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KEY REGULATORY ISSUE SUMMARY Updated February 3, 2021

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

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NUTRIENTS IN SAN FRANCISCO BAY	1		
 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 FY21, BACWA contributed the \$2.2M required by the Watershed Permit, as well as "frontloading" an additional \$0.4M to accelerate the pace of the science that will be used for management decisions for the third 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. Form a Nutrient Technical Team that will engage a consultant to provide technical review of work products and charge questions for the science team. 	BACWA Nutrients Page: https://bacwa.org/nutrient s/ SFEI Nutrient Science Plan Documents: http://sfbaynutrients.sfei.o rg/books/reports-and- work-products

SF BAY NUTRIENT WATERSHED PERMIT

- The first nutrient watershed permit was adopted in April 2014. The first watershed permit required a regional study on Nutrient Treatment by Optimization and Upgrades, completed in 2018.
- The 2nd Nutrient Watershed Permit was adopted in May 2019 with an effective date of July 1, 2019. It includes:
- Continued individual treatment plant nutrient monitoring and reporting;
- o 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 2018 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:
- o Group Annual Reporting
- Regional Studies on Nature-Based Systems and Recycled Water
- Support of scientific studies through the RMP at \$2.2M per year through the five-year permit term.

- In December 2019, BACWA submitted scoping and evaluation plans for the Recycled Water and Nature-Based Systems studies required by the 2nd watershed permit.
- Each year, BACWA submits a Group Annual Report on behalf of its members. The report summarizes trends in nutrient concentrations and loading for each agency, and for all the agencies as a whole.
- The annual reporting period in the 2nd Watershed permit is based on a water year (October 1 – September 30th) The first group annual report submitted under the 2nd watershed permit was submitted in February 2020.
- 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 respond to a BACWA survey regarding load projections for Total Inorganic Nitrogen.
- 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. Agencies provided preliminary information in June 2020, and outreach to individual agencies will be conducted in several waves in 2021.
- Begin 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/b

oard info/agendas/2019/ May/6_ssr.pdf

Scoping and Evaluation Plans for Recycled Water and Nature-Based Systems: <u>https://bacwa.org/docume</u> <u>nt-category/2nd-</u> watershed-permit-studies/

Optimization/Upgrade Study Final Report: https://bacwa.org/wpcontent/uploads/2018/06/ BACWA_Final_Nutrient_ Reduction_Report.pdf

Optimization/Upgrade Report Brochure: https://bacwa.org/wpcontent/uploads/2019/03/ BACWA-2019-Nutrient-Brochure_Final_2019030 1.pdf

BACWA Group Nutrient Annual Reports: http://bacwa.org/documen t-category/nutrientannual-reports/

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. It will not go into effect until it is approved by the State Water Board, Office of Administrative Law, and EPA, which is expected by late 2021.

• Work with Regional Water Board staff to develop a regional blanket permit amendment that would implement the new BPA for all Region 2 dischargers at one time. This approach which would accelerate implementation compared to a slower, permit-by-permit rollout.

Final BPA adopted by Regional Water Board

https://www.waterboards. ca.gov/sanfranciscobay// water_issues/programs/pl anningtmdls/amendments /chlorinebpa/2_Chlorine_ Resolution_R2-2020-0031.pdf

Final BPA Staff Report:

https://www.waterboards. ca.gov/sanfranciscobay/w ater_issues/programs/pla nningtmdls/amendments/ chlorinebpa/3_Chlorine_B PA_Final_staff_report.pdf

BACWA Comment Letter on draft BPA:

https://bacwa.org/docume nt/chlorine-basin-planamendment-bacwacomment-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 scientifically sound pesticide management program that will not impact POTWs' primary functions of collecting and treating wastewater, recycling water, and managing biosolids. 	 EPA reviews all registered pesticides at least once every 15 years. Each review allows opportunity for public comment. BACWA has funded 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 was increased from \$30K to \$60K in FY20/21. 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 to identify opportunities for collaboration. 	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/docume nt-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

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.
- 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. In 2020, BACWA continued to fund a 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 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.

- Conduct 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.

2017 Mercury/PCB Watershed Permit: http://www.waterboards.c a.gov/sanfranciscobay/bo ard_decisions/adopted_or ders/2012/R2-2012-0096.pdf

Risk Reduction Materials: https://bacwa.org/mercury pcb-risk-reductionmaterials/

Updated BACWA PCBs Protocol: https://bacwa.org/wpcontent/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/prog rams/npdes/docs/drinking water/one-time_compl iance_report_for_dental_ offices.pdf

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 1, 2020 meeting. The Provisions are likely to come into effect in mid-2021 after review by OAL and EPA.
- In December 2020, Regional Water Board staff provided BACWA with a copy of draft sample NPDES permit language. 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.
- 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. Now that agencies will once again be required by the provisions to do sensitive species screening, this will reduce RMP funds by approximately \$100K per year.
- 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 it is being circulated for BACWA member review.
- Collaborate with State Water Board, CASA and POTWs Statewide on the special study on the *Ceriodaphnia dubia* test method.
- Develop an alternative funding mechanism for RMP CECs studies by seeking reduced monitoring for items other than chronic toxicity screening. A draft plan is under development.

SWRCB Toxicity Page: http://www.swrcb.ca.gov/ water_issues/programs/st ate_implementation_polic y/tx_ass_cntrl.shtml

Toxicity Workshop Presentations from 2017 BACWA Workshop: <u>https://bacwa.org/bacwa-</u> toxicity-workshopseptember-18-2017/

Regional Water Board presentation on implementation of Statewide Toxicity Provisions from December 2020 https://bacwa.org/wpcontent/uploads/2021/01/ Slides-from-RWQCB-Regarding-R2-Tox-Language-in-NPDES-Permits-2020-12-08.pdf

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.

- Continue to participate in the RMP CEC Workgroup.
- Participate in studies of sunscreens (2 facilities planned) and microplastics (6 facilities planned) by collecting wastewater samples at member facilities.
- 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.
- Continue efforts to provide a funding stream for RMP CEC studies based on reducing other NPDES permit monitoring and reporting requirements.

RMP CEC Workgroup: http://www.sfei.org/rmp/ec wg#tab-1-4

BACWA CECs White Paper:

https://bacwa.org/docume nt/bacwa-cec-whitepaper-updated-june-2020/

BACWA Microplastics Fact Sheet: <u>https://bacwa.org/wpcontent/uploads/2019/09/</u> BACWA-Microplasticsflyer.pdf

SFEI Microplastics Science Strategy: www.sfei.org/documents/ microplastic-monitoringand-science-strategy-sanfrancisco-bay

SWRCB Microplastics in Drinking Water page: <u>https://www.waterboards.</u> <u>ca.gov/drinking_water/cer</u> <u>tlic/drinkingwater/micropla</u> <u>stics.html</u>

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 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
 - o Oct 2019 chrome-platers
 - o July 2020 POTWs
 - TBD 2021 refineries & bulk terminals
- The Summit Partners held several 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 will analyze data and prepare report (anticipated May 2021).
- Phase 2 will be conducted in Summer/ 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.

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

Summit Partners PFAS Workshop presentations: <u>https://casaweb.org/calen</u> <u>dar/speaker-</u> <u>presentations/</u>

SWRCB Investigative Order for POTWs: https://www.waterboards. ca.gov/board_decisions/a dopted_orders/water_qua lity/2020/wqo2020_0015_ dwg.pdf

OEHHA Notification Levels for Drinking Water: <u>https://oehha.ca.gov/wate</u> <u>r/notification-levels-</u> 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 actio n_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 SSS WDR in 2021. They have sought out early stakeholder engagement through outreach to CASA and the Regional Associations, and NGOs. Goals for the update are: Effective spill response Proactive planning and management Transparent reporting "Feasible and reasonable" regulations - good faith effort to comply - personnel, budget, equipment by governing board 	 The State Water Board has identified the following as components to be included: Resiliency assessment Sewershed mapping Reporting of PSL spills Improvement of CIWQS data quality Study of the impact of exfiltration and leakage Updated SSMPs that are more enforceable Potential incentives for well performing systems A new "Category 4" for SSOs less than 50 gallons that do not need to be reported CASA provided proposed redlines to the SSS WDR on the text of the SSS WDR, as well as the proposed SSMP outline. They have been meeting with the State Water Board regularly during 2019 and 2020 	 Review and comment on draft SSS WDR when available for public comment, expected in Q1 2021. Discuss response to issues such as exfiltration via BACWA's Collection Systems Committee. 	SWB SSS WDR page: https://www.waterboards. ca.gov/water_issues/prog rams/sso/ CASA SSS WDR Redlines: https://bacwa.org/docume nt/sss-wdr-casa-redlines- 8-29-18/ CASA SSS WDR MRP Redlines: https://bacwa.org/docume nt/casa-sss-mrp-redlines- 08-29-18/

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. In June 2020, ELAP staff presented on the State Water Board's new 'Roadmap to ELAP Accreditation' program at the Lab Committee meeting. 	 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/cer tlic/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.c a.gov/drinking_water/certl ic/labs/elap_regulations.s html

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 don't 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 biosolids land application are disallowed.
- Jurisdictions that divert organic waste must also procure the end products of diversion, such as biogas, biomethane, and compost (biosolids are not included at this time).

- Consider ways to build a market for compost and other soil amendment products from biosolids, using lessons learned in the Pacific Northwest and Midwest.
- Actively work through CASA with California Air Resource Board, CalRecycle, State Water Resource Control Board, and California Department of Food and Agriculture to mutually develop sustainable long-term options for the beneficial use of biosolids.
- Follow efforts of the BABC, investigating all-weather options for biosolids management (including innovative technologies generating energy and other useful bioproducts from biosolids). BABC is a BACWA Project of Special Benefit, beginning in FY20.
- 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.

BACWA 2018 Biosolids Trends Survey Report: https://bacwa.org/docume nt/2018-biosolids-trendssurvey-report/

CASA White Paper on Biosolids Use in Landfills: https://bacwa.org/wpcontent/uploads/2017/01/ 1-11-17-Sustainability-forbiosolids-use-atlandfills.pdf

BABC website: http://www.bayareabiosoli ds.com/

CASA White Paper on SB 1383 Implementation: https://bacwa.org/docume nt/summary-of-sb-1383and-its-implementationcasa-2020/

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 (i.e., methane)
 - Carbon sequestration on Natural and Working Lands
 - Largest emitters (transportation, electricity, and industrial sectors)
- SB 1383 (Short-Lived Climate Pollutant Reduction) calls for:
- 40% methane reduction by 2030
 75% discussion of expension system
- 75% diversion of organic waste from landfills by 2025
- Policy and regulatory development encouraging production/use of biogas
- BAAQMD developed a Clean Air Plan that requires GHG emissions reduction track with CARB's 2030 and 2050 targets.
- BAAQMD has proposed the development of Regulation 13 (climate pollutants) targeting GHG emission 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 wetlands 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 costprohibitive. 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 BAAQMD Rule 11-18.
- 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 develop information about current best management practices.

- Work with CASA to look for opportunities for POTWs to help the State meet GHG reduction goals.
- Look for opportunities to inform BAAQMD on the 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 and they have proposed reducing their standard from 990 Btu/scf to 970 Btu/scf.
- Engage in development of Regulation 13 Rules, which are intended to govern climate pollutants, odors, VOCs and TACs from POTWs and anaerobic digesters.
- 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.
 - Develop information about current best management practices at anaerobic digesters and lagoons.

Climate Change Scoping Plan: <u>https://www.arb.ca.gov/cc</u> /scopingplan/scoping_pla

n 2017.pdf

CARB Short Lived Climate Pollutant Reduction Strategy: <u>https://www.arb.ca.gov/cc</u> /shortlived/meetings/0314 2017/final_slcp_report.pdf

SB 1383: http://www.leginfo.ca.gov/ pub/15-16/bill/sen/sb 1351-1400/sb_1383_bill_20160 919_chaptered.htm

BAAQMD Clean Air Plan: http://www.baaqmd.gov/pl ans-and-climate/airguality-plans/currentplans

BAAQMD Regulation 13 http://www.baaqmd.gov/r ules-andcompliance/rules/regulati on-13-climate-pollutants

BACWA Comments on Regulation 13: https://bacwa.org/wpcontent/uploads/2019/07/ BACWA-AIR_FINAL_Comment-Letter_Regulation13_Rul es 24_071219.pdf

CLIMATE CHANGE ADAPTATION

- In 2017, the State Water Board adopted a Climate Change Resolution addressing mitigation and adaptation. One of the requirements is that Regional Water Boards will make recommendations to the State Water Board on the need to modify permits and other regulatory requirements to reduce vulnerability of water and wastewater infrastructure to flooding, storm surges, and sea level rise.
- The Regional Water Board identified Climate Change and Wetland Policy Update as the highest priority Basin Planning project in their 2018 Triennial Review.
- Climate change and water resilience continue to be 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 a data request that they will send 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 is planning to distribute a survey to all POTWs in the region in 2021 to collect information about climate vulnerability and adaptation. This survey will be more detailed than the State Water Board's survey. Several BACWA members are test-driving the survey in January and February 2021.
- 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.

- Respond to the Regional Water Board's climate change survey, which is expected to be distributed to all POTWs in approximately March or April 2021.
- Continue to coordinate with State Water Board on the status of their data request on climate change planning, so members can provide the information they request as effectively as possible. Survey expected to be released in the first half 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.
- BACWA to review Governor's Water Resilience Portfolio initiative, released in 2020.

State Water Board 2017 Climate Change Resolution: <u>https://www.waterboards.</u> <u>ca.gov/board_decisions/a</u> <u>dopted_orders/resolution</u> s/2017/rs2017_0012.pdf

Regional Water board Wetlands Policy Page: <u>https://www.waterboards.</u> <u>ca.gov/sanfranciscobay/w</u> <u>ater_issues/programs/cli</u> <u>mate_change/wetland_po</u> <u>licies.html</u>

BACWA Comments on Wetlands Policy: https://bacwa.org/wpcontent/uploads/2018/09/ BACWA-comments-Wetland-Policy-9-14-18.pdf

Governor's Final Water Resilience Portfolio: <u>http://waterresilience.ca.g</u> <u>ov/</u>

BACWA Comments on Resilience Portfolio: https://bacwa.org/wpcontent/uploads/2019/10/ BACWA-Water-Resilience-Portfolio-10-01-19.pdf

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 use toxic emissions inventories and proximity to the nearest receptor (residents or offsite workers) to conduct site-specific Health Risk Screening Analyses (HRSA). From HRSAs, BAAQMD will 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.

- 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 Q2 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 prioritization score.
- 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 Q2 2021. There will be a 60-day turnaround 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 tentatively agreed to give 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 2026). Final rule-making documents are expected in February 2021. CASA has a subgroup dedicated to this effort. Results could inform Rule 11-18 HRA's.

BAAQMD Rule 11-18 page:

http://www.baaqmd.gov/r ules-and-compliance/ruledevelopment/rules-underdevelopment/regulation-11-rule-18

BAAQMD Prioritization Scores for AB 11-18: https://www.baaqmd.gov/ ~/media/files/ab617community-health/facilityriskreduction/documents/impl ementationprocedures august 2020 -pdf.pdf?la=en

Rule 11-18 Process Flowchart:

https://bacwa.org/docume nt/baaqmd-11-18process-flowchart-08-17-17/

BAAQMD page on AB 617:

http://www.baaqmd.gov/r ules-and-compliance/ruledevelopment/barctimplementation-schedule

CARB page on AB 617 and AB 2588: <u>https://ww2.arb.ca.gov/ou</u> <u>r-work/programs/criteria-</u> and-toxics-reporting

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 May 2018, the State Water Board released Recycled Water Policy Amendments for Public Comment. The Recycled Water Policy governs the Recycled Water General Order.
- The Amendments were adopted in December 2018.

- Key issues in the Recycled Water Policy Amendments are:
- Introduces goal to increase recycled water where wastewater is otherwise discharged to ocean, bays, and estuaries.
- Terminates Region 2 96-011 Recycled Water General Order three year after Policy Amendment adoption (April 2020).
- Adds to the procedural burdens in obtaining Wastewater Change Petition.
- Removes requirement for priority pollutant monitoring.
- On April 8, 2020, SF Regional Water Board transitioned 96-011 permittees to the statewide General Order by issuing a NOA and modified MRP.
 BACWA had previously provided comments on the draft NOA and MRP documents. All permittees were transitioned with the exception of City 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

2016 State Recycled Water General Order: http://www.waterboards.c a.gov/board_decisions/ad opted_orders/water_quali ty/2016/wqo2016_0068_d dw.pdf

State Recycled Water Policy Amendment Page: https://www.waterboards. ca.gov/water_issues/prog rams/water_recycling_pol icy/index.html#amendme nt

NOA and MRP for enrollment of Bay Area agencies in statewide General Order: <u>https://bacwa.org/wp-</u> <u>content/uploads/2020/11/</u> <u>2020-04_NOA-Recycled-</u> <u>Water-04-08-20.pdf</u>

September 2020 Regional Water Board staff report: <u>https://www.waterboards.</u> ca.gov/rwqcb2/board_info /agendas/2020/Septembe r/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
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