and funded a study of background enterococcus levels in the SF Bay. Surface water samples were collected in July (dry season) and January (wet season) throughout the Bay. Samples from all stations were below the 30 CFU/100 mL WQO, justifying allowing for dilution credits when implementing the WQO. The study was completed and submitted in June 2020.	SWB Bacterial Objective page: https://www.waterboards.ca.gov/bacterialobjectives/ SFEI Final Report on Enterococci in the SF Bay: https://bacwa.org/wp-content/uploads/2020/08/BACWA-2020_Enterococci-report_final.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
MERCURY AND PCBS			
• The Mercury & PCB Watershed Permit was reissued in November 2017 with an effective date of January 1, 2018. The Watershed Permit is based on the TMDLs for each of these pollutants. • Aggregate PCB and mercury loads have been well below waste load allocations through 2019, the last year for which data have been compiled. • Method 1668C for measuring PCB congeners has not been promulgated by EPA. Data collected during the first permit term varied widely depending on which laboratory performed the analyses. BACWA Laboratory Committee developed an updated PCB Protocol to reduce variability between laboratories running Method 1668C, effective January 1, 2014. Data have been more consistent since the distribution of this document. • In 2017, EPA adopted federal pretreatment program rules requiring dental offices to install dental amalgam separators. The rule is intended to reduce dental office discharge of mercury. The compliance date was July 14, 2020.	• The 2017 watershed permit reduces monitoring frequencies via Method 1668C for agencies with design flows of less than 50 MGD. It also incorporates the laboratory guidance from the BACWA PCB Protocol. • The permit requires continued risk reduction program funding. For FY22, BACWA granted an extension to an ongoing contract worth $12,500 to the California Indian Environmental Alliance to conduct risk reduction activities related to fish consumption. A previous contract for APA Family Support Services is now complete. • In 2016, monitoring requirements for PCBs were modified for some agencies per Order No. R2-2016-0008, *Alternate Monitoring and Reporting Requirements for Municipal Wastewater Dischargers for the Purpose of Adding Support to the San Francisco Bay RMP*. Additional changes to mercury monitoring are expected when this 2016 Order is replaced, which is expected to occur in FY22. • As part of the 2021 Triennial Review of the Basin Plan, the Regional Water Board is considering whether to designate three new beneficial uses: Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB) and Subsistence Fishing (SUB). Water bodies designated these beneficial uses could also be assigned lower mercury objectives.	• **Complete any remaining outreach to dentists to ensure all facilities have completed the one-time compliance report required by the federal pretreatment program. The reports were due October 12, 2020**. • Continue outreach to dentists on mandatory amalgam separation through BAPPG and BACWA's pretreatment committee. • Schedule risk reduction presentations by the grantees to the Regional Water Board in 2021. • Continue to work with Regional Water Board staff to develop appropriate mercury and PCB monitoring requirements (as well as other constituents) when replacing the 2016 *Alternate Monitoring and Reporting Requirements* Order. • Track potential Basin Plan Amendments resulting from the Triennial Review project related to new beneficial use designations. The new designations are not expected to impact the bay-wide mercury TMDL in the near term, but there could be localized or longer-term impacts.	2017 Mercury/PCB Watershed Permit: http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2012/R2-2012-0096.pdf Risk Reduction Materials: https://bacwa.org/mercurypcb-risk-reduction-materials/ Updated BACWA PCBs Protocol: https://bacwa.org/wp-content/uploads/2014/02/PCBs-Sampling-Analysis-and-Reporting-Protocols-Dec13.pdf One-Time Compliance Report for Dental Offices: https://www.waterboards.ca.gov/water_issues/programs/npdes/docs/drinkingwater/one-time_compliance_report_for_dental_offices.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
STATE WATER BOARD TOXICITY PROVISIONS			
• The State Water Board has been working since before 2012 to establish Toxicity Provisions in the SIP that would introduce uniform Whole Effluent Toxicity Requirements for the State • During individual permit reissuances since 2015, the Regional Water Board has been performing RPAs for chronic toxicity and giving chronic toxicity limits to agencies with Reasonable Potential. • Proposed Final Statewide Toxicity Provisions were released in October 2020, incorporating revisions to previous versions from 2018 to 2020. The Provisions establish: ○ Use of Test of Significant Toxicity (TST) as statistical method to determine toxicity replacing EC25/IC25 (with concerns it will lead to more false positive results); ○ Numeric limits for chronic toxicity for POTWs >5 MGD and with a pretreatment program; smaller POTWs would receive effluent targets and only receive limits if Reasonable Potential is established; ○ Regional Water Board discretion on whether to require RPAs for acute toxicity; ○ For POTWs with *Ceriodaphnia dubia* as most sensitive species, numeric targets rather than limits until after completion of state-wide study on lab/ testing issues (Dec. 31, 2023).	• The State Water Board adopted the Statewide Toxicity Provisions at its December 2020 meeting. In October 2021, the State Water Board plans to vote on a resolution confirming that the Statewide Toxicity Provisions were adopted as state policy for water quality control for all inland surface waters and estuaries. The Provisions will not go into effect until later in 2022 after this second approval by the State Water Board, followed by review by OAL and EPA. • Implementation is likely to be on a permit-by-permit basis as new individual NPDES permits are issued. • Since 2016, agencies have had the option to skip sensitive species screening upon permit reissuance and pay the avoided funds to the RMP to be used for CECs studies. Once the Statewide Toxicity Provisions come into effect, agencies will once again be required by the provisions to do sensitive species screening once every 15 years. • BACWA has joined SCAP, CVCWA and NACWA in a lawsuit alleging EPA did not follow proper procedure in requiring use of the TST, which has not been officially promulgated. The lawsuit was dismissed on Statute of Limitation grounds, but the group has filed an appeal.	• **Continue to work with Regional Water Board on language for implementing Toxicity Provisions in Region 2 NPDES Permits.** • Regional Water Board staff presented draft permit language to the BACWA Permits Committee at its December 2020 meeting, and BACWA subsequently provided written feedback. A modified draft will be circulated for BACWA member review later in 2021. The sample permit language will ultimately be copied into each newly adopted permit in the region, filling in details about monitoring and screening requirements that the Provisions leave to Regional Water Board discretion. • Share information on the special study on the *Ceriodaphnia dubia* test method with agencies who have that species in their permits. • Develop an alternative funding mechanism for RMP CECs studies by seeking reduced monitoring for items other than chronic toxicity screening. A draft plan to replace the 2016 *Alternate Monitoring and Reporting Requirements* Order is under development by BACWA and Regional Water Board staff.	SWRCB Toxicity Page: http://www.swrcb.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.shtml Toxicity Workshop Presentations from 2017 BACWA Workshop: https://bacwa.org/bacwa-toxicity-workshop-september-18-2017/ Regional Water Board presentation on implementation of Statewide Toxicity Provisions from December 2020 https://bacwa.org/wp-content/uploads/2021/01/Slides-from-RWQCB-Regarding-R2-Tox-Language-in-NPDES-Permits-2020-12-08.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
COMPOUNDS OF EMERGING CONCERN (CECS)			
• Pharmaceuticals and other trace compounds of emerging concern (CECs) are ubiquitous in wastewater at low concentrations and have unknown effects on aquatic organisms. • The State Water Board is considering developing a Pilot CECs Monitoring Plan for the State**.** • Region 2's CEC strategy focuses on monitoring/tracking concentrations of constituents with high occurrence and high potential toxicity. Much of what the State Water Board is considering for its Pilot Monitoring Plan is already being implemented in Region 2 through the RMP.	• The Regional Water Board has stated that voluntary and representative participation in RMP CECs studies is key to avoiding regulatory mandates for CECs monitoring. These studies are informational and not for compliance purposes. BACWA developed a White Paper on representative participation to be used to support facility selection for these studies. It is intended to be a living document with ongoing updates • Microplastics have been a focus of the RMP in recent years. BACWA has participated in the Workgroup and developed a POTW Fact Sheet. One conclusion of the RMP work is that POTWs contribute much lower microplastic loads than stormwater. • DDW has adopted a definition of Microplastics in Drinking Water (may apply to other matrices such as wastewater and stormwater in the future). • The OPC is funding a study in 2021 that will look at microplastic removal through wastewater treatment processes. The study will be carried out by SCCWRP and SFEI, and will commence with a pilot study in summer 2021 and full-scale sampling of about 15 facilities in Fall 2021.	• **Continue to participate in the RMP CEC Workgroup.** • **Participate in studies by collecting wastewater samples at member facilities.** Studies this year will include ethoxylated surfactants follow-up, sunscreens, and the OPC-funded microplastic study. • Provide ongoing updates to White Paper for use by the RMP in selecting representative POTWs for participation in CEC studies, and develop a proposal for ongoing monitoring. • Continue tracking State Water Board and Ocean Protection Council actions re: microplastics via the CASA Microplastics Workgroup. • Work with Regional Water Board to replace the 2016 *Alternate Monitoring and Reporting Requirements* Order. The new Order will provide a sustainable source of RMP CEC funding in exchange for reduced monitoring and reporting of other parameters.	RMP CEC Workgroup: http://www.sfei.org/rmp/ecwg#tab-1-4 BACWA CECs White Paper: https://bacwa.org/document/bacwa-cec-white-paper-updated-june-2020/ BACWA Microplastics Fact Sheet: https://bacwa.org/wp-content/uploads/2019/09/BACWA-Microplastics-flyer.pdf SFEI Microplastics Science Strategy: www.sfei.org/documents/microplastic-monitoring-and-science-strategy-san-francisco-bay SWRCB Microplastics in Drinking Water page: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/microplastics.html

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)			
• Per- and polyfluoroalkyl substances made substances (PFAS) are a large group of human-made substances that are very resistant to heat, water, and oil. PFAS have been used extensively in surface coating and protectant formulations; common PFAS-containing products are non-stick cookware, cardboard/paper food packaging, water-resistant clothing, carpets, and fire-fighting foam. • Perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) are two types of PFAS that are no longer manufactured in the US; however, other types of PFAS are still produced and used in the US. • All PFAS are persistent in the environment, can accumulate within the human body, and have demonstrated toxicity at relatively low concentrations. PFOA and PFOS were found in the blood of nearly all people tested in several national surveys. • Potential regulatory efforts to address PFAS focus on drinking water in order to minimize human ingestion of these chemicals, although regulators have also expressed concern about uptake into food from land applied biosolids. • In April 2021, the formation of an "EPA Council on PFAS" was announced.	• In Aug 2019, DDW lowered the drinking water notification levels (NLs) to 6.5 ng/L for PFOS and 5.1 ng/L for PFOA (lowest detection possible at the time). In Feb 2020, DDW also lowered the 'response levels' (RLs) to 10 ng/L for PFOA and 40 ng/L for PFOS. • Under AB756 (July 2019), DDW can order public water systems to monitor PFAS, consumers must be notified if NLs/RLs are exceeded, and water sources must be removed from service or blended/ treated if RLs are exceeded (if possible). DDW has requested OEHHA develop NLs for seven other PFAS compounds and public health goals (PHGs) for both PFOA and PFOS, the next step in establishing drinking water MCLs. • In 2019, the SWRCB developed a phased investigation action plan requiring testing of drinking water systems and site investigations at high risk locations for PFAS. Investigative orders are issued as follows: ○ Mar/Apr 2019 - landfills and airports and adjacent public water systems ○ Oct 2019 - chrome-platers ○ July 2020 - POTWs ○ March 2021 - refineries & bulk terminals • The Summit Partners held three PFAS Workshops on the SWRCB investigative order for POTWs in late 2020 and early 2021.	• The July 2020 SWRCB investigative Order for POTWs is not applicable to Region 2 agencies. Instead, BACWA worked with RWB staff and obtained State Water Board approval to fund and conduct a regional study through the RMP. • SFEI is conducting this study in two phases: ○ In Phase 1, fourteen representative facilities collected samples in Q4 2020 for influent, effluent, RO concentrate, and biosolids. SFEI is analyzing the data and will issue a report in September 2021. ○ Phase 2 will be conducted in Fall 2021 and will be designed based on recommendations from Phase 1 report. • BACWA will continue collaboration with Summit Partners and non-governmental organizations on legislation related to pollution prevention, as well as tracking developments at the State and Regional level. • A fourth Summit Partners PFAS workshop is planned for August 2021.	Region 2 PFAS Study Phase 1 Sampling Plan: https://bacwa.org/wp-content/uploads/2020/12/SFEI-Final-PFAS-SAP-Phase-1-2020-11-23.pdf Summit Partners PFAS Workshop presentations: https://casaweb.org/calendar/speaker-presentations/ SWRCB Investigative Order for POTWs: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2020/wqo2020_0015_dwq.pdf OEHHA Notification Levels for Drinking Water: https://oehha.ca.gov/water/notification-levels-chemicals-drinking-water EPA PFAS Resources https://www.epa.gov/pfas EPA PFAS Action Plan (updated Feb 2020) https://www.epa.gov/sites/production/files/2020-01/documents/pfas_action_plan_feb2020.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
SSS WDR REISSUANCE			
• The State Water Board plans to reissue the statewide Sanitary Sewer System General Order (SSS-WDR) in late 2021. • State Water Board staff have sought out early stakeholder engagement through outreach to CASA and the Regional Associations, and NGOs. • The State Water Board's goals for the update are: ○ Updating the 2006 Order ○ Clarifying compliance expectations and enhancing enforceability ○ Addressing system resiliency, including climate change impacts ○ Identifying valuable data and eliminating non-valuable reporting requirements	• In February 2021, the State Water Board released an informal staff draft of the updated SSS-WDR. The informal staff draft proposed the following new components: ○ SSMPs must include a detailed risk assessment, with findings to be used for prioritizing remediation actions ○ Spills must be reported to CIWQS within 2 hours ○ Sewershed boundaries must be provided to SWRCB ○ Agencies must report spills from private systems and laterals ○ Exfiltration is included in the definition of a spill ○ Well-performing systems have reduced reporting requirements for "Category 4" SSOs (those less than 50 gallons) ○ Legally Responsible Officials must have a PE license or be a CWEA-certified Grade III collection system operator • BACWA worked with CASA to provide proposed redlines to the informal staff draft, and discussed concerns in several meetings with State Water Board staff. BACWA also provided a comment letter on the informal staff draft. • A public review draft is expected later in summer 2021.	• Review and comment on the public review draft SSS-WDR when available for public comment, expected in Q3 2021. • Continue to coordinate with CASA, CVCWA, and SCAP on proposed revisions and reorganization of the SSMP requirements • Discuss response to issues such as exfiltration via BACWA's Collection Systems Committee.	SWB SSS WDR page: https://www.waterboards.ca.gov/water_issues/programs/sso/ SWB Informal Staff Draft (February 2021) https://www.waterboards.ca.gov/water_issues/programs/sso/docs/workshops/informal_staff_draft_statewide_sso_order.pdf BACWA / CASA Comment Letter on Informal Staff Draft: https://bacwa.org/wp-content/uploads/2021/07/6-30-21-SSS-WDR-Comment-Letter.pdf BACWA / CASA markup of Informal Staff Draft: https://bacwa.org/wp-content/uploads/2021/07/6-30-21-SSS-WDR-Redlines-Submission.docx

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

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
PHASE-OUT OF BIOSOLIDS AS ALTERNATIVE DAILY COVER			
• Regulatory drivers are indicating that biosolids used as alternative daily cover (ADC) or disposed in landfills will be phased out: ○ AB 341 set a goal to recycle 75% of solid waste by 2020 and CalRecycle's plan to achieve that goal called for a marked, but unquantified, reduction of organics to landfills. ○ SB 1383, adopted in September 2016 requires organics diversion: -50% by 2020 (relative to 2014) -75% by 2025 (relative to 2014) ○ In 2020, CalRecycle will count green waste as disposal (per AB 1594), rather than diversion, even when used as ADC. • Regulations implementing SB 1383 were approved by the Office of Administrative Law on November 9, 2020. The regulation will become effective on January 1, 2022, when states can begin enforcement on jurisdictions. Jurisdictions can begin local enforcement January 1, 2024, and compliance is required by January 1, 2025. • While the regulations implementing SB 1383 do not explicitly forbid biosolids disposal/reuse in landfills, it is assumed that since biosolids are a relatively "clean" waste stream that can be easily diverted, landfills will stop accepting biosolids.	• In the 2018 BACWA Biosolids survey, more agencies reported that they are developing plans for the phase-out than in the 2016 Survey. • Requirements in the final regulations include: ○ Diverted biosolids must be anaerobically digested and/or composted to qualify as landfill reduction. ○ Incineration and surface land disposal sites are designated as "landfills" for accounting purposes. ○ Local ordinances restricting land application are disallowed. ○ Jurisdictions that divert organic waste must also procure the end products of diversion, such as biogas, biomethane, and compost (but not biosolids). ○ If SB 619 (Laird) passes in the 2021 state legislative session, enforcement of SB1383 on local jurisdictions will be delayed by one year to January 1, 2023. • In March 2020 and May 2021, the California Conference of Directors of Environmental Health (CCDEH) prepared letters expressing concern over the anticipated expansion of land application due to SB 1383, and requesting a moratorium on land application until new safety standards are developed.	• **In July 2021, BACWA will distribute a biosolids trends survey covering 2018- 2020 activities and SB 1383 implementation – please respond.** • Actively work through CASA with California Air Resource Board, CalRecycle, State Water Board, and California Department of Food and Agriculture to develop sustainable long-term options for biosolids beneficial use. • Follow efforts of the Bay Area Biosolids Coalition (BABC) to investigate all-weather options for biosolids management. BABC is a BACWA Project of Special Benefit. • Coordinate with BABC, SFEI and Sonoma County Land Trust on preparation of a white paper regarding biosolids management in the baylands. • Participate in BAAQMD's Organics Recovery Technical Working Group to educate their staff on how to address implementation of SB 1383 at the Air District level. • Meet with BAAQMD management regularly in 2021 to discuss alignment of state and local regulations. • Work with CASA and others to respond to CCDEH concerns regarding safety standards for land application.	BACWA 2018 Biosolids Trends Survey Report: https://bacwa.org/document/2018-biosolids-trends-survey-report/ CASA White Paper on Biosolids Use in Landfills: https://bacwa.org/wp-content/uploads/2017/01/1-11-17-Sustainability-for-biosolids-use-at-landfills.pdf BABC website: http://www.bayareabiosolids.com/ CASA White Paper on SB 1383 Implementation: https://bacwa.org/document/summary-of-sb-1383-and-its-implementation-casa-2020/

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CLIMATE CHANGE MITIGATION			
• CARB's Climate Change Scoping Plan Update lays out the approach for the State to meet its greenhouse gas (GHG) emissions reduction targets through 2030, including additional policies to achieve 40% reduction below 1990 levels by 2030: ○ Short-lived climate pollutants ○ Carbon sequestration on Natural and Working Lands ○ Largest emitters (transportation, electricity, and industrial sectors) The Scoping Plan will be updated in 2022 targeting carbon neutrality by 2045. • SB 1383 (Short-Lived Climate Pollutant Reduction) calls for: ○ 40% methane reduction by 2030 ○ 75% diversion of organic waste from landfills by 2025 ○ Policy / regulatory development encouraging production/use of biogas • BAAQMD developed a Clean Air Plan requiring GHG emissions supporting CARB's 2050 target. • BAAQMD has proposed the development of Regulation 13 (climate pollutants) targeting GHG reductions related to organics diversion and management. • In October 2020, Governor Newsom signed Executive Order N-82-20 calling for nature-based land management strategies to address climate change, such as natural and working lands restoration.	• CARB states POTWs are part of the solution for reducing fugitive methane, and encourages diversion of organics to POTWs to use excess digester capacity and produce biogas. However, diversion also increases biosolids, which also need to be diverted from landfills. • Many POTWs are exploring energy generation, but BAAQMD TAC regulations could make such programs more difficult to implement. Direct injection of biogas to PG&E's pipelines or use as a transportation fuel may be more efficient. OSHA's PSM Standards, triggered by use of biogas offsite (if managing over 10k lbs of biogas onsite), may cause pipeline injection to be cost-prohibitive. CalOSHA has verbally agreed with scenarios exempt from PSM standards. • CARB's previous interest in nitrous oxide emission estimates and/or emission factors for POTWs has shifted to toxic air contaminants. See Toxic Air Contaminants - BAAQMD Rule 11-18, AB 617, and AB 2588. • BAAQMD is developing a suite of Rules under Regulation 13 for climate pollutants methane and nitrous oxide. However, rule development has been suspended due to COVID-19 and lack of data. The delay is allowing time to summarize information about current best management practices.	• **Respond to the July 2021 AIR committee-led survey regarding current methane management practices at anaerobic digesters and sludge lagoons.** • For Regulation 13, continue to work with BAAQMD staff to provide information and education about anaerobic digesters and POTW operations. Participate in the Organics Recovery Technical Working Group, as well as comment on draft Rules. • Work with CASA to look for opportunities for POTWs to help the State meet GHG reduction goals. • Look for ways to inform BAAQMD on opportunities and challenges for climate change mitigation by Bay Area POTWs. • Work with PG&E and BAAQMD to explore options for POTWs to inject biogas into PG&E pipelines. Note: CASA has been discussing the barriers to pipeline injection with CPUC staff, proposing a reduction in their standard from 990 Btu/scf to 970 Btu/scf.	AIR Committee Survey regarding management practices at digesters and lagoons: https://bacwa.org/document/methane-and-voc-survey-pdf-version-not-fillable/ Climate Change Scoping Plan, including 2022 Update: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan CARB Short Lived Climate Pollutant Reduction Strategy: https://www.arb.ca.gov/cc/shortlived/meetings/03142017/final_slcp_report.pdf SB 1383: https://www.calrecycle.ca.gov/organics/slcp BAAQMD Clean Air Plan: http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans BAAQMD Regulation 13 http://www.baaqmd.gov/rules-and-compliance/rules/regulation-13-climate-pollutants

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
CLIMATE CHANGE ADAPTATION			
• In 2017, the State Water Board adopted a Climate Change Resolution addressing mitigation and adaptation. One requirement is Regional Water Boards will make recommendations to modify permits and/or create other regulatory requirements to reduce vulnerability of water and wastewater infrastructure to flooding, storm surges, and sea level rise. • The Regional Water Board is planning to modify the Basin Plan under its Climate Change and Wetland Policy Update. • Climate change and water resilience continue to be a strategic priority of the Regional Water Board in FY21. • In April 2019, Governor Newsom signed Executive Order N-10-19 directing State Agencies to recommend a suite of priorities and actions to build a climate-resilient water system and ensure healthy waterways through the 21st century.	• The State Water Board is planning to send a data request to all permitted facilities (collection systems and POTWs) in the State to better understand to what extent agencies are performing climate change vulnerability assessments and/or investing in adaptation measures. They plan to use this information to determine the need for funding assistance or permit requirements for climate change planning. • The Regional Water Board recently completed a survey of all POTWs in the region in 2021 to collect information about climate vulnerability and adaptation. This survey is more detailed than the State Water Board's survey. Responses were due on July 1. • The Regional Water Board hosted a workshop on its Wetlands Policy 94-086 on August 14 and solicited stakeholder input on potential revisions to the Policy. ○ BACWA provided the Regional Water Board staff specific case studies of wetlands projects that are being considered as well as written comments regarding Policy revisions that would help incentivize the development of wetlands projects by wastewater agencies, and reduce permitting hurdles.	• **Support the Regional Water Board's efforts to obtain a response from each agency on the climate change survey. Responses were due July 1.** • Review a draft Basin Plan Amendment from the Climate Change and Wetland Policy Update project, anticipated to be issued by the Regional Water Board in late 2021 or early 2022. • Continue to coordinate with State Water Board on the status of their data request on climate change planning, so members can provide the information they request as effectively as possible. Survey expected to be released towards the end of 2021. • Continue to work with Regional Water Board and other resource agencies to look for regulatory solutions to encourage wetlands projects for shoreline resiliency.	State Water Board 2017 Climate Change Resolution: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0012.pdf Regional Water board Wetlands Policy Page: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/climate_change/wetland_policies.html BACWA Comments on Wetlands Policy: https://bacwa.org/wp-content/uploads/2018/09/BACWA-comments-Wetland-Policy-9-14-18.pdf Information about Proposed Basin Plan Amendment (Issue 5.1): https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html#triennialreview BACWA Comments on Resilience Portfolio: https://bacwa.org/wp-content/uploads/2019/10/BACWA-Water-Resilience-Portfolio-10-01-19.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
TOXIC AIR CONTAMINANTS - BAAQMD RULE 11-18, AB 617, AND AB2588			
• Regulation 11, Rule 18 (Rule 11-18), adopted November 15, 2017, is BAAQMD's effort to protect public health from toxic air pollution from existing facilities, including POTWs. • Per the Rule, BAAQMD will conduct site-specific Health Risk Screening Analyses (HRSAs) and determine each facility's prioritization score (PS). BAAQMD will conduct Health Risk Assessments (HRAs) for all facilities with a cancer PS>10 or non-cancer PS>1.0. After verifying the model inputs, if the facility still has PS above that threshold, that facility would need to implement a Risk Reduction Plan that may include employing Best Available Retrofit Control Technology for Toxics (TBARCT). • AB 617 (Community Air Protection Program) – requires CARB to harmonize community air monitoring, reporting, & local emissions reduction programs for air toxics and GHGs). POTWs within communities already impacted by air pollution may have to accelerate implementation of risk reduction measures. • AB 2588 (Air Toxics "Hot Spots" Program) - Establishes a statewide program for the inventory of air toxics emissions from individual facilities, as well as requirements for risk assessment and public notification of potential health risks. 2020 updates expanded compound list from >500 to >1,000.	• BACWA developed a White Paper on the BAAQMD Rule to describe its potential impacts on the POTW community. • In response to a request by BAAQMD, the AIR Committee delivered a letter report summarizing specific challenges that POTWs would face in complying with the rule due to budgeting and planning constraints related to being public agencies. • In response, BAAQMD moved all POTWs to Phase 2 to give sufficient time to update the model's inputs, and plan for emissions reduction or TBARCT, as needed. **Phase 2 has been slow to roll out and is now expected to begin in Q3 2021** with data collection and verification, followed by the development of HRAs for facilities with a cancer PS>10 or non-cancer PS>1.0. Implementation of the Rule for Phase 2 facilities will be spread out over two years depending on the PS. • AIR Committee gathered data on proximity factors from each facility and submitted to BAAQMD for updating prioritization scores, which will be use in HRA development.	• **Priority: Agencies should use the tool developed by the AIR Committee to address emission contributions from influent flows, which will be used to update emissions inventory values.** • **Respond to BAAQMD data request beginning in Q3 or Q4 2021. There will be a 60-day turn-around to comply with the data request.** • Meet with BAAQMD management more frequently in 2021 to discuss alignment of state and local regulations • Track both AB 617's regulation development and expansion of the toxics compound list under AB 2588's Air Toxics Hot Spots Program. Draft regulatory language under AB 617 stated all uncovered POTWs >5 MGD and covered (primary) POTWs >10 MGD must monitor and report all compounds listed under AB 2588. CARB has provided the wastewater sector time to develop a short-list of relevant compounds and perform a pooled emissions estimating effort to update outdated default emission factors (through 2028). CASA has prepared a one-page handout on this topic. Results could inform Rule 11-18 HRA's.	BAAQMD Rule 11-18 page: http://www.baaqmd.gov/rules-and-compliance/rule-development/rules-under-development/regulation-11-rule-18 BAAQMD Prioritization Scores for AB 11-18: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/implementation-procedures_august_2020-pdf.pdf?la=en Rule 11-18 Process Flowchart: https://bacwa.org/document/baaqmd-11-18-process-flowchart-08-17-17/ CARB page on AB 617 and AB 2588: https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting CASA One-Page Handout on Air Toxics Reporting: https://casaweb.org/wp-content/uploads/2021/06/CTR-EICG_CASAOnePageIssue-Approach_June2021.pdf

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
BACT FOR STANDBY POWER			
• In December 2020, BAAQMD made a determination that diesel back-up engines greater than or equal to 1,000 bhp must meet EPA Tier 4 Emissions Standards under the Best Available Control Technology (BACT) Regulation.	• The determination was made retroactive to January 2020, affecting projects whose applications had been deemed complete at several BACWA member agencies. • BAAQMD did not consider reliability under emergency conditions in determining that Tier 4 Emissions Standards were "achieved-in-practice." Some Tier 4-compliant engines have malfunctioned during actual emergencies.	• Meet with BAAQMD management regularly in 2021 to provide earlier knowledge of new regulations, such as BACT determinations, and encourage a public notification and review process for future BACT determinations. • Work with CASA and Regional Associations to encourage consideration of reliability for essential public services in BACT determination being conducted by other Air Boards.	BAAQMD Program Page: https://www.baaqmd.gov/permits/permitting-manuals/bact-tbact-workbook BACWA Comment Letter on BACT Determination: https://bacwa.org/document/baaqmd-bact-letter-2021-02-23/
RECYCLED WATER GENERAL ORDER			
• In response to the Governor's proclamation of a Drought State of Emergency, the State Water Board adopted a General Order on June 3, 2014 to streamline permitting for recycled water. The State Water Board reissued the General Order on June 7, 2016, making enrollment mandatory for Regional Permittees. • In 2018, the State Water Board adopted Recycled Water Policy Amendments, which: ○ Introduced a goal of increasing recycled water where wastewater is otherwise discharged to saltwater; ○ Resulted in termination of Region 2's 96-011 Recycled Water General Order; ○ Added procedural burdens for Wastewater Change Petitions. ○ Removed requirements for priority pollutant monitoring.	• In April 2020, SF Regional Water Board transitioned 96-011 permittees to the statewide General Order by issuing a NOA and modified MRP. All permittees were transitioned with the exception of Livermore, Delta Diablo, Napa Sanitation, and SASM who have older Title 22 Engineering Reports; they will be enrolled at a later date following a review by DDW. • As of 2020, recycled water production must be reported to the state's GeoTracker.database by April 30 each year. This requirement is being included in all newly issued NPDES permits.	• Support member agencies as they implement new monitoring and reporting requirements. • BACWA Recycled Water Committee continues to collaborate with Regional Water Board staff. In September 2020, Committee leaders provided an update to Regional Water Board members on the transition to the General Order as well as recycled water projects and activities in the SF Bay area.	State Recycled Water Policy Amendment Page: https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/index.html#amendment NOA and MRP for enrollment of Bay Area agencies in statewide General Order (Includes 2016 General Order) https://bacwa.org/wp-content/uploads/2020/11/2020-04_NOA-Recycled-Water-04-08-20.pdf September 2020 Regional Water Board staff report: https://www.waterboards.ca.gov/rwqcb2/board_info/agendas/2020/September/7_ssr.pdf

"Parking lot" issues with no updates can be found in previous BACWA issues summaries.

ACRONYMS

ADC	Alternate Daily Cover
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BTU/SCF	British thermal units per standard cubic foot
CARB	California Air Resources Board
CASA	California Association of Sanitation Agencies
CAP	Criteria Air Pollutant
CEC	Compound of Emerging Concern
CIWQS	California Integrated Water Quality System
CVCWA	Central Valley Clean Water Agencies
CWEA	California Water Environment Association
EC25/IC25	25% Effect Concentration/25% Inhibition Concentration
ELAP	Environmental Laboratory Accreditation Program
ELTAC	Environmental Laboratory Technical Advisory Committee
EPA	United States Environmental Protection Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FY	Fiscal Year
GHG	Greenhouse Gas
HRSA	Health Risk Screening Analyses
HRA	Health Risk Assessment
MCL	Minimum Contaminant Level (Drinking Water)
MGD	Million Gallons per Day
NACWA	National Association of Clean Water Agencies
NELAC	National Environmental Laboratory Accreditation Conference
PCB	Polychlorinated Biphenyl
POTW	Publicly Owned Treatment Works
PS	Prioritization Score
RMP	Regional Monitoring Program
RPA	Reasonable Potential Analysis
SCAP	Southern California Alliance of POTWs
SF Bay	San Francisco Bay
SFEI	San Francisco Estuary Institute
TAC	Toxic Air Contaminant
TMDL	Total Maximum Daily Load
TIN	Total Inorganic Nitrogen
TNI	The NELAC Institute
TST	Test of Significant Toxicity
WQBEL	Water Quality Based Effluent Limitation
WQO	Water Quality Objective

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 20, 2021

ITEM NO. RA7 CHLORINE RESIDUAL BLANKET PERMIT AMENDMENT

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

Background
EBDA's current NPDES permit, as well as those of every other wastewater discharger into the Bay, contains a limit for total residual chlorine of 0.0 mg/L or parts per million (ppm), expressed as an instantaneous maximum. This limit stems from the performance-based 0.0 mg/L instantaneous maximum limit contained in the Basin Plan, the regional document that sets water quality standards. In order to ensure consistent compliance with the 0.0 limit, EBDA and other dischargers overdose the dechlorinating chemical sodium bisulfite (SBS). By documenting that there is excess SBS in the effluent, we can demonstrate that there is no possibility for chlorine, and thereby we are compliant even if an online chlorine analyzer temporarily shows the presence of chlorine.

At the request of the discharger community, through the Bay Area Clean Water Agencies (BACWA), the Regional Water Quality Control Board (RWB) adopted a Basin Plan Amendment concerning total residual chlorine in November 2020. The Basin Plan's performance-based 0.0 mg/L instantaneous maximum limit was replaced with a water quality-based objective and averaging period. The new limit is based on EPA's 1984 Ambient Water Quality Criteria for chlorine, which sets a one-hour average concentration of 13 ug/L for estuarine discharges. Because it is water quality-based, this approach allows effluent limits for deep-water dischargers to be calculated considering dilution.

Discussion
In order for wastewater dischargers to begin seeing the benefits of this change to chlorine residual compliance limits prior to their individual NPDES permits coming up for renewal, RWB staff has developed a Blanket Permit Amendment. This Blanket Permit Amendment would modify each existing permit to insert a new limit for total residual chlorine calculated consistent with the new Basin Plan objective and use of dilution.

For EBDA, this means that instead of complying with an instantaneous maximum limit of 0.0 ppm, with the new objective and EBDA's current 75:1 dilution factor, EBDA's compliance will be based on 0.98 ppm, measured as a one-hour average concentration. Compliance with this limit can be achieved with minimal SBS dosing, and at times, no SBS addition.

The Blanket Permit Amendment is scheduled for adoption by the RWB on October 12, 2021. Because the Basin Plan Amendment that facilitates these changes is still awaiting adoption by the Environmental Protection Agency (EPA) and the California Office of Administrative Law (OAL), the Permit Amendment will not take effect immediately. Rather, it is drafted to take effect automatically shortly after all Basin Plan approvals are completed.

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 20, 2021

ITEM NO. RA8 PFAS UPDATE

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

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. PFOA and PFOS, two of the PFAS compounds, were found in the blood of nearly all people tested in several national surveys.

Regulatory efforts to address PFAS have focused on drinking water in order to minimize human ingestion of these chemicals. In August 2019, California's Division of Drinking Water (DDW) lowered the drinking water notification levels to 6.5 ng/L for PFOS and 5.1 ng/L for PFOA (lowest detection possible at the time). In February 2020, DDW also lowered the response levels to 10 ng/L for PFOA and 40 ng/L for PFOS.

Regulators have also expressed concern about land applied biosolids, including migration of the chemicals into drinking water aquifers and uptake into food. A recent study conducted by University of Arizona investigated the impact of long-term land application of Class B biosolids on PFAS presence in soils. The study found that even after decades of land application, the concentration and accumulation of PFAS in soils receiving the biosolids was comparatively low, and significant attenuation of PFAS occurred near the soil surface. These results suggest that the potential for groundwater contamination is relatively small.

Discussion
In July 2020, the State Water Resources Control Board issued an investigative order requiring all wastewater treatment plants (WWTPs) to monitor for PFAS in influent, effluent, and biosolids quarterly for one year. The San Francisco Bay Region was exempted from that order in favor of conducting a regional study through the Regional Monitoring Program. In Phase 1 of the study, influent, effluent, and biosolids samples were analyzed at a select number of Bay Area WWTPs, which included Dublin San Ramon Services District, Union Sanitary District, and EBDA's combined outfall.

A Fact Sheet summarizing the study and key findings is attached. Levels detected in wastewater effluent and biosolids from Bay Area agencies were lower than in other household products, and concentrations of individual PFAS compounds in effluent were well below DDW action levels. The study also showed that levels of PFAS in influent were not correlated with the number of industrial dischargers in an agency's service area,

leading to the conclusion that PFAS is primarily coming from residential and commercial sources. This is consistent with analysis of the statewide PFAS data to date. Another interesting finding was that effluent PFAS concentrations consistently exceed influent concentrations. This is not because wastewater plants are creating or contributing PFAS, but rather because significant quantities of PFAS precursors can be found in influent, and those precursors are converted to detectable PFAS compounds through the treatment process.

The Bay Area Clean Water Agencies (BACWA) and the San Francisco Estuary Institute (SFEI) are currently working to scope Phase 2 of the regional study, which would be conducted this Fall. The focus is on gathering information that is actionable and can inform management of PFAS. Since source control appears to be the most effective way to reduce PFAS in effluent and biosolids, the study will seek to better understand sources in the sewershed by sampling upstream in several sewer service areas.

In parallel, University of Arizona researchers are gathering funding and participants for a national study looking at the fate and transport of PFAS in biosolids land application, including soil concentrations and plant uptake.

Lastly, on September 8, 2021, the U.S. Environmental Protection Agency announced plans to propose a rule that would limit PFAS wastewater discharges from facilities that produce the chemicals, as well as from chromium electroplating sites. This is consistent with the wastewater community's message that PFAS compounds are best managed and regulated through source control.

PFAS Fact Sheet

San Francisco Bay Region Phase I Study Results

Per- and polyfluoroalkyl substances (PFAS) are a large group of human-made compounds that are very resistant to heat, water, and oil. Common PFAS-containing products are non-stick cookware, cardboard/paper food packaging, water-resistant clothing, carpets, personal care products, 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.

Publicly owned treatment works (POTWs) are receivers of PFAS from residential and industrial customers in their sewershed. PFAS in influent are transformed to other PFAS species, but are not destroyed during treatment. PFAS received in POTW influent ultimately partition into effluent or biosolids depending on the individual compound's chemical characteristics.

KEY POINTS

- PFAS are ubiquitous in numerous everyday products and in the environment
- The State Water Board is investigating the sources that could impact drinking water supplies
- We expect to measure low levels of PFAS in wastewater and from landfills as long as we continue to utilize these chemicals in common products

Region 2 PFAS Study – Phase I

In 2019, the State Water Board developed a phased investigation action plan requiring testing of drinking water systems and site investigations at high-risk locations for PFAS[i]. Investigative orders were issued as follows:

- Mar/Apr 2019 - Landfills and airports and adjacent public water systems
- Oct 2019 – Industrial Chrome-platers
- July 2020 - POTWs
- March 2021 - Refineries & bulk terminals

The July 2020 State Water Board Investigative Order for POTWs is not applicable to Water Board Region 2 (San Francisco Bay Area) agencies. Instead, the Bay Area Clean Water Agencies (BACWA) worked with Water Board staff and obtained approval to fund and conduct a regional study through the Regional Monitoring Program at the San Francisco Estuary Institute (SFEI)[ii]. SFEI is conducting this study in two phases:

- In Phase 1, fourteen representative facilities collected influent, effluent, and biosolids samples in Fall of 2020. SFEI is currently continuing to analyze the data and will issue a technical memorandum in September 2021.

- Phase 2 will be conducted in Fall 2021 and will be designed based on recommendations from Phase 1 technical memorandum.

The facilities participating in Phase 1 were selected based on their size, location, level of industry in their service area, treatment technology, and whether they had participated in previous SFEI PFAS studies, so that trends in individual PFAS compounds could be tracked over time. While the Water Board's Investigative Orders required 31 individual PFAS analytes to be measured, the SFEI study is looking at 40 individual analytes, as well as performing a total organic precursor (TOP) analysis on influent and biosolid samples. The TOP analysis involves oxidizing the sample to convert PFAS to their terminal transformation products, then measuring those products. The advantage of the TOP analysis is that it gives a better estimate of the total PFAS in a sample, and not just the individual analytes that are being targeted by a specific analytical method.

Phase I Results

In the Phase I data, total PFAS levels were generally comparable across all agencies treating municipal wastewater, although the levels of individual compounds differed. This result confirms that using a representative selection of POTWs is an appropriate strategy for this investigation.

In recent years new PFAS compounds, such as GenX and ADONA, have been introduced to replace other compounds, such as perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), that have been phased out in the United States. Some of these shorter chain replacement chemicals have been detected and others have not.

KEY POINTS

- Levels detected in wastewater effluent and biosolids from Bay Area agencies are lower than in other household products
- We are supporting research to understand if even these very, very low levels in land-applied biosolids could impact plants
- Maximum concentrations of individual PFAS in effluent are well below DDW drinking water response levels
- We can reduce PFAS in the environment by utilizing products that are PFAS-free

The median sum of the analytes as well as the results of the TOP analysis across all participating agencies are presented in Figures 1 and 2 below. There is a significant presence of non-targeted PFAS precursors in influent and biosolids. As expected based on data collected in other regions, the sum of effluent PFAS concentrations are higher than influent concentrations. This is not because POTWs are adding, making, or concentrating PFAS, but because of the transformation of precursors during biological treatment. These results highlight the need to consider PFAS as a class rather than as a sum of individual compounds, since there are more PFAS than are being measured by individual analytical methods, and the specific compounds are changing over time as industries shift to different PFAS mixtures.

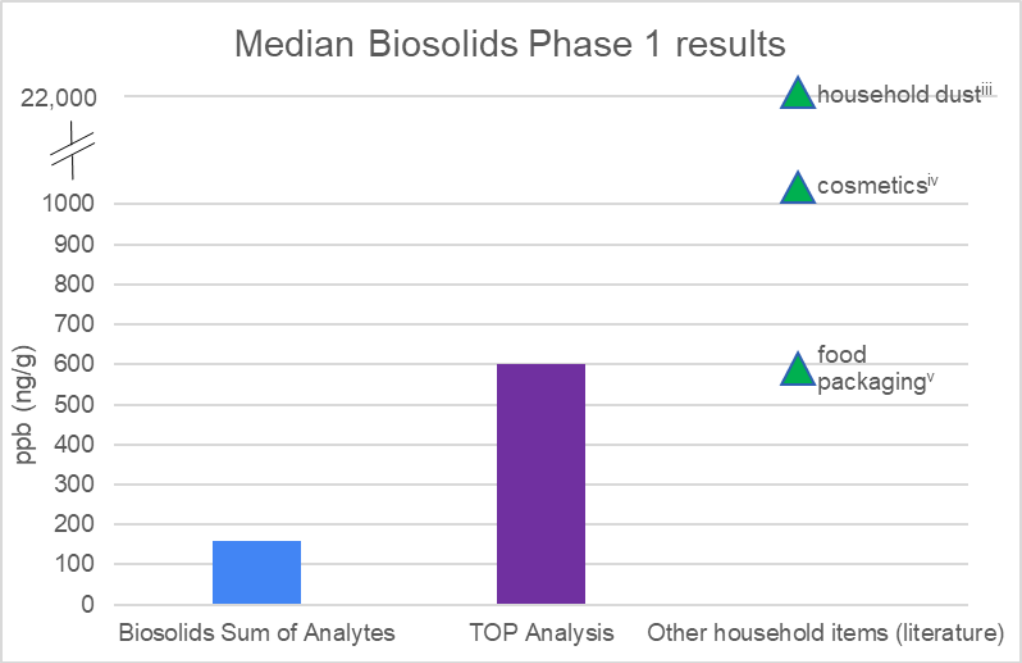


Figure 1: Median biosolids concentrations (ng/g) as measured as the sum of individual analytes, as well as total organic precursors (TOP) shown with typical concentrations found in other sources.

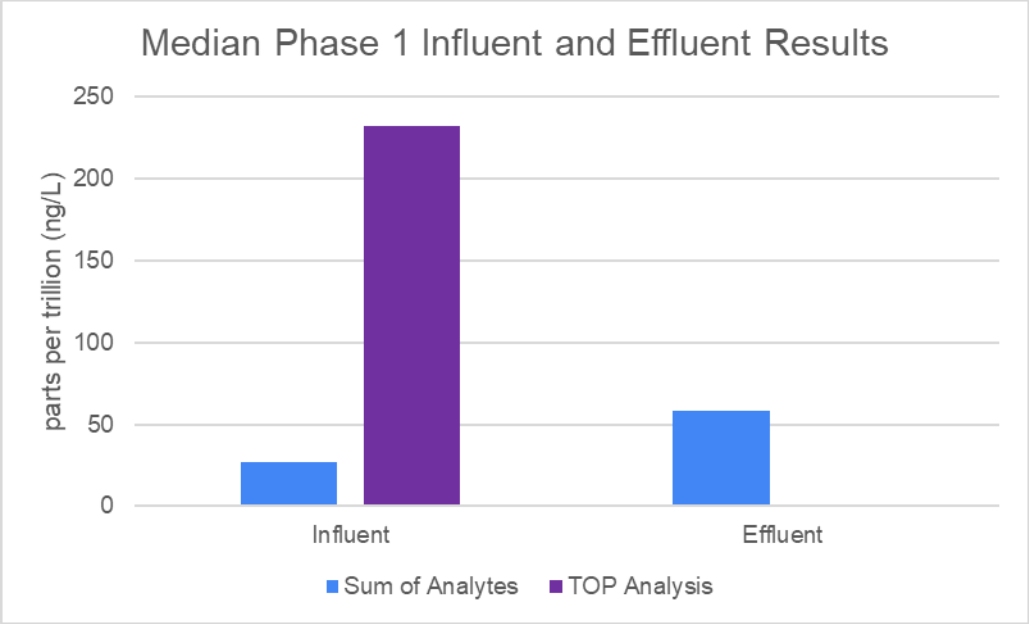


Figure 2: Median influent and effluent concentrations (ng/l) or parts per trillion as measured as the sum of individual analytes, as well as total organic precursors (TOP), which was only performed on influent samples

What does it mean?

Levels of PFAS in Biosolids

Biosolids concentrations, while detectable, are lower than concentrations in common consumer products and in household dust. Levels in some of these other matrices are listed below, although a true apples-to-apples comparison isn't possible since different studies look at different individual PFAS analytes.

- Median sum of analytes in biosolids = 178 ng/g
- Median TOP analysis in biosolids = 594 ng/g
- *Average sum of analytes in household dust = 22,000 ng/g*[iii]
- *Median sum of analytes in cosmetics = 1,050 ng/g*[iv]
- *Median sum of analytes in takeout food packaging > 580 ng/g*[v]

The Bay Area Biosolids Coalition (BABC), a project of Special Benefit of BACWA, is currently sponsoring research through UC Davis to investigate plant uptake rates of PFAS from fields amended with biosolids. This study will add to the existing body of research investigating if there is a health concern related to these levels of PFAS in biosolids. This study is unique in that it will include fields that are amended with food waste compost in addition to control fields that have not received any amendment.

Levels of PFOA, PFOS, and PFBS in Effluent

Most PFAS compound do not have a regulatory threshold. PFOS and PFOA are two types of PFAS that are no longer manufactured in the US although they still are measured in the environment, and have been found in the blood of nearly all people tested in several national surveys. The State Water Board's Division of Drinking Water (DDW) has set notification and response levels for PFOA, PFOS, and perfluorobutane sulfonic acid (PFBS). A response level is the level at which DDW recommends removal of a drinking water source from service. Although no major Bay Area POTW's effluent contributes to a drinking water supply, the median maximum levels of these compounds were compared to the drinking water response levels to provide context (Table 1). Maximum levels in effluent are below drinking water response levels.

Analyte Abbrev.	DDW Drinking Water Response Level (ppt or ng/L)	**Median Observed in Effluent (ng/L)**	**Max Observed in Effluent (ng/L)**
PFOS	40	5.6	9.7
PFOA	10	6.3	9.1
PFBS	5,000	4.1	4.8

Table 1. Bay Area POTW concentrations compared to drinking water response levels.

Phase II and other next steps

BACWA and its members are continuing to work with SFEI and the Water Board to make recommendations on the best use of resources for Phase 2 of the study. BACWA and its members are particularly interested in developing actionable data that will inform future source control or other management efforts. To this end, analysis may focus on the fate and transport within treatment processes or work to identify specific sources within sewersheds.

References

[i] SWRCB Investigative Order for POTWs: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2020/wqo2020_0015_dwq.pdf

[ii] Region 2 PFAS Study Phase 1 Sampling Plan: https://bacwa.org/wp-content/uploads/2020/12/SFEI-Final-PFAS-SAP-Phase-1-2020-11-23.pdf

[iii] Hall, S. et al., 2020, Per- and Polyfluoroalkyl Substances in Dust Collected from Residential Homes and Fire Stations in North America, *Ecotoxicology and Public Health;* Available at https://pubs.acs.org/doi/pdf/10.1021/acs.est.0c04869

[iv] Whitehead et al., 2021, Fluorinated Compounds in North American Cosmetics, *Ecotoxicology and Public Health;* Available at: https://pubs.acs.org/doi/10.1021/acs.estlett.1c00240?ref=pdf

[v] Strakova et al., 2021Throwaway Packaging, Forever ChemicalsEuropean wide survey of PFAS in disposable food packaging and tableware; Available at https://www.env-health.org/wp-content/uploads/2021/05/FINAL_pfas_fcm_study_web.pdf

Agenda Explanation
East Bay Dischargers Authority
Regulatory Affairs Committee
September 20, 2021

ITEM NO. RA9 CLIMATE ADAPTATION UPDATES

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

Background
As has been discussed with the Commission, there are multiple efforts underway to develop climate adaptation measures in the Bay Area. The Bay Conservation and Development Commission (BCDC) has been working on adaptation issues for over a decade, having launched their Adapting to Rising Tides Program in 2010. BCDC's latest effort to facilitate regional collaboration and planning is the BayAdapt Program. Staff provided the Committee with an introduction to this effort in July 2020.

At the same time, the California Legislature and Governor have made climate adaptation a high priority for use of surplus funding identified in this year's state budget. Staff will provide the Committee with updates on these two efforts.

Discussion

BayAdapt
It is widely acknowledged that regional planning and coordination will be necessary for the Bay Area to effectively adapt to sea level rise, since actions to adapt in one part of the Bay can directly impact others. Yet one of the greatest identified challenges to regional planning has been the dispersed responsibilities and a lack of regional leadership. The stated goal of BayAdapt is "to establish regional agreement on the actions necessary to protect people and the natural and built environment from rising sea levels." The initiative aims to identify a common set of principles and actions that will guide agencies in their adaptation planning efforts going forward.

For the past year, hundreds of stakeholders, including EBDA staff, have engaged at different levels in a process facilitated by BCDC to develop a Joint Platform for addressing sea level rise in the Bay. The result is a Joint Platform that includes nine actions and twenty-one subtasks aimed on improving the regional response. The attached document summarizes the drivers and the Joint Platform.

State Budget
On September 9 and 10, 2021, the Legislature approved the Climate Resilience Package in the State Budget, which consists of $3.688 billion over the next three years, with $369.2 million allocated to Fiscal Year 2021/2022. The Package is part of **AB-155** and **AB-170** in the Assembly and **SB-155** and **SB-170** in the Senate. A summary of the programs contained within the package and their funding levels is attached.

The budget package includes both policy direction and $35 Million in funding (in this fiscal year) to:

1. Direct the Office of Planning and Research (OPR), to create a state grant program to support collaborative, multi-agency efforts to establish regional climate adaptation plans and their implementation, and to

2. Provide state grants to local, regional and tribal communities to develop and implement regional climate adaptation plans.

In addition, the package includes an $240 Million in future years to expand this grant program. Staff expects that following signature by the Governor, discussions will begin regarding implementation. Ultimately, the goal of EBDA and other regional agencies will be to ensure funds flow equitably to the Bay Area for collaboration and implementation of projects consistent with the BayAdapt Joint Platform.

The Bay is Rising

The time to come together to *act* is now.

Sea level rise is no longer a distant threat and the San Francisco Bay Area stands to be one of the hardest hit places in North America. It's past time for us to get ready.

As we walk the dog along our favorite waterfront, the waves don't seem any taller. As we wait in traffic at the Bay Bridge toll plaza, the water level looks the same as ever. But the Bay has already started rising onto our highways and streets during storms. Another foot or two will seriously impact our homes, jobs, habitats, and safety. The San Francisco Bay Area has an enormous amount at stake—and an unprecedented opportunity to address these risks.

At risk of flooding in the next 40 years

28,000 socially vulnerable residents

13,000 existing housing units and another **70,000** new housing units

104,000 existing jobs and another **85,000** new jobs

20,000 acres of wetlands, lagoon and tidal marsh habitat

5 million daily highway vehicle trips

60,000 daily rail commuters

Impacts from flooding that could occur at 48" Total Water Level from the ART Bay Area Regional Sea Level Rise Vulnerability and Adaptation Study. 48" TWL may occur between 2060 and 2100.

Why *shared* solutions?

- Sea level rise will **impact everyone** in the Bay Area, no matter where you live.
- A regional problem requires **regional solutions**.
- **Flooding know no boundaries** and doesn't care about jurisdictional lines.
- Solutions should **center on the most vulnerable people** and environments.
- Bay Adapt is building **regional consensus to** address our strengths and weaknesses, enabling us to respond faster, better and together.
- Only with **strong local and regional actions** can we ensure the safety and welfare of all the Bay Area.

BAY ADAPT

REGIONAL STRATEGY FOR A RISING BAY

The Joint Platform:
A regional strategy for a rising Bay

Bay Adapt established regional agreement on the actions necessary to protect the Bay Area's people and natural and built environments from sea level rise.

Bay Adapt is convened by the San Francisco Bay Conservation and Development Commission, a state agency, in partnership with a broad range of Bay Area leaders.

Through dozens of expert working groups, public forums, ten community and stakeholder focus groups, over 50 presentations, an environmental justice caucus, and led by a Leadership Advisory Group—hundreds of people from across the Bay came together to achieve a consensus-driven strategy and regional agreement on a path forward.

Rather than identifying specific projects, the Joint Platform lays out guiding principles and region-wide actions and tasks to achieve **faster, better**, and **more equitable adaptation** to a rising Bay. It will result in:

- **Reduced flood** risk for communities, businesses, infrastructure, and habitats.
- Protection **of natural areas and wildlife**.
- Robust integration of adaptation into **community-focused local plans**.
- Recognition and **equitable support for low income communities**.
- Accelerated permitting and **project construction**.
- **Technical assistance** for local governments.
- **More funding** for adaptation.

Guiding Principles

- Support socially vulnerable communities
- Put nature first whenever possible
- Solve interconnected problems at the same time
- Practice inclusive, community-led governance and decision-making
- Support existing efforts but plan for the long term
- Pick the right strategy for the right place at the right time

Working together as *one* region to preserve what we care about.

The Bay Area's cultural and environmental diversity is what makes it an incredible place to live. The impacts of sea level rise, and the resources necessary to address them, are unequal across the Bay Area. Healthy Bay ecosystems are inextricably linked to our quality of life — and are also our first line of defense from rising seas. This is why all nine actions in the Joint Platform emphasize achieving **equitable** outcomes to improve the lives of people, the quality of our **environment**, and a thriving **economy** for all.

Nobody can solve these challenges alone. Bay Adapt has been working with partners across the region to integrate and embed Joint Platform actions into existing regional plans and practices. MTC/ABAG's Plan Bay Area 2050, set to be adopted in 2021, now incorporates multiple hazards, including sea level rise. The Estuary Blueprint, a map for regional actions on the health and resilience of Bay ecosystems, is also aligning with Bay Adapt actions. We need everyone to come together to help us collectively create a resilient Bay Area region.

The Joint Platform

9 actions, 21 tasks, 1 region *moving forward together*

PEOPLE

Action 1: Collaborate on a "One Bay" vision to adapt to rising sea levels.

Task 1.1: Create a long-term regional vision rooted in communities.
Task 1.2: Lay the foundation for a proactive regional legislative agenda.

Action 2: Elevate communities to lead.

Task 2.1: Improve how communities and public agencies learn from each other and work together.
Task 2.2: Fund the participation and leadership of community-based organizations (CBOs) and frontline communities in adaptation planning.

INFORMATION

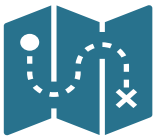
Action 3: Broaden public understanding of climate change science and impacts.

Task 3.1: Tell local and regional stories about people and places adapting to climate change.
Task 3.2: Weave climate literacy into school programs.

Action 4: Base plans and projects on the best science, data, and knowledge.

Task 4.1: Align research and monitoring with information gaps.
Task 4.2: Make scientific data, information, and guidance easier to use.
Task 4.3: Increase access to technical consultants for local adaptation partners.

PLANS



Action 5: Align local and regional plans into a unified adaptation approach.

Task 5.1: Provide incentives for robust, coordinated adaptation plans.
Task 5.2: Align state-mandated planning processes around adaptation.

Action 6: Figure out how to fund adaptation.

Task 6.1: Expand understanding of the financial costs and revenues associated with regional adaptation.
Task 6.2: Establish a framework for funding plans and projects.
Task 6.3: Help cities and counties expand ways to fund adaptation planning and projects.

PROJECTS

Action 7: Refine and accelerate regulatory approvals processes.

Task 7.1: Accelerate permitting for equitable, multi-benefit projects.
Task 7.2: Tackle environmental regulations and policies that slow down progress on projects.

Action 8: Fund and facilitate faster adaptation projects.

Task 8.1: Incentivize projects that meet regional guidelines.
Task 8.2: Encourage collaboration among people doing projects in the same places.
Task 8.3: Facilitate faster construction of nature-based projects.

PROGRESS

Action 9: Track and report progress to guide future actions.

Task 9.1: Measure regional progress using metrics and share results.
Task 9.2: Monitor and learn from pilot projects.

What can you do?

The draft Joint Platform is now ready for you! Examine the opportunities it can provide to help us decide what to do next. We're all in this together.

For local leaders

- ☑ Share the Joint Platform with your staff and colleagues **and identify which actions** you'd like support for implementation.
- ☑ **Provide feedback on the Joint Platform** using our online form or email us at BayAdapt@bcdc.ca.gov
- ☑ Write a **letter of support** for the Bay Adapt Joint Platform to help us advocate for regional implementation.

For the interested public

- ☑ Learn more and provide feedback on the **40-page, easy-to-read Joint Platform.** Where can the Joint Platform help?
- ☑ **Understand your community's vulnerability** by using online tools such as the ART Shoreline Flood Explorer for exploring risks of flooding in your area
- ☑ **Talk to your community** about resilience and preparing for climate change.

Read the Joint Platform, provide feedback through our online form or email us at BayAdapt@bcdc.ca.gov, and learn more at

www.BayAdapt.org

Leadership Advisory Group

Ana Alvarez, East Bay Regional Parks
Tessa Beach, Ph.D., US Army Corps of Engineers
David Behar, SF Public Utilities Commission/ Bay Area Climate Adaptation Network (BayCAN)
John Bourgeois, Valley Water/ CHARG
Allison Brooks, Bay Area Regional Collaborative
Amanda-Brown Stevens, Greenbelt Alliance
Paul Campos, Building Industry Association
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Dina El-Tawansy, Caltrans District 4
Tian Feng, BART
Julio Garcia, Environmental Justice Caucus Member
Ms. Margaret Gordon, West Oakland Indicators Project
Terrie Green, Shore Up Marin City
Alicia John-Baptiste, SPUR
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Mark Lubell, UC Davis
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Jim Wunderman, Bay Area Council

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2021-22 Climate Resilience Package ($ in millions)

FY 2021-22 Climate Resilience Budget | Assembly Floor Report

PROGRAM	BU	DEPARTMENT	2021-22 (GF)	2022-23 (GF)	2023-24 (GF)	TOTAL FUNDING
Extreme Heat						
Urban Greening/Forestry	0540	CNRA	$50	$100	$100	**$250**
Low Income Weatherization	4700	CSD	-	$25	$25	**$50**
Community Resilience Centers/Extreme Heat and Community Resilience Program	0650	SGC	-	$50	$150	**$200**
Extreme Heat Set Aside	*Various*	*Various*	-	$150	$150	**$300**
Multi-Benefit and Nature-Based Solutions						
Climate Change Impacts on Wildlife	3600	DFW	$15	$35	-	**$50**
Habitat Restoration	3860	DWR	-	$125	$75	**$200**
Multi-Benefit and Nature-Based Solutions Set Aside	*Various*	*Various*	-	$593	$175	**$768**
Protect Fish and Wildlife from Changing Conditions	3640	WCB	$31	$222	$100	**$353**
Building Ocean and Coastal Resilience						
State Parks Sea Level Rise Adaptation Strategy	3790	Parks	$12	-	-	**$12**
Coastal Protection and Adaptation	3760	SCC	-	$350	$150	**$500**
Ocean Protection Trust Fund	0540	OPC	-	$50	$50	**$100**
Building Community and Regional Climate Resilience						
Transformative Climate Communities	0650	SGC	$115	$165	$140	**$420**
Regional Climate Collaboratives	0650	SGC	$10	$10	-	**$20**
Climate Adaptation & Resilience Planning Grants	0650	OPR	$10	$10	$5	**$25**
Vulnerable Communities Platform & Cal-Adapt Mapping	0650	OPR	$5	-	-	**$5**
Environmental Justice Initiative	0555	Cal EPA	$10	$10	$5	**$25**
California Climate Action Corps	0650	Cal Volunteers	$5	$5	$5	**$14**
Regional Climate Resilience Planning and Implementation	0650	OPR/SGC	$25	$125	$100	**$250**
State Conservancies *Additional funding in out years carved out in Multi-Benefit/Nature-Based Solutions Set Aside*	*Various*	*Various*	$60	-	-	**$60**
Strategic Climate Resilience Investments & Projects						
Biomass to Hydrogen/Biofuels Pilot	3480	DOC	**-**	**$50**	**-**	**$50**
Fifth Climate Assessment	0540	CNRA	**$6**	**-**	**-**	**$6**
	0650	OPR	**$11**	**-**	**-**	**$11**
	3360	CEC	**$5**	**-**	**-**	**$5**
Fluorinated Gas Reduction Incentive Program	3900	CARB	**-**	**$15**	**-**	**$15**
		TOTAL FUNDING	**$369.2**	**$2,089.7**	**$1,229.7**	**$3,688.5**