



EAST BAY DISCHARGERS AUTHORITY  
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*A Joint Powers Public Agency*

Pursuant to the Governor's Executive Order N-25-20 the Regulatory Affairs Committee Meeting scheduled for this morning at 9:00 a.m. will be telephonic. The dial-in number for the meeting is +1 669 900 6833 with meeting I.D. #941 024 117. Members of the public are encouraged to dial-in to the meeting using the same number. The original meeting location 2651 Grant Avenue, San Lorenzo, CA will remain available for anyone unable to dial-in. Thank you.

## **ITEM NO. 11**

### **REGULATORY AFFAIRS COMMITTEE AGENDA**

**Wednesday, March 18, 2020**

**9:00 a.m.**

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

**Committee Members: Johnson (Chair); Cutter**

**RA1. Call to Order**

**RA2. Roll Call**

**RA3. Public Forum**

**RA4. EBDA NPDES Performance – See Item OM4**

(The Committee will review NPDES Permit compliance data through February 2020.)

**RA5. NPDES Annual Report (Attachment)**

(The Committee will review the 2019 Annual Report of plant discharges.)

**RA6. Reporting Checklist**

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

**RA7. BACWA Key Regulatory Issue Summary**

(The Committee will review BACWA's issue summary.)

**RA8. Nutrients Group Annual Report**

(The Committee will discuss the conclusions of the report submitted in February 2020.)

**RA9. Brine Project Opportunity**

(The Committee will discuss a project for potential brine discharge through EBDA's system.)

**RA10. Adjournment**

(Any member of the public may address the Commission at the commencement of the meeting on any matter within the jurisdiction of the Commission. This should not relate to any item on the agenda. It is the policy of the Authority that each person addressing the Commission 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 Commission on an agenda item should do so at the time the item is considered. It is the policy of the Authority that oral comments be limited to three minutes per individual or ten minutes for an organization. Speaker's cards will be available in the Boardroom 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 the EBDA office at (510) 278-5910 or [kyambao@ebda.org](mailto:kyambao@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 posted on the East Bay Dischargers Authority website located at <http://www.ebda.org>.)

**The next Regulatory Affairs Committee meeting is scheduled for  
Wednesday, May 20, 2020, at 9:00 a.m.**

**ITEM NO. RA4 EBDA NPDES PERFORMANCE – NPDES PERMIT**

Please see the Operations and Maintenance Committee agenda, Item No. OM4 for permit compliance data.

**ITEM NO. RA5 NPDES ANNUAL REPORT**

**Recommendation**

This report is for the Committee's information only; no action is required.

**Background**

EBDA is required by its NPDES permit to submit an annual report. The report provides a compendium of the status of EBDA's facilities and discharge quality.

**Discussion**

EBDA's Annual Self-Monitoring Report is attached for the Commission's information.

# 2019 NPDES SELF-MONITORING PROGRAM ANNUAL REPORT

NPDES PERMIT NO. CA0037869

East Bay Dischargers Authority  
City of San Leandro  
Oro Loma Sanitary District  
Castro Valley Sanitary District  
City of Hayward  
Union Sanitary District

January 30, 2020

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## Section 1: Comprehensive Discussion of Treatment Plant Performance and Compliance

East Bay Dischargers Authority (EBDA) reached a major milestone in 2019 with renewal of its Joint Powers Agreement (JPA), which was set to expire at the end of 2019. The existing agreement was extended through June 30, 2020, and an Amended and Restated JPA was adopted effective July 1, 2020 through June 30, 2040. The JPA outlines the governance and cost-sharing of EBDA's joint transport and outfall system and associated infrastructure.

Major milestones and construction projects completed at the EBDA member treatment plants included the following:

- Oro Loma Sanitary District (OLSD) is nearing completion on a full scale nitrification and denitrification process. The \$24.7M construction project is 80% complete and expected to begin start-up in April 2020. The scope includes the construction of a fourth aeration basin, six new blowers and associated building, and retrofit of existing mechanical aeration with fine bubble diffusers. When completed, the project will reduce TIN to below 15 mg/L during the dry season and reduce TIN levels across the entire year by approximately 50%.
- OLSD also plans to implement full scale sidestream nitrification using Microvi's biocatalyst. The full scale implementation follows three years of pilot work considering both mainstream and sidestream treatment applications. As planned, approximately 100,000 gpd of belt press filtrate will be treated each day. The stream contains approximately 20% of the total influent nitrogen. The project is in late design stage and bids for the installation are expected in January 2020. The system is scheduled for start-up in May 2020.
- Hayward's Recycle Water Tank and Pump Station was completed in 2019. When the treatment system is installed, this will supply 300k gallons of recycled water to neighboring businesses. The Nutrient Management Strategy TM completed, which is a part of the Facilities Master Plan. Sludge Blending tank walls were repaired along with a manway constructed and Final Clarifier 2 structure was recoated. The primary clarifier effluent gate was removed and expanded to a larger gate to reduce the head loss and allow more flow to the trickling filters.
- San Leandro is nearing completion of a nearly 1MW solar array and is currently reviewing a design proposal for a microgrid system with multiple sources of power. The two projects together would reduce demand for grid energy, nearly eliminate need to run diesel backup, and create energy security. Treatment wetlands are in the design and initial permitting phase.
- Union Sanitary District (USD) has completed pre-design efforts and will begin design of the Enhanced Treatment and Site Upgrade Program, which includes nutrient removal options in the future. Final Design for Digester #7 has been completed and construction is expected to commence in 2020. Ongoing design for a new Standby Generator system should be completed in 2020.

EBDA also completed a thorough review and update to its Asset Management Plan to ensure appropriate renewal and replacement of infrastructure. The estimated total restoration cost over 20 years is approximately \$11.3 million.

In addition, EBDA has nearly completed the \$3 million motor control center replacement project at the Hayward Effluent Pump Station (HEPS). The project will improve reliability at the station.

EBDA’s Member Agencies recycled approximately 410 million gallons in 2019 for irrigation, up from to 369 million gallons in 2018. Adding the flow recycled as an environmental input through Hayward Marsh, EBDA’s total recycling was over 1 billion gallons. As shown in the table below, including the LAVWMA agencies, water recycling accounted for more than 3.1 billion gallons, about 13% of EBDA’s outfall discharge last year of 23.9 billion gallons.

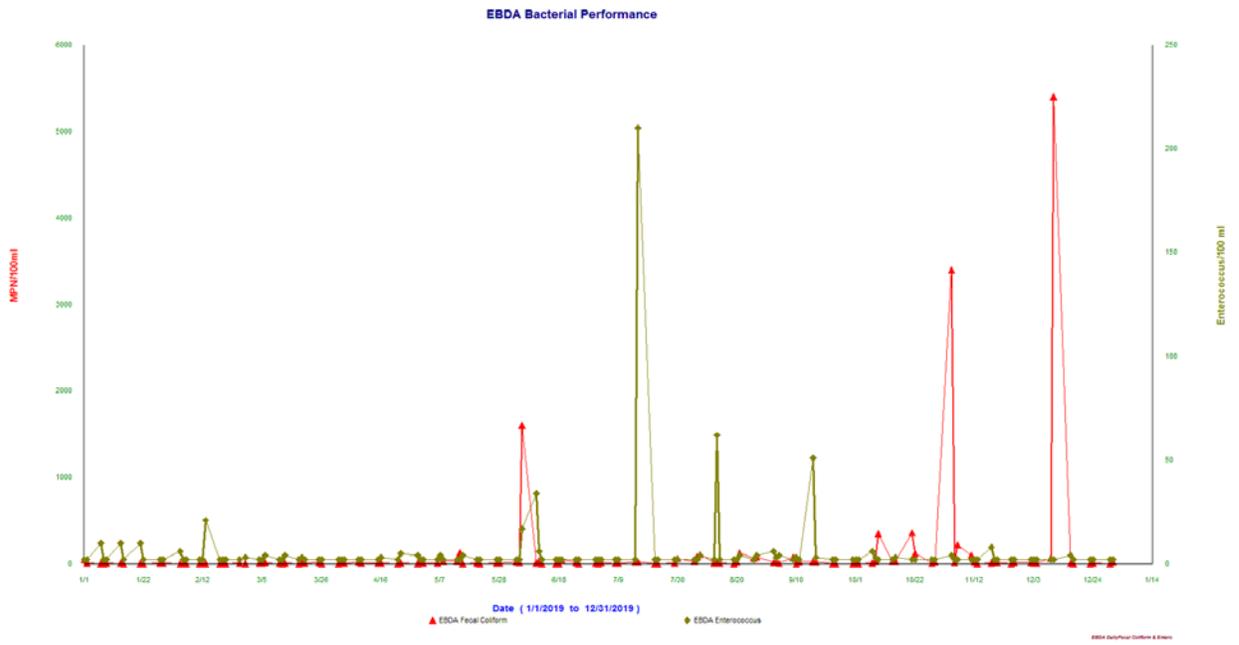
<i>Agency</i>	<i>2019 Recycled Water Production (MG)</i>
Hayward	257.09
San Leandro	96.25
EBDA Skywest Project	57.15
<b>EBDA Subtotal – Irrigation Reuse</b>	<b>410.49</b>
USD Hayward Marsh	684.11
<b>EBDA Total</b>	<b>1094.6</b>
Livermore	644.03
Dublin San Ramon Services District (DSRSD)	1401.149
<b>LAVWMA Total</b>	<b>2045.18</b>
<b>Grand Total</b>	<b>3139.78</b>

*Bacterial Limits*

The graphic below presents fecal pathogen data from daily samples through the year. Note that permit limits are calculated as monthly geometric means or monthly 90%ile samples. At random intervals, perhaps once a month, a high sample can be detected. This outcome is probably due to the sloughing of pipe biofilms into the sample line—these events are why permit compliance is determined by geometric means.

EBDA and its member agencies worked hard over the past few years to improve chlorine dosing to prevent outbreaks of bacterial contamination that had occurred in prior years. This led to consistent compliance with limits. EBDA plans to further study chlorine dosing optimization to prevent bacterial regrowth in 2020.

Figure 1 – EBDA Bacterial Contaminant Performance



## **Section 2: List of Analyses for Which the Discharger Is Certified**

EBDA conducts no analyses of its own. Each member agency is certified by the State Water Resources Control Board for standard water quality tests such as BOD, TSS, pH, DO, enterococcus, and fecal coliform. City of San Leandro staff performs these analyses on the combined effluent.

All metals and organics analyses are performed by the Authority's contract laboratory, Caltest Analytical Laboratory. Caltest's lab is certified for these analyses. Caltest subcontracts for analytical work on some items, including dioxin and furan compounds and PCBs to other certified labs.

Pacific Eco-Risk Laboratory (PERL), also a certified laboratory, conducts the required acute and chronic toxicity testing for the Authority.

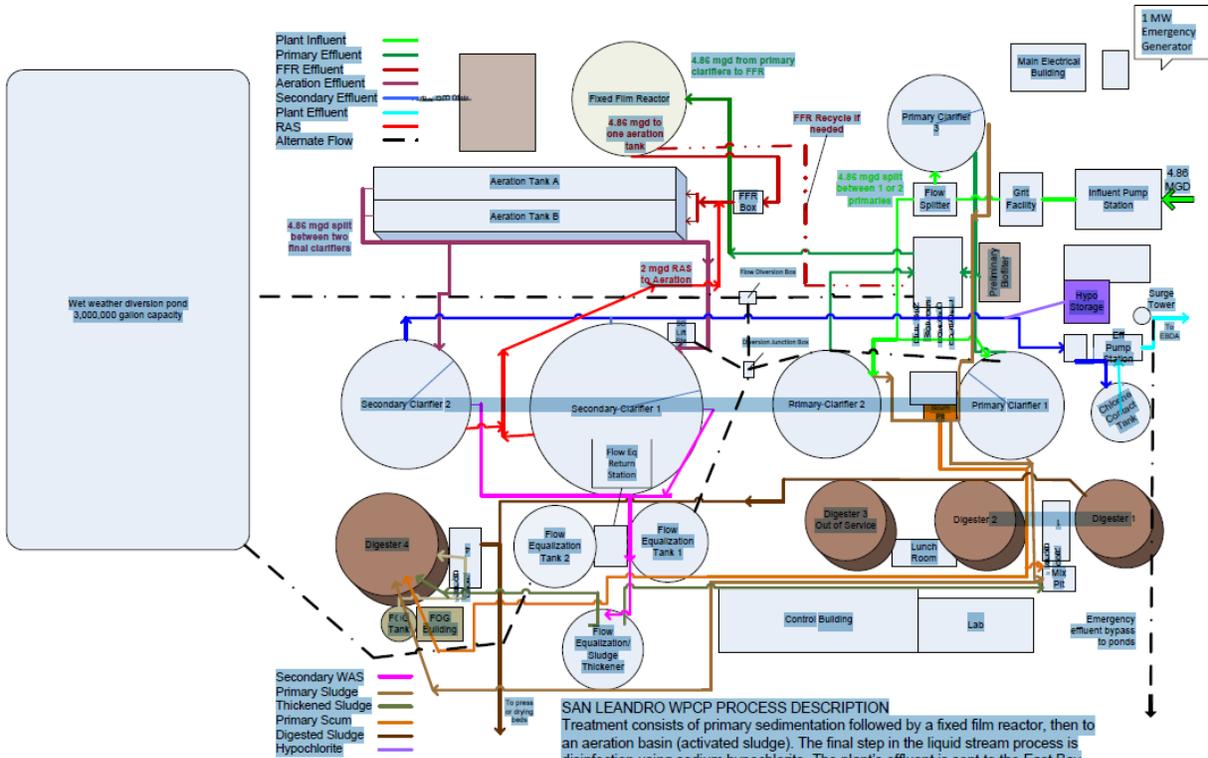
Copies of all laboratory reports are maintained on file at the Authority's office and are available for review upon request. Said reports are not included in this report.

# Section 3: Plan View Drawing or Map Showing the Discharger's Facility, Flow Routing, Sampling and Observation Station Locations

## Marina Dechlorination Facility



# San Leandro Plant – Process Flow Diagram



**SAN LEANDRO WPCP PROCESS DESCRIPTION**  
 Treatment consists of primary sedimentation followed by a fixed film reactor, then to an aeration basin (activated sludge). The final step in the liquid stream process is disinfection using sodium hypochlorite. The plant's effluent is sent to the East Bay Dischargers facility for dechlorination.

The plant solids captured from primary clarifiers and WAS thickening are stabilized in anaerobic digesters. The remaining solids are then dewatered with a belt press and solar dried in drying beds.

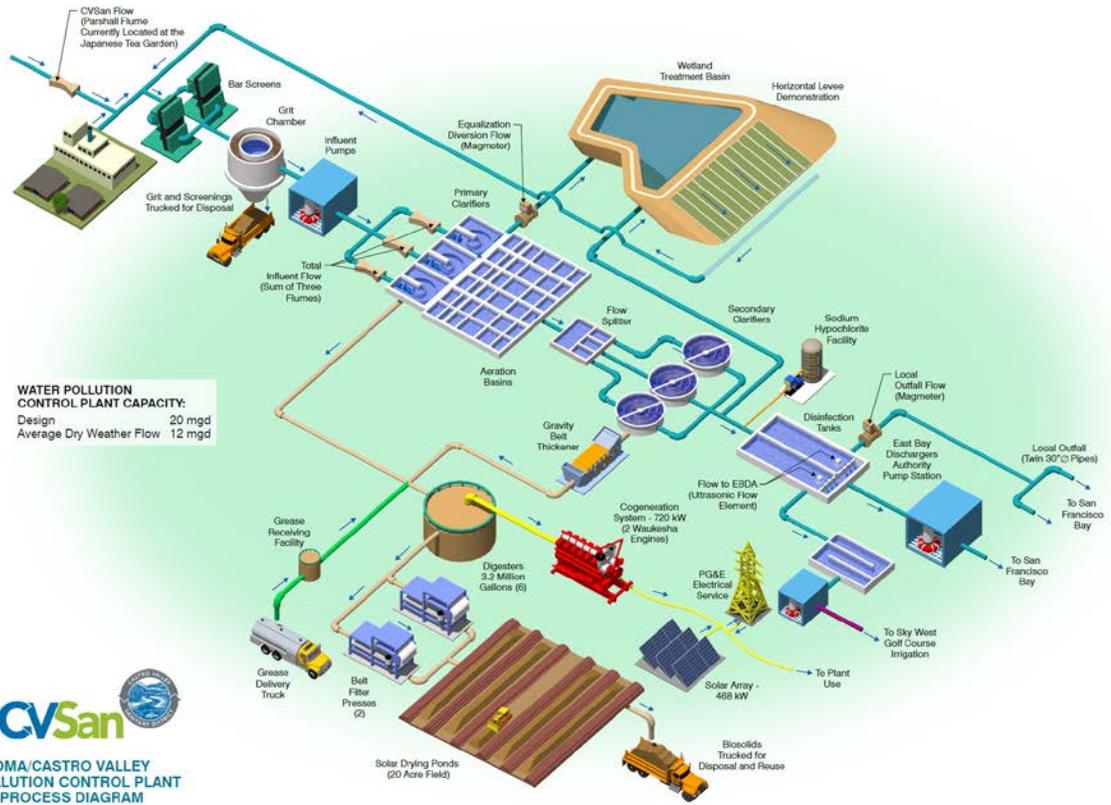
San Leandro Plant – Sampling Locations



Effluent Sampling Point

Influent Sampling Point

# OLSD Plant – Process Flow Diagram



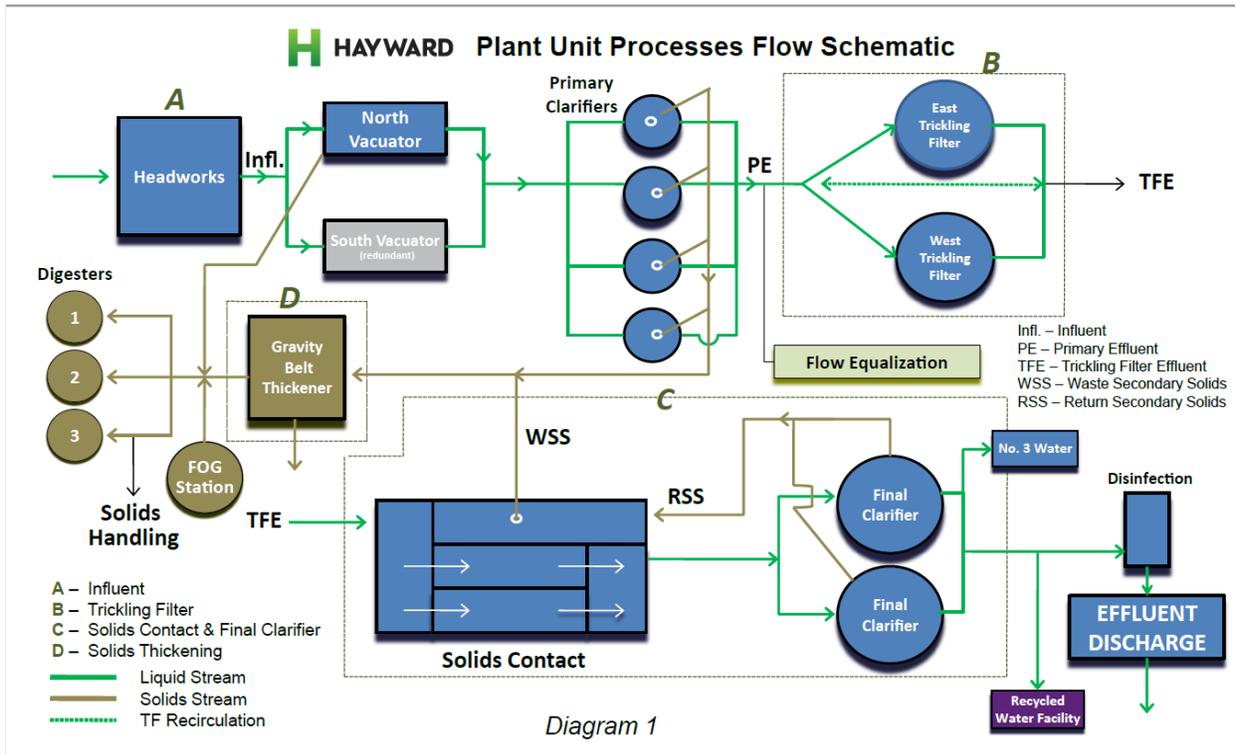
## OLSD Plant – Sampling Locations

**PLANT  
INFLUENT  
SAMPLE POINT**



**PLANT  
EFFLUENT  
SAMPLE POINT**

# Hayward Plant – Process Flow Diagram

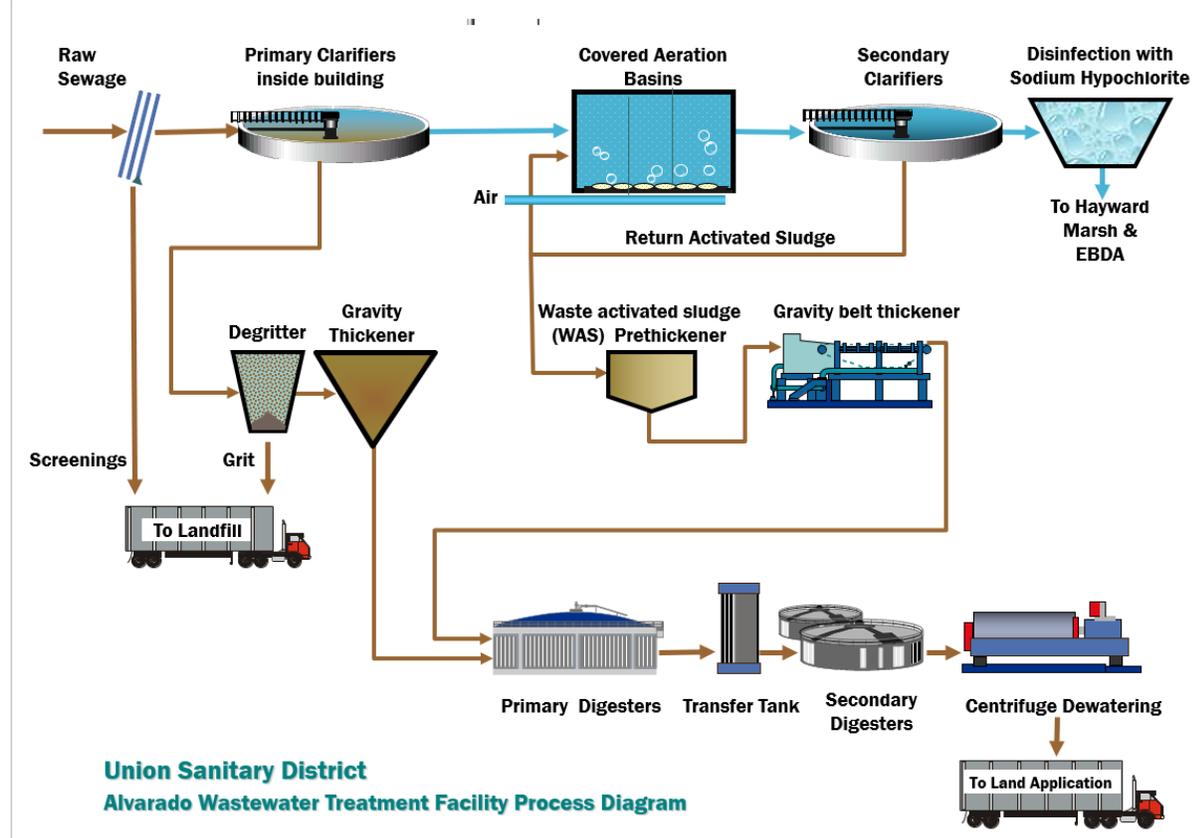


# Hayward Plant – Sampling Locations



# USD Plant – Process Flow Diagram

## UNION SANITARY DISTRICT



USD Plant – Sampling Locations



## Section 4: Results of Facility Report Reviews

The tables in this section summarize the status of reviewing and updating the following documents: Operations & Maintenance (O&M) Manual, Contingency Plan, Spill Prevention Plan, and Wastewater Facilities Status Report.

### EBDA Facilities

REPORTS	REVIEW DATE	REVIEW PROCEDURES	PLANNED ACTIONS	SCHEDULE
O&M Manual	Jan 2020	Updated on an as-needed basis and reviewed annually by the EBDA O&M Manager.	The Authority maintains a comprehensive O&M Manual for the joint-use facilities. Chapters of the Manual are regularly reviewed and updated. EBDA's Wet Weather SOP is updated annually.	Performed annually
Contingency Plan	Jan 2020	Updated annually by EBDA O&M Manager and EBDA Administrative Assistant. EBDA is included in the Alameda County's Office of Emergency Service's Utility Unit.	The Emergency Operating Contingency Plan is supported by Operations & Maintenance Agreements between Member Agencies, which are compatible with their existing plans and known to all other local and county agencies for emergency purposes. Operation and maintenance activities are contracted with the Member Agencies for routine work. Emergency work is performed sometimes by Member Agencies and sometimes through contracts with private specialty firms.	Performed annually
Spill Prevention Plan	Jan 2020	Updated annually by EBDA O&M Manager	No major changes planned for 2020.	Performed annually
Wastewater Facilities Status Report	Jan 2020	EBDA continues to maintain a comprehensive Replacement and Renewal Policy covering all of EBDA's equipment above a \$3,000 value. The Authority has an Asset Management Plan that covers all critical equipment. The plan is currently being updated and will be reviewed semi-annually by the EBDA General and O&M Managers.	<p>In 2019, EBDA completed the SCADA System Upgrade, Asset Management Plan Update, and improvements to network security.</p> <p>In 2020, the Authority is continuing work on the following projects that provide upgrades to the EBDA system:</p> <ol style="list-style-type: none"> <li>1. Replacement of the Motor Control Center at the Hayward Effluent Pump Station (HEPS).</li> <li>2. Facilities Electrical Evaluation</li> <li>3. EBDA Office Repairs</li> <li>4. Replacement of 4 pumps at HEPS</li> <li>5. Redundant back-up power for the Oro Loma Effluent Pump Station (OLEPS)</li> </ol>	<p>Anticipated Completion:</p> <p>HEPS MCC Replacement, March 2020</p> <p>Facilities Electrical Evaluation, March 2020</p> <p>EBDA Office Repairs, June 2020</p> <p>HEPS Pump Replacements, June 2020</p> <p>OLEPS Backup Power, Dec 2021</p>

## San Leandro Treatment Plant

Document	Review Date	Review Procedures	Planned Actions	Schedule
O&M Manual	Sections assigned and updated throughout the year	O&M manuals and SOPs are written and revised as necessary by designated Plant Operators and reviewed by the Operations Supervisor and Plant Manager	Review O&M chapters and SOPs as needed. Continue developing and revising SOPs for plant processes. SOPs reviewed/revised or created are: Screenings conveyor reverse operation, plant flowmeter calibration, Clean and inspect washer compactor, removing grease from grit facility, Check valve deragging, PD pump deragging, Cleaning FFR fans, Cleaning DO probes, Tertiary fill station Coliform testing. Digester 1 and two deragging and sludge transfer, Belt filter press truck operation, Replacing Polymer totes, MOSM creation,  O&M is still a mix of electronic and older paper as we transition we have fewer and fewer paper versions per year.	Performed continuously
Contingency Plan	January 2020	WPCP management reviews, edits and approves	Contingency plan reviewed annually and updated as needed. Update employee list and emergency contacts along with contractor contacts.	Performed annually
Spill Prevention Plan	January 2020	WPCP management reviews, edits and approves	Plan reviewed and updated. Training and review done annually, including: new employee orientation, 8 hour on-site level 1 responder training, and tailgate review on plan and emergency spill kits.	Performed annually

## Oro Loma Sanitary District Treatment Plant

Document	Review Date	Review Procedures	Planned Actions	Schedule
O&M Manual	Ongoing	New sections of the O&M for the Nutrient Optimization facilities are in draft and expected to be available for start-up activities in Spring 2020.	New sections will be added to reflect the new nitrification and denitrification facilities. Drafts of the new sections will be available for use during start-up in Spring 2020. The District continues to invest significant time in training existing staff for the new process. Training will continue in advance of and through start-up.	Review updated Nutrient Treatment Sections in Winter 2019/20. Finalize sections in Summer 2020.
Contingency Plan	December 2019	Management team reviews each section and updates to reflect changes in contact information or equipment/facility changes.	Continue to make updates as needed, at least annually.	December 2020
Spill Prevention Plan	July 2018	The District updated its plan in 2018 to reflect changes to the fuel tank at the EBDA Pump Station at Oro Loma.	Continue to make updates as needed.	As needed
Wastewater Facilities Status Report	January 2019		<p>The District continues to execute on its planned 5-Year, \$110M capital program. The program includes extensive sewer pipe renewal (1.5% of system/year), Nutrient Treatment Upgrades, and Digester Construction.</p> <p>In 2019, the District applied for \$25M in financing from the State Revolving Fund. The District plans to replace a minimum of 40 miles of pipe in the next 10 years.</p> <p>The District is currently in construction of a Nutrient Optimization Project. The project will provide full nitrification and denitrification. Start-up planned for Spring 2020.</p>	10-Year Capital Plan (Updated December 2019)

## Hayward Water Pollution Control Facility

Document	Review Date	Review Procedures	Planned Actions	Schedule
O&M Manual	Ongoing	COH WPCF electronic O&M manuals, including SOP's, are reviewed and updated annually by staff. Revisions are made to Sections and SOP's	12 SOPs were written or updated in 2019. Procedure for moisture balance analysis, run pump in reverse with Allen Bradley #7700 VFDs, seal water strainers, using plant air, flushing headworks wet wells, EQ pond isolation for Contractor, drying bed underflow line isolation for contractor, GBT and SBT isolation for contractors, snail kill update, procedure for cleaning distillation glass, update VA/TA, H2S Sensodyne Draeger tube readings. The review of SOPs and O&M will be done as needed throughout the year of 2020.	SOP's and O&M sections are reviewed periodically and updated no less than on an annual basis. Updates occurred throughout 2019
Contingency Plan	January 2020	The entire plan is reviewed by the WPCF manager with updates and edits made by the Senior Secretary.	The latest update was made in November 2019 and updates will be made as needed throughout 2020. Edits and/or updates were made to the following areas: <ul style="list-style-type: none"> <li>• Emergency Phone Numbers</li> <li>• WPCF Employee Phone List</li> <li>• Standby and Emergency Call Lists</li> <li>• Critical Emergency Procedures</li> <li>• Emergency Contact List</li> <li>• F.O.G. Supplier List</li> </ul>	A thorough and comprehensive review is completed annually in January. Emergency contact & Personnel phone lists are kept up-to-date.
Spill Prevention Plan	January 2020	Plan reviewed by WPCF Manager every January. Changes made by Senior Secretary.	Make updated as needed.	Spill Prevention Plan was reviewed in January 2020

Facilities Status	January 2020	<p>The City continues implementation of projects as recommended in the 2014 Master Plan update.</p> <p>Consultant selection process for Phase 2 Master Plan began in 2017.</p>	<p>Planned for 2020:</p> <ul style="list-style-type: none"> <li>• Design of Headworks bar screen began in 2019 and will be complete in 2020. construction will begin in 2020 and expected to be complete in 2021</li> <li>• Construction of the first phase of the Recycled Water Pipeline (8 miles) Project was completed in 2019 along with the construction for the Recycled Water Storage Tank and Pump Station. The Treatment system will be installed and completed in 2020. When it is completed the treatment system will have a capacity of 5 million gallons per day with an initial service demand of roughly 300K gallons per day</li> <li>• Construction of Effluent Pump Station electrical building, MCC and dissipater structure was completed in 2019 the rest of project will be complete in 2020</li> <li>• There are several elements of the Phase Two WPCF Improvements that have been incorporated into the Sewer Replacement &amp; Sewer Improvement CIP's which will move forward in year 2020</li> </ul>	<p>10-year Master Plan CIP planning changes are made every year in July with mid-year adjustments made in January/February</p>
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## Union Sanitary District Treatment Plant

Document	Review Date	Review Procedures	Planned Actions	Schedule
O&M Manual	Ongoing	Plant O&M documents are incorporated into the District's Competency-Based Training Program. USD utilizes Microsoft Sharepoint software to track document review.	Plant management reviews training documents and SOP's as changes occur (i.e., following construction) or as scheduled.	Each individual training module and SOP has a review frequency of 3 years.
Contingency Plan	December 2019	Plant Manager reviews and updates the Contingency Plan annually.	None. Contingency Plan was updated in December 2019.	Complete next review by December 2020.
Spill Prevention Plan	December 2019	Spill Prevention Plan is incorporated into our Contingency Plan and is reviewed at the same time.	None. Spill Prevention Plan was reviewed in December 2019.	Complete next review by December 2020.
Wastewater Facilities Status Report	December 2019	<p>USD's Master Plans address most of the Facilities Evaluation requirements. Our Plant Master Plan is updated every 5 years and Pump Station and Collection System Master Plans are updated as needed. Asset management data is updated on an ongoing basis. CIP and Operating plans and budgets are reviewed and revised annually.</p> <p>2019 Projects Completed/in-progress:</p> <ul style="list-style-type: none"> <li>• Redundant Degritter system.</li> <li>• New Anaerobic Digester #7 (Design, Completed)</li> <li>• Digester # 3 Rehabilitation (Completed)</li> <li>• Headworks 3<sup>rd</sup> Bar Screen (Design complete)</li> <li>• Alvarado Pump Station (Design, Complete)</li> </ul>	<p>Complete capital improvements in accordance with 20-year CIP plan. Implement annual rate adjustments for Sewer Service Charges and Capacity Fees in accordance with 10-year financial plan.</p> <p>2020 Projects Planned:</p> <ul style="list-style-type: none"> <li>• New Anaerobic Digester #7 (Commence Construction)</li> <li>• Standby Power Upgrade. (Design)</li> <li>• Digester # 2 Rehabilitation (Repair in progress)</li> <li>• Enhanced Treatment and Site Upgrade (Pre-design of Activated Sludge Improvements complete, Design to commence)</li> <li>• Headworks 3<sup>rd</sup> Bar Screen (Construction in progress)</li> <li>• Alvarado Pump Station (Construction to Commence)</li> </ul>	<p>20-year CIP annual update in June.</p> <p>Master Plans:</p> <ul style="list-style-type: none"> <li>• Newark Basin MP 2019</li> <li>• Irvington Basin 2021</li> <li>• Pump Station Asset Condition Assessment 2021</li> <li>• Plant Asset Condition Assessment 2024</li> <li>• Plant Solids System/Capacity Assessment 2024</li> <li>• Alvarado Basin 2025</li> </ul>

## **Section 5: BACWA Watershed Permitting and Monitoring**

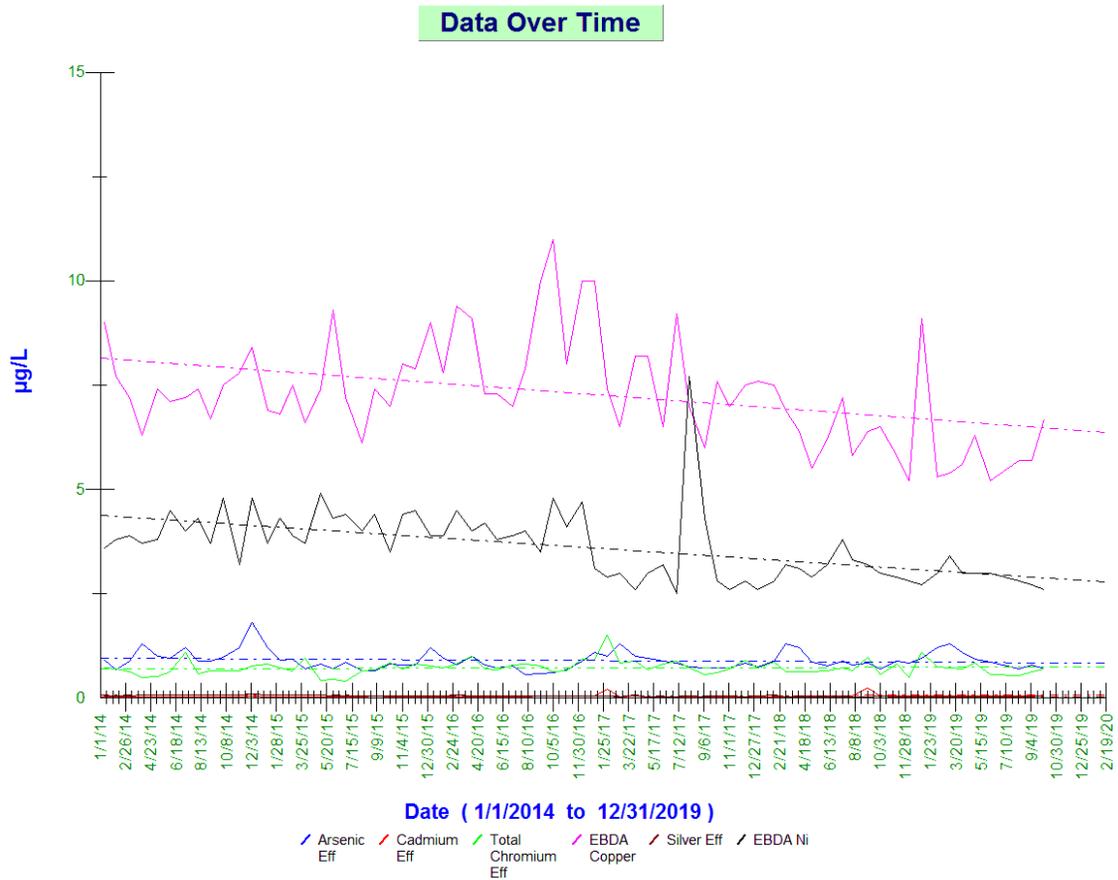
EBDA participates in a number of group processes coordinated by BACWA to fulfill other permit requirements, including Receiving Water Quality Monitoring, TMDL/SSO Support, Mercury and PCBs Watershed Permit Support, Nutrients Watershed Permit Support, and Implementation of Copper Action. Participation in these items is described in an annual BACWA letter to Water Board found here: <https://bacwa.org/wp-content/uploads/2020/01/BACWA-NPDES-Permit-Letter-2020-submitted.pdf>

## Section 6: Effluent Characterization Study and Report

EBDA regularly monitors and evaluates discharges from the common outfall and each contributing plant's effluent to identify any concerning trends. No significant increases over past performance were noted in 2019 data.

EBDA monitors monthly for metals and cyanide. Cyanide is rarely detected. As shown in Figure 2, five years of metals data continue to show flat or downward trends.

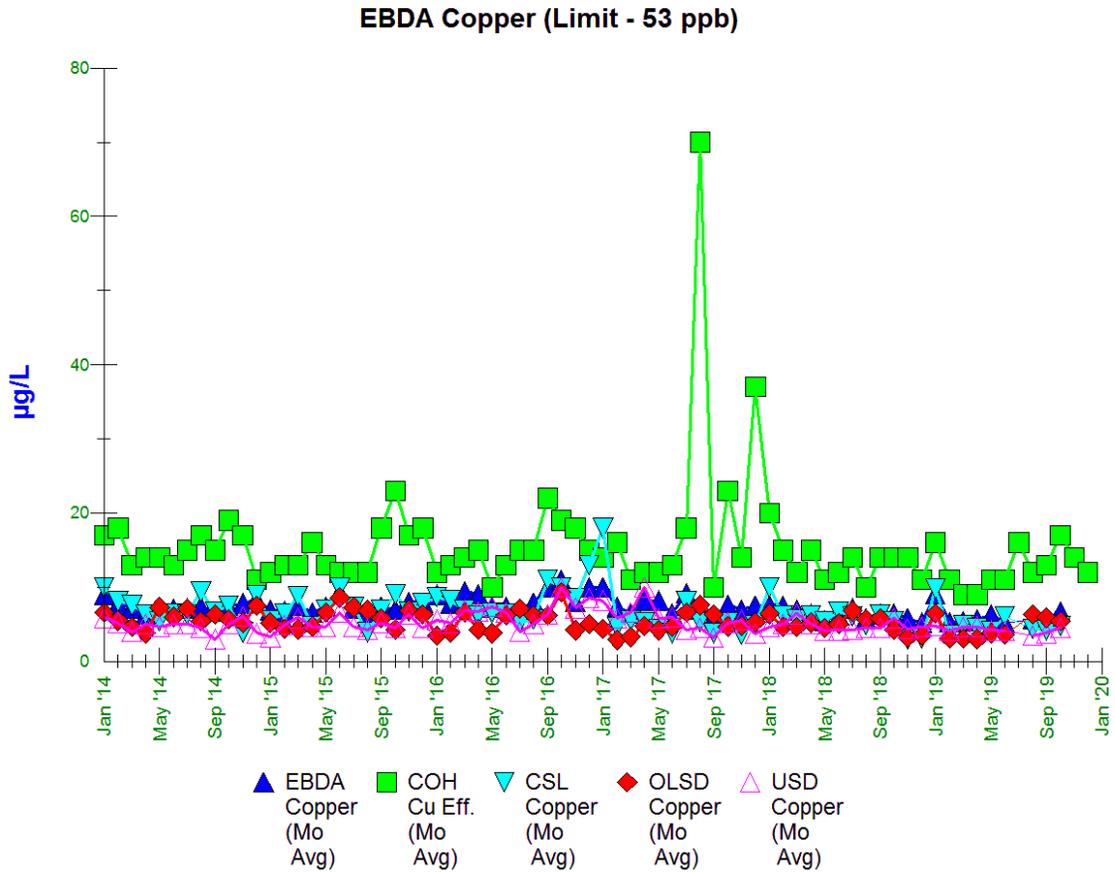
Figure 2 – EBDA Effluent Metals Trends



Metals Sp Trend

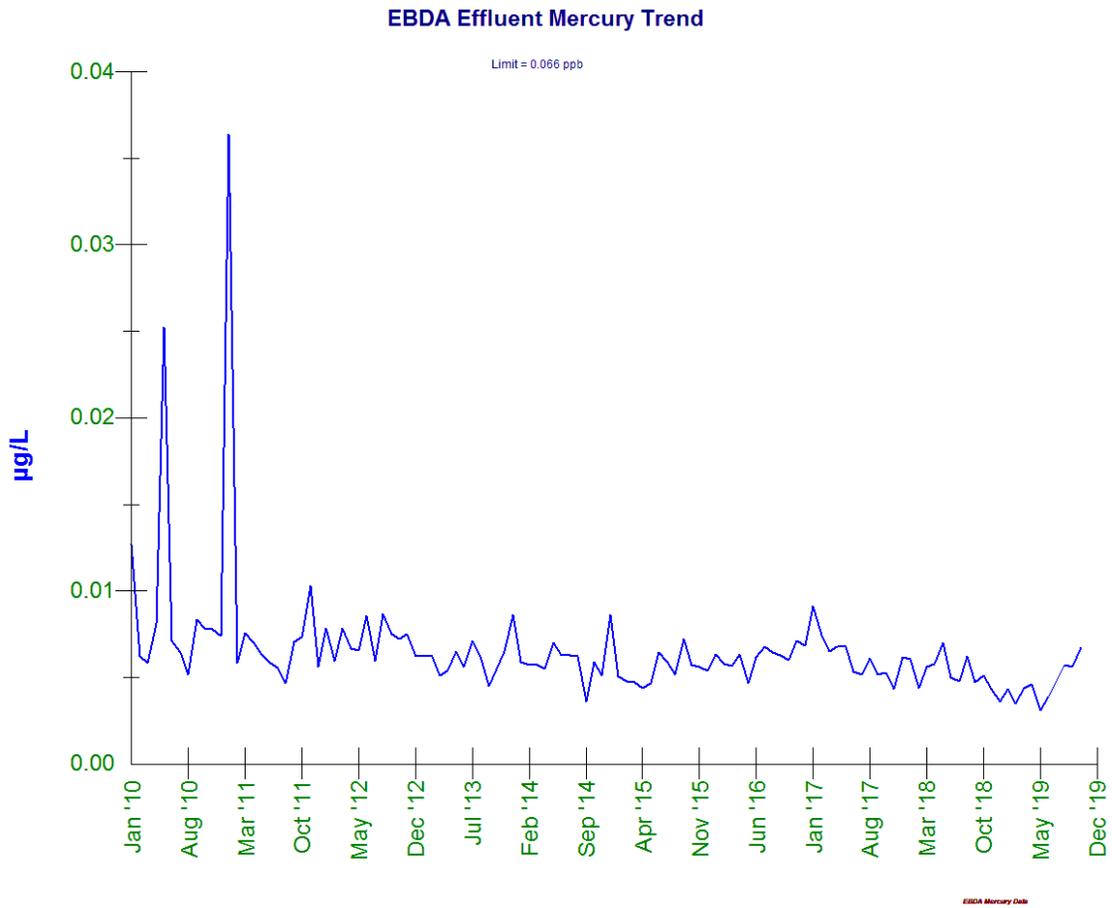
EBDA's five-year trend for copper shows that while individual member agency effluent concentrations have varied, EBDA's common outfall concentration consistently averaged less than 20 ppb versus a permit limit of 53 ppb (see Figure 3).

Figure 3 – Effluent Copper Trend



EBDA's effluent mercury loads also continue to be well below permit limits, as shown in Figure 4.

Figure 4 – Effluent Mercury Trend



## ITEM NO. RA6 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 November 1 to February 29; there are no outstanding activities.

<i>Regulatory Authority</i>	<i>Required Action</i>	<i>Occurrence</i>	<i>Date Submitted</i>
Regional Monitoring Program % SFEI	1st Quarter Partipant fee (billed annually in October)	Quarterly	11/14/2019
State Water Resources Control Board	Annual Waste Discharge Permit Fee	Annual	11/14/2019
Bureau of Automotive Repairs	Annual reporting transmittal 2008 Ford Ranger	Annual	12/1/2019
Alameda County	Financial Statements Submittal	Annual	12/2/2019
State Controller	Financial Statements Submittal	Annual	12/2/2019
Regional Monitoring Program % SFEI	2nd Quarter Partipant fee (billed annually in October)	Quarterly	12/16/2019
Alliant Insurance Services, Inc	Pollution Liability Insurance Program Renewal	Annual	12/19/2019
Secretary of State	Statement of Facts/Roster of Public Agencies Filing (Post-election changes to Commission)	Annual	12/21/2019
County of Alameda, Clerk/Recorder	Statement of Facts/Roster of Public Agencies Filing	Annual	12/21/2019
Oro Loma Sanitary District	Land Lease Renewal	Quinquennial	1/1/2020
Dept of Industrial Relations	Form 300A Posting	Annual	1/8/2020
Division of Occupational Safety & Health	Crane Inspection/Certification	Annual	1/9/2020
State Compensation Insurance Fund	Payroll Report, Semi-Annual Jul 01 - Jan 01 (started December 2012)	Semi-Annual	1/10/2020
ADP Business Payroll	Print Payroll Quarter-End Tax Returns (W-2 will be delivered via FedEx)	Quarterly	1/10/2020
Local Agency Formation Commission	File JPA Amendments within 30 days after the effective		1/15/2020
Internal Revenue Service	Distribute W-2 forms to employees	Annual	1/18/2020
Regional Water Quality Control Board	Recycled Water monthly reports	Monthly	1/27/2020
Internal Revenue Service	Distribute Form 1099-MISC to vendors/contractors	Annual	1/28/2020
State Controller	Special Districts Report of Financial Transactions	Annual	1/28/2020
Internal Revenue Service	Submit Form 1096 w/1099-MISC copies to IRS	Annual	1/29/2020
State Water Resources Control Board	NPDES Annual Report	Annual	1/29/2020
City of San Leandro	CUPA HMBP & Inventory Reporting (CERS)	Annual	1/30/2020
AICo Environmental Health	CUPA HMBP & Inventory Reporting (CERS ID)	Annual	1/30/2020
State Water Resources Control Board	NPDES Quarterly (Oct-Dec) Reports	Quarterly	1/30/2020
Dept of Industrial Relations	Federal & State Employment Legal Notices posting	Annual	1/30/2020
State Water Resources Control Board	NPDES monthly reports	Monthly	1/31/2020
Bureau of Labor Statistics	Report monthly employment figures	Monthly	2/12/2020
Regional Monitoring Program % SFEI	3rd Quarter Partipant fee (billed annually in July)	Quarterly	2/29/2020

## ITEM NO. RA7 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 January 8, 2020

<b>Contents</b>	<b>Page</b>	<b>Contents</b>	<b>Page</b>
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SF Bay Nutrient Watershed Permit	2	SSS WDR Reissuance	6
Chlorine Residual Compliance	3	ELAP Update	7
Pesticides	3	Phase-out of Biosolids as Alternative Daily Cover	8
Mercury/PCBs Watershed Permit	4	Climate Change Mitigation	9
Enterococcus Objectives	4	Climate Change Adaptation	10
State Water Board Toxicity Provisions	5	Toxic Air Contaminants and BAAQMD Rule 11-18	11
		Recycled Water Policy	12
		Acronyms	13

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

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>NUTRIENTS IN SAN FRANCISCO BAY – SCIENCE</b>			
<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>For FY20, BACWA contributed the \$2.2M required by the Watershed Permit, as well as “frontloading” additional funds that would be subtracted from future permit years. Moving the funding up will accelerate the pace of the science that will be used for management decisions for the third Watershed Permit.</li> <li>Agencies are conducting effluent monitoring for nutrients under the watershed permit.</li> <li>Current scientific efforts are focused on expanding monitoring data, modeling, and work exploring the linkage between nutrients, dissolved oxygen, and harmful algal species.</li> <li>Future studies will be focused on the science needed to inform the development of nutrient load caps for the third Nutrient Watershed Permit.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to participate in steering committee and planning subcommittee, and provide funding for scientific studies.</li> <li><b>Participate in the Nutrient Technical Workgroup, which is a venue to provide technical input to the process, and is open to the public, as well as the Stakeholder Advisory Group.</b></li> </ul>	<p>BACWA “Other Useful Nutrient Documents” Page:  <a href="http://bacwa.org/nutrients/other-useful-nutrient-documents/">http://bacwa.org/nutrients/other-useful-nutrient-documents/</a></p> <p>SFEI Nutrient Science Plan Documents:  <a href="http://sfbaynutrients.sfei.org/books/reports-and-work-products">http://sfbaynutrients.sfei.org/books/reports-and-work-products</a></p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>SF BAY NUTRIENT WATERSHED PERMIT</b>			
<ul style="list-style-type: none"> <li>• The first nutrient watershed permit was adopted in April 2014. The second Nutrient Watershed Permits was adopted May 8, 2019 with an effective date of July 1, 2019.</li> <li>• The second Nutrient Watershed permit includes: <ul style="list-style-type: none"> <li>○ Continued individual treatment plant nutrient monitoring and reporting;</li> <li>○ Continued group annual reporting;</li> <li>○ Significantly increased funding for science;</li> <li>○ Regional assessment of the feasibility and cost for reducing nutrients through nature-based systems and recycled water;</li> <li>○ Establishing current performance for TIN, and “load targets” for nutrient loads based on 2018 load data plus a 15% buffer for growth and variability</li> <li>○ Recognition of “early actors” who are planning projects that will substantially decrease TIN loads.</li> </ul> </li> <li>• Through the nutrient surcharge levied on permittees, BACWA funds compliance with the following provisions on behalf of its members: <ul style="list-style-type: none"> <li>○ Group Annual Reporting</li> <li>○ Optimization and Facilities Upgrade Studies (first permit term)</li> <li>○ Regional Studies on Nature Based Systems and Recycled Water (second permit term)</li> <li>○ Support of scientific studies through the RMP at \$2.2M per year through the five-year permit term.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• BACWA submitted a final report on Nutrient Treatment by Optimization and Upgrade on June 26, 2018. An agency-customizable presentation, and a brochure to educate governing boards and the public were made available to our members.</li> <li>• BACWA and SFEI most recently submitted a science implementation plan and schedule update on February 1, 2019.</li> <li>• All agencies covered by the Nutrient Watershed Permit participated in the first four group Annual Reports, submitted in 2015, 2016, 2017, and 2018. Agencies are now reporting to BACWA via a data sheet developed by the consultant. An updated data sheet was distributed to agencies that accounts for changes in the monitoring and reporting program in the second Watershed Permit, including the following: <ul style="list-style-type: none"> <li>○ The second watershed permit reporting period will now be based on water year, through September 30, instead of permit year, through June 30. The next Group Annual Report is due Feb 1, 2020.</li> <li>○ Agencies with flows greater than 10mgd are required to conduct influent monitoring.</li> <li>○ Organic nitrogen and soluble reactive phosphorus are no longer required to be monitored in effluent.</li> </ul> </li> <li>• Agencies with plans to substantially reduce nutrients are recognized in 2<sup>nd</sup> Watershed Permit Fact Sheet.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Agencies continue to report nutrient monitoring to the Water Boards through CIWQS and to BACWA via the data sheet, which was updated with the monitoring and reporting requirements in the second Nutrient Watershed Permit.</b></li> <li>• <b>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”.</b></li> <li>• <b>Work with team led by HDR to provide information to be used for Nutrient Removal by Recycled Water Evaluation and the Nature Based Systems study.</b></li> <li>• Begin discussions about development of a potential Nutrient Trading framework.</li> </ul>	<p>Second Nutrient Watershed Permit:  <a href="https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2019/May/6_ssr.pdf">https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2019/May/6_ssr.pdf</a></p> <p>Optimization/Upgrade Study Final Report:  <a href="https://bacwa.org/wp-content/uploads/2018/06/BACWA_Final_Nutrient_Reduction_Report.pdf">https://bacwa.org/wp-content/uploads/2018/06/BACWA_Final_Nutrient_Reduction_Report.pdf</a></p> <p>Optimization/Upgrade Report Presentation:  <a href="https://bacwa.org/wp-content/uploads/2019/03/bacwa_brochure_presentation_20190312.pptx">https://bacwa.org/wp-content/uploads/2019/03/bacwa_brochure_presentation_20190312.pptx</a></p> <p>Optimization/Upgrade Report Brochure:  <a href="https://bacwa.org/wp-content/uploads/2019/03/BACWA-2019-Nutrient-Brochure_Final_20190301.pdf">https://bacwa.org/wp-content/uploads/2019/03/BACWA-2019-Nutrient-Brochure_Final_20190301.pdf</a></p> <p>BACWA Nutrient Annual Reports:  <a href="http://bacwa.org/document-category/nutrient-annual-reports/">http://bacwa.org/document-category/nutrient-annual-reports/</a></p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>CHLORINE RESIDUAL COMPLIANCE</b>			
<ul style="list-style-type: none"> <li>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, however, because there are 24 hourly reporting events each day, the “opportunities” for violations are enormous. However, the actual violation rates are infinitesimal (~0.001%).</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Regional Water Board is working with BACWA to develop a Basin Plan amendment. BACWA has retained consultant support for this effort.</li> <li>The Basin Plan amendment will include: <ul style="list-style-type: none"> <li>Adopting EPA Ambient Water Quality Criteria for chlorine, which would be applied with dilution, and lead to limits with a one-hour average compliance period</li> <li>Possibly establishing a Minimum Level, or Reporting Limit of 0.05mg/L for online continuous monitoring system.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Work with the consultant and Regional Water Board to proceed with tasks in the Scope of Work to support the Basin Plan Amendment.</li> <li><b>Respond to information requests from BACWA and the Regional Water Board to support this initiative.</b></li> </ul>	Basin Plan Amendment support Scope of Work: <a href="https://bacwa.org/wp-content/uploads/2018/01/EOA-Inc.-SOW-Budget.pdf">https://bacwa.org/wp-content/uploads/2018/01/EOA-Inc.-SOW-Budget.pdf</a>
<b>PESTICIDES</b>			
<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Beginning 2016, EPA has been reviewing the registration of several key pesticides, a task it conducts once about every 15 years.</li> <li>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.</li> <li>With chronic toxicity limits likely in the near term, POTWs will be in compliance jeopardy if pesticides contribute to toxicity.</li> <li>Baywise.org has launched webpages on flea and tick control messaging to pet owners and veterinarians.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to comment on pesticide reregistrations.</li> <li>Work with veterinary associations on messaging with respect to flea and tick control alternatives.</li> <li>Continue to develop summary of EPA actions on pesticides.</li> </ul>	BACWA Pesticides Regulatory Update and Call to action: <a href="https://bacwa.org/wp-content/uploads/2016/02/BACWA-Pesticide-Regulatory-Update-2016-1.pdf">https://bacwa.org/wp-content/uploads/2016/02/BACWA-Pesticide-Regulatory-Update-2016-1.pdf</a>  BACWA Pesticide Regulatory Support Page: <a href="https://bacwa.org/document-category/pesticides-regulatory-support/">https://bacwa.org/document-category/pesticides-regulatory-support/</a>  Baywise flea and tick pages: <a href="https://baywise.org/">https://baywise.org/</a>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>MERCURY/PCB WATERSHED PERMIT</b>			
<ul style="list-style-type: none"> <li>Mercury/PCB Watershed Permit was reissued on 11/8/17 with 1/1/18 effective date. The Watershed Permit is based on the TMDLs for each of these pollutants.</li> <li>Aggregate PCB and mercury loads have been well below waste load allocations through 2016.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>The permit requires continued risk reduction program funding and annual reporting of effort. BACWA is repeating its grant program that it established as part of the previous permit. In summer 2018, two \$25,000 grants were awarded, to APA Family Support Services (now complete) and the California Indian Environmental Alliance (ongoing through 2020).</li> </ul>	<ul style="list-style-type: none"> <li>Continue outreach to dentists on amalgam separation through BAPPG and BACWA's pretreatment committee.</li> <li>Schedule risk reduction presentations by the grantees to the Regional Water Board 2020.</li> </ul>	<p>2017 Mercury/PCB Watershed Permit:  <a href="http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2012/R2-2012-0096.pdf">http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2012/R2-2012-0096.pdf</a></p> <p>Risk Reduction Materials from 2012 and 2017 Permit term:  <a href="https://bacwa.org/mercury-pcb-risk-reduction-materials/">https://bacwa.org/mercury-pcb-risk-reduction-materials/</a></p> <p>Updated BACWA PCBs Protocol:  <a href="https://bacwa.org/wp-content/uploads/2014/02/PCBs-Sampling-Analysis-and-Reporting-Protocols-Dec13.pdf">https://bacwa.org/wp-content/uploads/2014/02/PCBs-Sampling-Analysis-and-Reporting-Protocols-Dec13.pdf</a></p>
<b>ENTEROCOCCUS LIMITS</b>			
<ul style="list-style-type: none"> <li>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.</li> <li>The Objectives were approved by the Office of Administrative Law in February 2019 and by EPA in March 2019</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>The Regional Water Board has been granted dilution credit upon request when implementing the new objectives in NPDES permits.</li> </ul>	<ul style="list-style-type: none"> <li>BACWA is working with SFEI to perform a study of background enterococcus levels in the San Francisco Bay. SFPUC has volunteered use of their boat for collecting samples. This study is being funded by BACWA. It began in Summer 2019, and will wrap up during the following wet season in 2019/20.</li> <li>The first round of samples found enterococcus levels near the detection limit in most locations.</li> </ul>	<p>SWB Bacterial Objective page:  <a href="https://www.waterboards.ca.gov/bacterialobjectives/">https://www.waterboards.ca.gov/bacterialobjectives/</a></p>

## STATE WATER BOARD TOXICITY PROVISIONS

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| <ul style="list-style-type: none"> <li>• 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</li> <li>• Draft State Toxicity Provisions posted October 19, 2018, would establish: <ul style="list-style-type: none"> <li>○ numeric limits for chronic toxicity;</li> <li>○ 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);</li> <li>○ Regional Water Board discretion on whether to require RPAs for acute toxicity</li> </ul> </li> <li>• 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.</li> </ul> | <ul style="list-style-type: none"> <li>• Key issues for BACWA to discuss with the State Water Board continue to be: <ul style="list-style-type: none"> <li>○ reasonable potential analysis methodology,</li> <li>○ MMEL testing schedule and laboratory capacity,</li> <li>○ test species variability</li> <li>○ sensitive species screening requirements</li> </ul> </li> <li>• 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. If agencies are required by the provisions to do sensitive species screening, this will reduce RMP funds by approximate \$100K per year.</li> <li>• 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.</li> <li>• The State Water Board is considering removing <i>C. dubia</i> tests for MMEL compliance purposes until a study on its accuracy and variability is complete. The State Water Board has tentatively agreed to a study examining <i>Ceriodaphnia dubia</i> test variability.</li> <li>• BACWA hosted a toxicity workshop for its members in September 2017.</li> </ul> | <ul style="list-style-type: none"> <li>• Meet with state Water Board staff and Regional Water Board staff to request that sensitive species screening not be required for agencies.</li> <li>• Respond to new draft Appendix K regarding California laboratory toxicity testing capacity by February 10, 2020.</li> <li>• Track State Water Board activities pertaining to the <i>Ceriodaphnia dubia</i> test.</li> <li>• Comment on proposed language by Regional Water Board that would implement Toxicity Provisions in Region 2 NPDES Permits.</li> </ul> | <p>State Board Toxicity Page:<br/> <a href="http://www.swrcb.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.shtml">http://www.swrcb.ca.gov/water_issues/programs/state_implementation_policy/tx_ass_cntrl.shtml</a></p> <p>2018 Draft Toxicity Provisions:<br/> <a href="https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/toxicity_draft_provisions.pdf">https://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/toxicity_draft_provisions.pdf</a></p> <p>Toxicity Workshop Presentations:<br/> <a href="https://bacwa.org/bacwa-toxicity-workshop-september-18-2017/">https://bacwa.org/bacwa-toxicity-workshop-september-18-2017/</a></p> <p>CASA <i>Ceriodaphnia dubia</i> White Paper:<br/> <a href="https://bacwa.org/document/casa-white-paper-on-ceriodaphnia-dubia/">https://bacwa.org/document/casa-white-paper-on-ceriodaphnia-dubia/</a></p> <p>BACWA Comments on Toxicity Provisions:<br/> <a href="https://bacwa.org/document/bacwa-comments-on-toxicity-provisions-12-21-18/">https://bacwa.org/document/bacwa-comments-on-toxicity-provisions-12-21-18/</a></p> |
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Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>COMPOUNDS OF EMERGING CONCERN</b>			
<ul style="list-style-type: none"> <li>Pharmaceuticals and other trace compounds of emerging concern (CECs) are ubiquitous in wastewater at low concentrations and have unknown effects on aquatic organisms.</li> <li>The State Water Board is considering developing a Pilot CECs Monitoring Plan for the State.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Regional Water Board has stated that voluntary participation in RMP CECs studies is key to avoiding regulatory mandates for CECs monitoring. These studies are informational and not for compliance purposes.</li> <li>Microplastics have been a focus of the RMP in recent years. BACWA has participated in the Workgroup and is finalizing a POTW Fact Sheet. One conclusion of the RMP work is that POTWs contribute much lower microplastic loads than stormwater.</li> <li>PFAS compounds are getting attention at the Federal and State level. They are ubiquitous at low levels, persistent, and there are not approved methods for wastewater. The State Water Board is planning a 13267 approach to collect data.</li> </ul>	<ul style="list-style-type: none"> <li><b>Continue to participate in the RMP CEC Workgroup and solicit agency participation for future studies.</b></li> <li>Finalize a White Paper for use by the RMP in selecting representative POTWs for participation in CEC studies, and develop a proposal for ongoing monitoring.</li> <li>Finalize Microplastic POTW Fact Sheet.</li> <li>Work with CASA and State Water Board on best approach for collecting PFAS data from POTWs. A draft Order from the State Water Board is expected in early 2020, with the final Order to come out no earlier than mid-February.</li> </ul>	<p>RMP CEC Workgroup:  <a href="http://www.sfei.org/rmp/ecwg#tab-1-4">http://www.sfei.org/rmp/ecwg#tab-1-4</a></p> <p>SFEI Microplastics Science Strategy:  <a href="http://www.sfei.org/documents/microplastic-monitoring-and-science-strategy-san-francisco-bay">http://www.sfei.org/documents/microplastic-monitoring-and-science-strategy-san-francisco-bay</a></p> <p>State Water Board PFAS page:  <a href="https://www.waterboards.ca.gov/pfas/">https://www.waterboards.ca.gov/pfas/</a></p>
<b>SSS WDR REISSUANCE</b>			
<ul style="list-style-type: none"> <li>The State Water Board plans to reissue the SSS WDR in 2020.</li> <li>They have sought out early stakeholder engagement through outreach to CASA and the Regional Associations, and NGOs.</li> <li>Goals for the update are: <ul style="list-style-type: none"> <li>Effective spill response</li> <li>Proactive planning and management</li> <li>Transparent reporting</li> <li>"Feasible and reasonable" regulations - good faith effort to comply - personnel, budget, equipment by governing board</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The State Water Board has identified the following as key issues to be included: <ul style="list-style-type: none"> <li>Reporting of PSL spills</li> <li>Improvement of CIWQS data quality</li> <li>Study of the impact of exfiltration</li> <li>Updated SSMPs that are more enforceable</li> <li>Potential incentives for well performing systems</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Comment on draft SSS WDR when available for public comment in early 2020.</li> <li>Discuss response to issues such as exfiltration via BACWA's Collection Systems Committee.</li> </ul>	<p>SWB SSS WDR page:  <a href="https://www.waterboards.ca.gov/water_issues/programs/sso/">https://www.waterboards.ca.gov/water_issues/programs/sso/</a></p> <p>CASA SSS WDR Redlines:  <a href="https://bacwa.org/document/sss-wdr-casa-redlines-8-29-18/">https://bacwa.org/document/sss-wdr-casa-redlines-8-29-18/</a></p> <p>CASA SSS WDR MRP Redlines:  <a href="https://bacwa.org/document/casa-sss-mrp-redlines-08-29-18/">https://bacwa.org/document/casa-sss-mrp-redlines-08-29-18/</a></p>

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<b>ELAP UPDATE</b>			
<ul style="list-style-type: none"> <li>• In August 2015, the State Water Board contracted with Southern California Coastal Water Research Project (SCCWRP) to establish and facilitate an Expert Review Panel to conduct an examination of ELAP, California's laboratory certification body.</li> <li>• The Expert Review Panel concluded that ELAP's current regulations are inadequate. The Panel recommended that ELAP adopt the laboratory standard established by The NELAC Institute (TNI) as the most viable option for California.</li> <li>• The Environmental Laboratory Technical Advisory Committee (ELTAC) was established to assist ELAP in technical matters that impact the laboratory community. The committee is composed of representatives from the laboratory community and data users, and have represented the POTW laboratory community during this process.</li> <li>• AB 1438 was signed into law on Sept 28, 2017 and became effective January 1, 2018. The bill sets the stage for ELAP to adopt TNI standards</li> </ul>	<ul style="list-style-type: none"> <li>• Draft Regulations that included adopting most of the TNI standard for laboratories were released for public comment on October 11, 2019.</li> <li>• Adopting TNI standards will pose a challenge since there are more than 1000 individual requirements in the full document. Initial costs may include <ul style="list-style-type: none"> <li>○ hiring staff to handle TNI-related paperwork;</li> <li>○ hiring consultants to setup the TNI documentation framework;</li> <li>○ purchasing Laboratory Information Management System (LIMS) software;</li> <li>○ purchasing documents and training material from TNI, etc.</li> </ul> </li> <li>• The new standards could be a particular burden on small municipal laboratories, which may choose to close if they cannot economically meet the new standards.</li> <li>• BACWA supports a dual track accreditation system. A group of laboratories have developed a California-specific QMS. While the majority of ELTAC members voted for a dual-track system, ELAP will not move forward with it unless the vote in favor is unanimous.</li> <li>• BACWA submitted comment on the draft regulations aimed at improving clarity and implementability if TNI is adopted. The comments also addressed the enforcement provisions and lack of due process therein.</li> </ul>	<ul style="list-style-type: none"> <li>• Attend January 17, 2020, stakeholder meeting with State Water Board members and staff to review in more depth the CA QMS alternative.</li> <li>• Work through BACWA's Laboratory Committee to explore ways to mitigate the burden of the new requirements, once adopted.</li> </ul>	<p>State Water Board's ELAP page: <a href="http://www.waterboards.ca.gov/drinking_water/certification/labs/elap_regulations.shtml">http://www.waterboards.ca.gov/drinking_water/certification/labs/elap_regulations.shtml</a></p> <p>BACWA Comment letter on Draft Regulations: <a href="https://bacwa.org/wp-content/uploads/2019/12/BACWA-comments-ELAP-Regs-12-20-19.pdf">https://bacwa.org/wp-content/uploads/2019/12/BACWA-comments-ELAP-Regs-12-20-19.pdf</a></p>

**PHASE-OUT OF BIOSOLIDS AS ALTERNATIVE DAILY COVER**

<ul style="list-style-type: none"> <li>• Regulatory drivers are indicating that biosolids used as alternative daily cover (ADC) or disposed in landfills will be phased out: <ul style="list-style-type: none"> <li>○ 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.</li> <li>○ SB 1383, adopted in September 2016 requires organics diversion: -50% by 2020 (relative to 2014) -75% by 2025 (relative to 2014)</li> <li>○ In 2020, CalRecycle will count green waste as disposal (per AB 1594), rather than diversion, even when used as ADC.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• While the regulations 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.</li> <li>• In the 2018 BACWA Biosolids survey, more agencies are reporting that they are developing plans for the phase-out than in the 2016 Survey.</li> <li>• The latest draft of proposed regulations were posted on June 17, 2019, with the next draft to be released the beginning of October with adoption on January 18, 2020. The regulation will become effective in 2022, and enforceable in 2024. Issues of concern are: <ul style="list-style-type: none"> <li>○ Diverted biosolids must be anaerobically digested and/or composted to qualify as landfill reduction; Language could be construed as disallowing other treatment technologies and management other than land application.</li> <li>○ Language that would prohibit local ordinances restricting biosolids land application have been softened.</li> <li>○ Procurement of renewable natural gas for renewable energy generation, use as a low carbon fuel, and pipeline injection has been included in the draft language. Regarding biosolids cake/products, procurement requirements are implied for biosolids compost only.</li> <li>○ Current regulatory language implies that incineration and surface land disposal sites are “landfills.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Consider ways to build a market for compost and other soil amendment products made from biosolids, using lessons learned in the Pacific Northwest and Midwest.</li> <li>• 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.</li> <li>• 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.</li> <li>• Participate in BAAQMD's Methane Expert Panel to educate their staff on how to address implementation of SB 1383 at the Air District level.</li> <li>• Following the release of the next draft regulation, participate in discussions/efforts with CASA and CalRecycle to modify the regulatory language that implies incineration and surface land disposal sites are landfills.</li> </ul>	<p>BACWA 2016 Biosolids Trends Survey Report: <a href="https://bacwa.org/wp-content/uploads/2017/08/BACWA-2016-Biosolids-survey-report.pdf">https://bacwa.org/wp-content/uploads/2017/08/BACWA-2016-Biosolids-survey-report.pdf</a></p> <p>2018 BACWA Biosolids Survey: <a href="https://www.surveymonkey.com/r/7Q3PDY9">https://www.surveymonkey.com/r/7Q3PDY9</a></p> <p>CASA White Paper on Biosolids Use in Landfills: <a href="https://bacwa.org/wp-content/uploads/2017/01/1-11-17-Sustainability-for-biosolids-use-at-landfills.pdf">https://bacwa.org/wp-content/uploads/2017/01/1-11-17-Sustainability-for-biosolids-use-at-landfills.pdf</a></p> <p>BABC website: <a href="http://www.bayareabiosolids.com/">http://www.bayareabiosolids.com/</a></p> <p>CASA Comments on proposed SB 1383 Implementation Regulation: <a href="https://bacwa.org/wp-content/uploads/2019/09/7-17-19-CASA-Comments-SB-1383-Regs3.pdf">https://bacwa.org/wp-content/uploads/2019/09/7-17-19-CASA-Comments-SB-1383-Regs3.pdf</a></p>
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Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>CLIMATE CHANGE MITIGATION</b>			
<ul style="list-style-type: none"> <li>• 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: <ul style="list-style-type: none"> <li>○ Short-lived climate pollutants (i.e., methane)</li> <li>○ Carbon sequestration on Natural and Working Lands</li> <li>○ Largest emitters (transportation, electricity, and industrial sectors)</li> </ul> </li> <li>• SB 1383 (Short-Lived Climate Pollutant Reduction) calls for: <ul style="list-style-type: none"> <li>○ 40% methane reduction by 2030</li> <li>○ 75% diversion of organic waste from landfills by 2025</li> <li>○ Policy and regulatory development encouraging production/use of biogas</li> </ul> </li> </ul> <p>BAAQMD developed a Clean Air Plan that requires GHG emissions reduction on track with CARB's 2030 and 2050 targets. BAAQMD has proposed the development of Regulation 13 (climate pollutants) targeting GHG emission reductions.</p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Many POTWs are exploring energy generation, but BAAQMD TAC regulations could make such programs more difficult to implement. Direct injection of biogas to PG&amp;E's pipelines or use as a transportation fuel may be more efficient. However, 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.</li> <li>• 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 and BAAQMD Rule 11-18.</li> <li>• BAAQMD is developing a suite of Rules under Regulation 13 to control climate pollutants: <ul style="list-style-type: none"> <li>○ Rule 13-1 (significant methane releases) - Postponed indefinitely in favor of source specific rules.</li> <li>○ Rule 13-2 (organic material handling) – Tentative adoption March/April 2020.</li> <li>○ Rule 13-3 (composting operations) – Tentative adoption June 2020.</li> <li>○ Rule 13- 4 (anaerobic digestion and sewage treatment) – Effort begins in 2020; Adoption date TBD.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Work with CASA to look for opportunities for POTWs to help the State meet GHG reduction goals. CASA is helping SWRCB collect information on excess digester capacity at POTWs.</li> <li>• Look for opportunities to inform BAAQMD on the opportunities and challenges for climate change mitigation by Bay Area POTWs.</li> <li>• Work with PG&amp;E and BAAQMD to explore options for POTWs to inject biogas into PG&amp;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.</li> <li>• 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.</li> </ul>	<p>Climate Change Scoping Plan:  <a href="https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf">https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf</a></p> <p>CARB Short Lived Climate Pollutant Reduction Strategy:  <a href="https://www.arb.ca.gov/cc/shortlived/meetings/03142017/final_slcp_report.pdf">https://www.arb.ca.gov/cc/shortlived/meetings/03142017/final_slcp_report.pdf</a></p> <p>SB 1383:  <a href="http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb_1351-1400/sb_1383_bill_20160919_chaptered.htm">http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb_1351-1400/sb_1383_bill_20160919_chaptered.htm</a></p> <p>BAAQMD Clean Air Plan:  <a href="http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans">http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans</a></p> <p>BAAQMD Regulation 13  <a href="http://www.baaqmd.gov/rules-and-compliance/rules/regulation-13-climate-pollutants">http://www.baaqmd.gov/rules-and-compliance/rules/regulation-13-climate-pollutants</a></p> <p>BACWA Comments on Regulation 13:  <a href="https://bacwa.org/wp-content/uploads/2019/07/BACWA-AIR_FINAL_Comment-Letter_Regulation13_Rules_24_071219.pdf">https://bacwa.org/wp-content/uploads/2019/07/BACWA-AIR_FINAL_Comment-Letter_Regulation13_Rules_24_071219.pdf</a></p>

Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>CLIMATE CHANGE ADAPTATION</b>			
<ul style="list-style-type: none"> <li>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.</li> <li>The Regional Water Board identified Climate Change and Wetland Policy Update as the highest priority Basin Planning project in their 2018 Triennial Review.</li> <li>In April 2019, Governor Gavin 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.</li> </ul>	<ul style="list-style-type: none"> <li>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. They plan to use this information to determine the need for funding assistance or permit requirements for climate change planning.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to coordinate with State Water Board on the status of their data request on climate change planning, so we can provide the information they request as effectively as possible.</li> <li>Continue to work with Regional Water Board to look for regulatory solutions to encourage wetlands projects for shoreline resiliency.</li> <li>BACWA to review Governor's Climate Resilience initiative, released in 2020.</li> </ul>	<p>State Water Board 2017 Climate Change Resolution:  <a href="https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0012.pdf">https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0012.pdf</a></p> <p>Regional Water board Wetlands Policy Page:  <a href="https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/climate_change/wetland_policies.html">https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/climate_change/wetland_policies.html</a></p> <p>BACWA Comments on Wetlands Policy:  <a href="https://bacwa.org/wp-content/uploads/2018/09/BACWA-comments-Wetland-Policy-9-14-18.pdf">https://bacwa.org/wp-content/uploads/2018/09/BACWA-comments-Wetland-Policy-9-14-18.pdf</a></p> <p>Governor's Draft Water Resilience Portfolio:  <a href="http://waterresilience.ca.gov/">http://waterresilience.ca.gov/</a></p> <p>BACWA Comments on Resilience Portfolio:  <a href="https://bacwa.org/wp-content/uploads/2019/10/BACWA-Water-Resilience-Portfolio-10-01-19.pdf">https://bacwa.org/wp-content/uploads/2019/10/BACWA-Water-Resilience-Portfolio-10-01-19.pdf</a></p>

### TOXIC AIR CONTAMINANTS - BAAQMD RULE 11-18 AND AB 617

<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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 HRSA's, BAAQMD will determine each facility's prioritization score (PS). BAAQMD will conduct Health Risk Assessments (HRAs) for all facilities with a cancer PS&gt;10 or non-cancer PS&gt;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).</li> <li>• AB 617 (Community Air Protection Program) – requires CARB to harmonize community air monitoring, reporting, &amp; local emissions reduction programs for CAPs and TACs (and GHGs). Oakland and Richmond. POTWs within these communities may have to accelerate implementation of risk reduction measures.</li> </ul>	<ul style="list-style-type: none"> <li>• BACWA developed a White Paper on the BAAQMD Rule to describe its potential impacts on the POTW community.</li> <li>• 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.</li> <li>• 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. <b>Phase 2 begins Jan 1, 2020</b> with data collection and verification, followed by the development of HRAs for facilities with a cancer PS&gt;10 or non-cancer PS&gt;1.0. Implementation of the Rule for Phase 2 facilities will be spread out over two years depending on prioritization score.</li> <li>• 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.</li> <li>• Best Available Retrofit Control Technology (BARCT) Implementation Schedule for industrial Cap-and-Trade facilities was adopted by BAAQMD's Board of Directors at a public hearing on December 19, 2018.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Priority: Agencies should use the tool developed by the AIR Committee's Emissions Inventory Subcommittee to address emission contributions from influent flows, which will be used to update emissions inventory values.</b></li> <li>• <b>Respond to BAAQMD data request in early 2020. There will be a 60-day turn-around to comply with the data request.</b></li> <li>• 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 &gt;5 MGD and covered (primary) POTWs &gt;10 MGD must monitor and report all compounds listed under AB 2588. The language has been temporarily removed, giving the wastewater sector time to generate a short-list of relevant compounds and perform a pooled emissions estimating effort to update outdated default emission factors. CASA is facilitating development of a work group to pursue this effort. Results could inform Rule 11-18 HRA's.</li> </ul>	<p>BAAQMD Rule 11-18 page:  <a href="http://www.baaqmd.gov/rules-and-compliance/rule-development/rules-under-development/regulation-11-rule-18">http://www.baaqmd.gov/rules-and-compliance/rule-development/rules-under-development/regulation-11-rule-18</a></p> <p>Rule 11-18 Process Flowchart:  <a href="https://bacwa.org/document/baaqmd-11-18-process-flowchart-08-17-17/">https://bacwa.org/document/baaqmd-11-18-process-flowchart-08-17-17/</a></p> <p>BACWA White Paper:  <a href="https://bacwa.org/wp-content/uploads/2017/01/11-18-White-Paper_final-2.pdf">https://bacwa.org/wp-content/uploads/2017/01/11-18-White-Paper_final-2.pdf</a></p> <p>BAAQMD page on AB 617:  <a href="http://www.baaqmd.gov/rules-and-compliance/rule-development/barct-implementation-schedule">http://www.baaqmd.gov/rules-and-compliance/rule-development/barct-implementation-schedule</a></p>
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Background Highlights	Challenges and Recent Updates	Next Steps for BACWA	Links/Resources
<b>RECYCLED WATER GENERAL ORDER</b>			
<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The Amendments were adopted in December 2018.</li> </ul>	<ul style="list-style-type: none"> <li>• Key issues in the Recycled Water Policy Amendments are: <ul style="list-style-type: none"> <li>○ Introduces goal to increase recycled water where wastewater is otherwise discharged to ocean, bays, and estuaries.</li> <li>○ Terminates Region 2 96-011 Recycled Water General Order three year after Policy Amendment adoption.</li> <li>○ Adds to the procedural burdens in obtaining Wastewater Change Petition.</li> <li>○ Removes requirement for priority pollutant monitoring.</li> </ul> </li> <li>• SF Regional Water Board has decided against transitioning all 96-011 permittees to the State General Order in a single regulatory action. Instead, it will be done in two phases, the first for agencies with Engineering Reports that predate Jan 1, 2001, and the second will be for agencies with Engineering Reports after that date.</li> <li>• To cover recycled water production. However, the Regional Water Board will make the regulatory connections in the NOA, including the following: <ul style="list-style-type: none"> <li>○ Title 22 Engineering Report and Report of Waste Discharge references, and include the requirement of operating in accordance with the information provided in these documents;</li> <li>○ Section in the Notice that lists the associated NPDES permits where applicable; and</li> <li>○ Monitoring requirements required to determine compliance with Title 22.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Continue to work with Regional Water Board on a strategy for transitioning 96-011 permittees to the State General Order and ensure that coverage is not interrupted.</li> <li>• <b>For agencies with Engineering reports that predate 2001, update reports to reflect the most recent guidelines.</b></li> <li>• <b>For agencies with Engineering reports 2001 or later, make sure Regional Water Board has electronic files of documents. Prepare to transition to State General Order by April 8, 2020.</b></li> </ul>	<p>2016 State Recycled Water General Order: <a href="http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2016/wgo2016_0068_dw.pdf">http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2016/wgo2016_0068_dw.pdf</a></p> <p>State Recycled Water Policy Amendment Page: <a href="https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/index.html#amendment">https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/index.html#amendment</a></p> <p>BACWA comments on Recycled Water Policy Amendments: <a href="https://bacwa.org/wp-content/uploads/2018/06/BACWA-RW-Policy-comments-6-26-18.pdf">https://bacwa.org/wp-content/uploads/2018/06/BACWA-RW-Policy-comments-6-26-18.pdf</a></p> <p>State Water Board 2001 Engineering Report Guidelines: <a href="https://bacwa.org/wp-content/uploads/2019/09/Engineering-Report-Preparation-Guidelines.pdf">https://bacwa.org/wp-content/uploads/2019/09/Engineering-Report-Preparation-Guidelines.pdf</a></p>

“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
NACWA	National Association of Clean Water Agencies
NELAC	National Environmental Laboratory Accreditation Conference
PCB	Polychlorinated Biphenyl
POTW	Publically Owned Treatment Works
PS	Prioritization Score
QMS	Quality Management System
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

## ITEM NO. RA8 NUTRIENTS GROUP ANNUAL REPORT

### **Recommendation**

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

### **Background**

While the loads of nutrients such as nitrogen and phosphorus to San Francisco Bay are higher than other estuaries, the Bay has historically been very resilient, and negative impacts of nutrient enrichment such as eutrophication have not occurred. Over the last decade, concerning trends caused the scientific and regulatory community to question whether the Bay's resilience is weakening. Bay Area wastewater agencies, through the Bay Area Clean Water Agencies (BACWA), have participated in a positive collaboration with a wide variety of stakeholders to implement a Nutrient Management Strategy that focuses on conducting scientific research and modeling to determine the effects of nutrients on the Bay ecosystem and protective levels of nutrient loading going forward.

BACWA worked closely with staff of the San Francisco Bay Regional Water Quality Control Board (Water Board) to negotiate a second Watershed Permit for nutrients. The permit went into effect on July 1, 2019 and includes the following key elements:

- Influent and effluent monitoring and continued annual regional reporting.
- Increased funding for scientific research on the fate and effects of nutrients in the Bay.
- A regional assessment of the feasibility and cost for reducing nutrients through multi-benefit nature-based solutions, including wetlands and horizontal levees.
- A regional assessment of nutrient reductions that will be achieved through water recycling.
- Establishment of a baseline nutrient load based on current nitrogen discharges over the dry season.
- Inclusion of load targets for 2024 that may be used as effluent limits if supported by scientific research.
- Recognition of agencies implementing early action projects that will reduce nutrient loads during this permit term, which includes Oro Loma and Hayward.

### **Discussion**

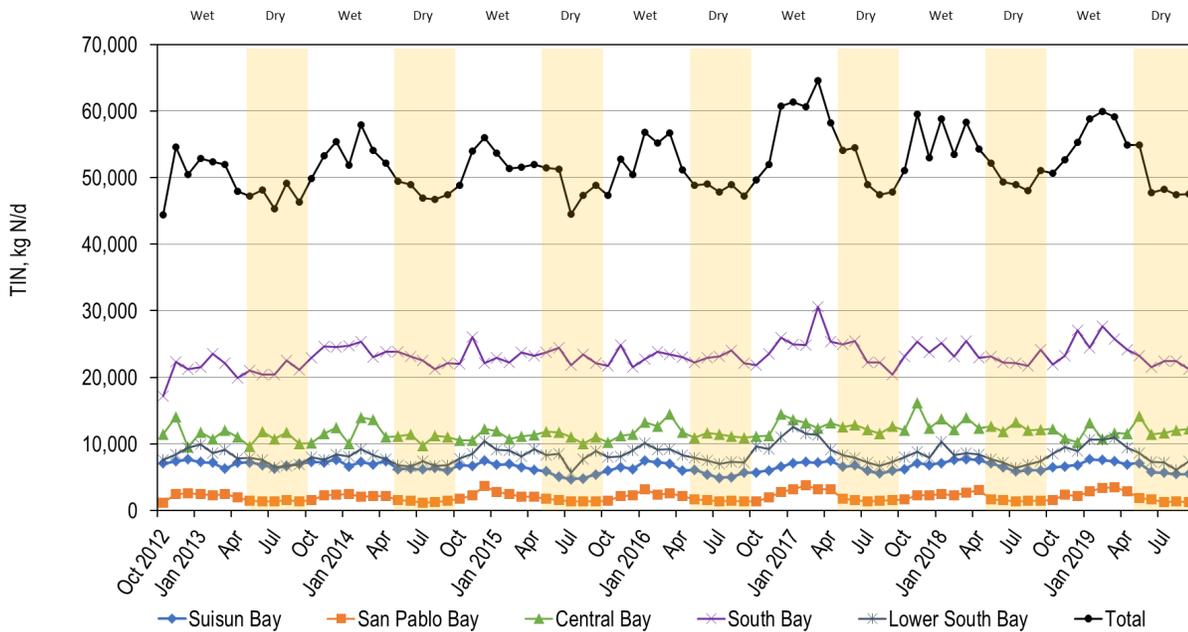
As it has every year since 2014, on February 1, 2020, BACWA submitted its Group Annual Report under the Nutrients Watershed Permit. The Report summarizes the nitrogen and phosphorus concentrations and loads from the thirty-seven wastewater treatment plants that discharge to San Francisco Bay. While EBDA's Member Agencies are required to periodically monitor for nutrients, the data contained in this report is only for the combined effluent discharged through EBDA's common outfall.

The full report can be found at the following link:

[https://bacwa.org/wp-content/uploads/2020/02/Group-Annual-Report-2020\\_FINAL.pdf](https://bacwa.org/wp-content/uploads/2020/02/Group-Annual-Report-2020_FINAL.pdf)

The table and graph below summarize dry season average daily discharges by subembayment for Total Inorganic Nitrogen, or TIN (in kg N/day) and give an indication of current trends. EBDA discharges into the South Bay.

Subembayment	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Trend <sup>(a,b)</sup>
Suisun Bay	6,810	6,200	5,160	5,410	6,160	6,300	5,890	None
San Pablo Bay	1,410	1,390	1,460	1,500	1,510	1,490	1,480	Up (1.2%/yr)
Central Bay	10,800	10,900	11,100	11,200	12,300	12,400	12,300	Up (2.7%/yr)
South Bay	21,100	22,600	23,100	22,900	23,100	22,700	22,200	None
Lower South Bay	7,130	6,850	7,840	7,390	7,480	7,110	7,320	None
<b>Total</b>	<b>47,200</b>	<b>47,900</b>	<b>48,700</b>	<b>48,400</b>	<b>50,600</b>	<b>49,900</b>	<b>49,200</b>	<b>Up (0.9%/yr)</b>



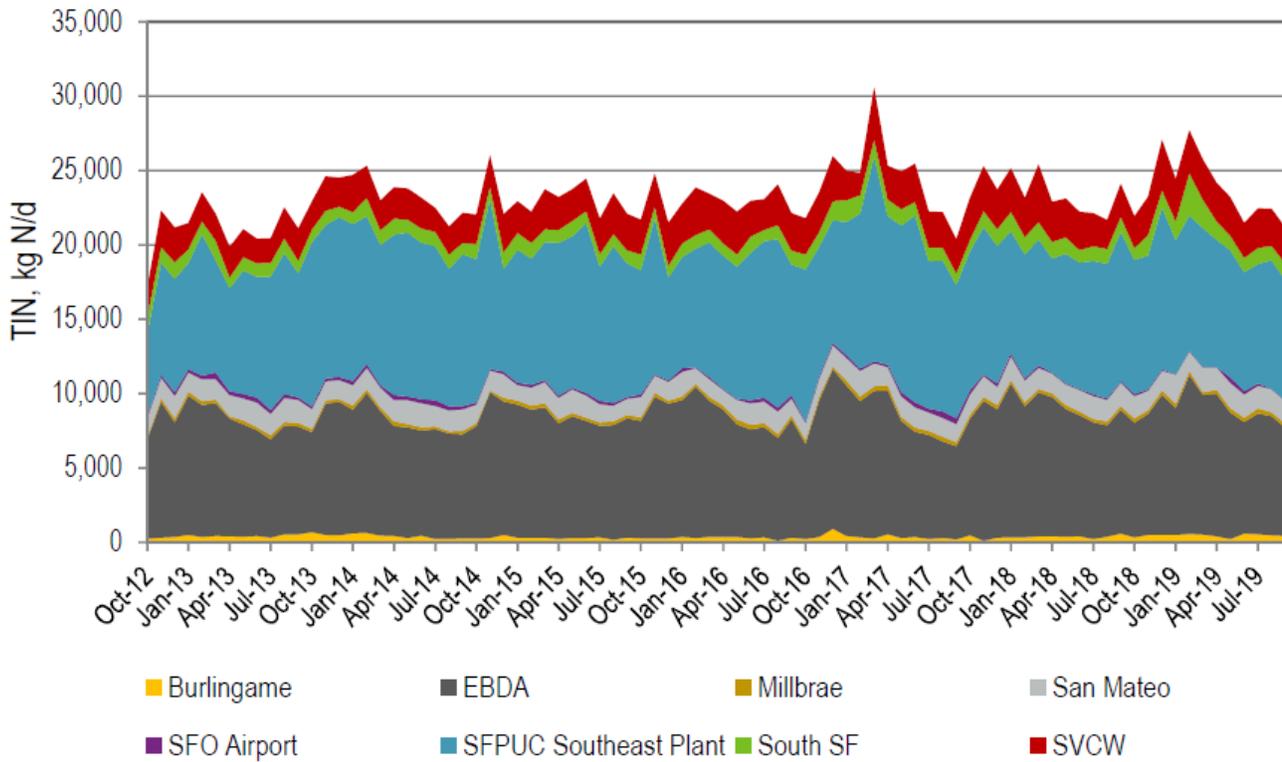
While the table indicates slight increases in TIN loading in several subembayments based on linear regression, as can be seen in the graph, the results are highly variable and trends are almost indiscernible. The report notes,

“There appears to be a Baywide upward dry and wet season trend in TIN loads. However, the last three years of data have been relatively stable, with a decrease in TIN loads in 2018/2019. Subembayments that previously showed a statistically significant increase (e.g., San Pablo Bay South Bay) now show no significant trend. Central Bay is the only subembayment that shows a trend based on the least squares method, and the Baywide upward trend averages less than a 1% increase in load per year.”

BACWA is currently evaluating whether more robust statistical methods should be used in next year’s report to establish trends. The fact that dry season loads trends have not been more significantly upwards is a bit surprising given that nitrogen loads are expected to

increase with population, which has been growing. The consultant did note in EBDA's individual appendix that for our effluent "Based on the average monthly values table, there appears to be a slight upward dry season trend for ammonia, TIN, and total phosphorus loads." With the Oro Loma's Nutrient Optimization Project coming online this year, EBDA's nitrogen loading is expected to decrease.

Compliance with the next Watershed Permit will likely be based on TIN by subembayment, so EBDA's discharge will be pooled with other South Bay dischargers, including San Francisco, to measure compliance against a target. The graph below shows EBDA's historic contribution of TIN to the South Bay relative to other dischargers.



## **ITEM NO. RA9 BRINE PROJECT OPPORTUNITY**

### **Recommendation**

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

### **Background**

In 2005, the Authority adopted a Policy for Disposal of Brine in the East Bay Dischargers Authority System. The Policy laid out conditions for acceptance of brine, a salty solution, into the system for discharge. Options for disposal of brine are limited, and the Authority's deep water outfall provides a unique sustainable option.

In the course of negotiating the recent Amended and Restated Joint Powers Agreement (JPA), the members incorporated a new section including principles for acceptance of brine. Those principles are being incorporated into an updated Brine Policy, which the MAC is currently reviewing and will be brought to the Commission in the coming months.

### **Discussion**

Authority staff has been approached by a company operating in the Authority's service area that is interested in discharging brine through the EBDA system. Staff, in consultation with the MAC, has begun discussions with the customer regarding regulatory strategy, commercial terms, and stakeholder outreach. At this Committee meeting, staff will brief the Committee on the opportunity and next steps.