Executive Board Meeting
AGENDA
Friday, January 19, 2024 9:00 AM - 12:00 PM (PDT)
EBMUD
375 11th Street (Small Training Room 2nd Floor)
Oakland CA 94607
To attend the meeting via Zoom or submit a comment please request access.

	Agenda Item		Time	Pages
	ROLL CALL, INTRODUCTIONS, AND HYBRID MEETING ETIQUETTE		**9:00 AM**	
	PUBLIC COMMENT	Guidelines	**9:05 AM**	
	CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER		**9:10 AM**	
	CONSENT CALENDAR		**9:15 AM**	
1	December 15, 2023 BACWA Executive Board meeting minutes			**3-6**
2	December 15, 2023 BACWA NST Special Executive Board meeting minutes			**7-8**
3	November 2023 Treasurer's Report			**9-19**
	APPROVALS AND AUTHORIZATIONS		**9:20 AM**	
4	Approval: NMS Payment #2 for FY24, $800K			**20-22**
5	Approval: Approve CASA Air Toxics Passthrough up to $100K for FY24			**23-24**
6	Member Updates			
	POLICY/STRATEGIC		**9:30 AM**	
7	Presentation: Civic Edge Update			
8	Discussion: POTW Bike tours	Central San "Go with the flow"		
9	Discussion: Shorelines and Waterways sponsorship activities			**25-31**
10	Informational: PFAS Fact Scheet Update			**32-38**
11	Informational: CASA Air Toxics Update	link to Program Management RFQ		
12	Informational: 2023 NPDES Compliance Letter			**39-45**
	BREAK		**10:30 AM**	
13	Discussion: Establishment of Climate Change Community of Practice			
14	Informational: Update on SCCWRP OAH Model Independent Review Panel	NWRI Project Page		
15	Informational: Agenda for meeting with BAAQMD			
16	Informational: Agenda for 2/29 meeting with BAAQMD EO			
17	Discussion: Draft agenda for 1/30 Joint meeting with R2			**46**
18	Presentation: Update on EPA office priorities			**47-51**
	OPERATIONAL		**11:30 AM**	
19	Discussion: Potential new PSB for contingency biosolids hauling			
20	Discussion: Launch discussion of annual meeting speakers			
21	Discussion: Arleen Navarret Award Nomination form			**52-53**
22	Informational: BACC Update			**54**
			11:50 PM	
23	Committee Reports			**55-65**
24	Executive Director Report			**66-67**
25	Board Calendar and Action Items			**68-69**
26	Regulatory Program Manager Report			
27	Other BACWA Representative Reports			
	a. RMP Technical Review Committee	Samantha Engelage, Alicia Chakrabarti		
	b. RMP Steering Committee	Karin North; Amanda Roa; Eric Dunlavey		
	c. Summit Partners	Lorien Fono; Amit Mutsuddy		
	d. ASC/SFEI	Lorien Fono; Amit Mutsuddy; Lori Schectel		
	e. Nutrient Governance Steering Committee	Eric Dunlavey; alternates: Lori Schectel		
	e.i Nutrient Planning Subgroup	Eric Dunlavey		
	f. SWRCB Nutrient SAG	Lorien Fono		
	h. BAIRWMP	Cheryl Munoz; Florence Wedington; Jackie Zipkin		
	i. NACWA Emerging Contaminants	Karin North; Melody LaBella		
	j. CASA State Legislative Committee	Lori Schectel		
	k. CASA Regulatory Workgroup	Lorien Fono; Mary Cousins		
	l. RMP Microplastics Liaison	Artem Dyachenko		

m. Bay Area Regional Reliability Project	Jackie Zipkin		
n. WateReuse Working Group	Cheryl Munoz		
o. San Francisco Estuary Partnership	Lorien Fono; Jackie Zipkin		
p. CPSC Policy Education Advisory Committee	Colleen Henry		
q. California Ocean Protection Council	Lorien Fono		
r. Countywide Water Reuse Master Plan	Karin North, Pedro Hernandez		
s. CHARG - Coastal Hazards Adaptation Resiliency Group	Jackie Zipkin		
t. California Water Quality Monitoring Council	Lorien Fono		
28 **SUGGESTIONS FOR FUTURE AGENDA ITEMS**		**11:59 PM**	
NEXT MEETING			
The next meeting of the Board is scheduled for February 16, 2024 at EBMUD, Orinda Watershed HQ			
ADJOURNMENT		**12:00 PM**	

Executive Board Meeting Minutes

Friday December 15, 2023

ROLL CALL AND INTRODUCTIONS

Executive Board Representatives: Amy Chastain (San Francisco Public Utilities Commission); Eric Dunlavey (City of San Jose); Jackie Zipkin (East Bay Dischargers Authority); Lori Schectel (Central Contra Costa Sanitary District); Amit Mutsuddy (East Bay Municipal Utility District).

Other Attendees and Guests:

Name	Agency/Company
Amanda Roa	CCCSD
Andrew Damron	NapaSan
Blake Brown	CCCSD
Dan Lopez	Black & Veatch
Dave Senn	SFEI
David Donovan	City of Hayward
Don Gray	EBMUD
Jennifer Dyment	BACWA
Jordan Damerel	Fairfield-Suisun Sewer District
Joe Neugebauer	West County Wastewater District
Joel Prather	SFPUC
Linda Sawyer	Brown and Caldwell
Lorien Fono	BACWA
Mallika Ramanathan	HDR
Mary Cousins	BACWA
Mike Falk	HDR
Michael Connor	Consultant
Mira Chokshi	Climate Adaptive Systems
Sarah Scheidt	SFO
Talyon Sortor	Fairfield-Suisun Sewer District
Tim Lewis	City of San Jose
Tom Hall	EOA

Amit called the meeting to order at 9:04 am.

Agenda Item

ROLL CALL, INTRODUCTIONS, AND HYBRID MEETING ETIQUETTE

PUBLIC COMMENT Guidelines

CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER

CONSENT CALENDAR

1 November 17, 2023 BACWA Executive Board meeting minutes

2 November 17, 2023 BACWA NST Special Executive Board meeting minutes

3 October 2023 Treasurer's Report

Consent Calendar items 1 thru 3: A motion to approve was made by Eric Dunlavey (City of San Jose) and seconded by Amy Chastain (SFPUC). Lori Schectel (Central Contra Costa Sanitary District) voted yes on Item 3 and abstained from Items 1 &2. Jackie Zipkin (EBDA) was not present. The motion was approved by the remaining board members.

APPROVALS AND AUTHORIZATIONS

None

POLICY/STRATEGIC

4 Presentation: California Product Stewardship Coalition (CPSC) update: - Doug Kobold, Executive Director of CPSC, gave a history of CPSC and background. He provided a summary of Extended Producer Responsibility efforts during the 2023 legislative session, highlighting successes and failures. He also provided information about key issues where CPSC continues to conduct advocacy, including plastics, textiles, gas cylinders, solar panels, and marine flares. General questions & discussion followed the presentation.

5 Informational: BACWA Regulatory Program Manager shared that the PFAS Fact Sheet is a work in progress. A draft will be provided at the January 2024 meeting.

6 Informational: CASA Air Toxics Update - BACWA ED is working out a process with CASA to front the funds in FY 2024 and recover the funds from participating BACWA members in FY 2025. BACWA ED is waiting for information from CASA and would like to bring a resolution to the board in January 2024 for approval.

Action Item: BACWA ED will bring a resolution, or draft, to the board at the January 2024 meeting.

7 Discussion: AQPI - BACWA ED shared summary of AQPI presentation from November meeting. The next AQPI meeting is February 5, 2024 and members are encouraged to sign up for meeting information and participate.

8 Informational: Updates to SWB Enforcement Policy - BACWA RPM shared a slide with updates on enforcement policy.

9 Discussion: Next steps on wastewater communications - BACWA ED summarized several different communication initiatives including plant tours for NGOs, media pitches, and op-eds. Next steps include integration with messaging related the value of wastewater agencies and a website landing page for communication efforts.

10 Informational: Notes from December 6, 2023 PSC meeting #81 - Attendees suggested corrections to meeting notes.

Action Items: BACWA ED to update to the meeting notes.

BREAK 10:35-10:48

11 Informational: Agenda for 12/18 meeting with BAAQMD - BACWA ED shared that the December meeting has been postponed and they are looking to reschedule the meeting. Meeting attendees discussed ways to engage BAAQMD.

Action Item: BACWA ED will reschedule the meeting.

12 Informational: Workforce development update - BACWA ED shared a summary of BACWWE meeting on December 5, 2023. The agenda is in the packet. Jordan Damerel also shared summary of meeting and ideas going forward, including coordination with Baywork.

13 Informational: 2023 GAR preview - Mike Falk (HDR) shared a preview of the draft Group Annual Report due February 1, 2024 per the 2019 Nutrient Watershed Permit. The report will summarize nutrient load data from the period Oct 2022 – Sept 2023 and compare to previous years.

14 Discussion: NMS Review presentation - Mike Connor gave a summary of eight SFEI documents that he reviewed in 2023 along with short management annual updates, BACWA recommendations and support for an adaptive management approach. A general discussion and questions followed.

15 Discussion: NMS priorities for next Fiscal Year - Dave Senn (SFEI) gave a brief summary of the planning process for the 2024-25 science plan, which will be proposed at the February NMS steering committee meeting for subsequent adoption at the May meeting. A general discussion and questions followed.

Action Item: BACWA ED to share wastewater communications write up

MEETING ADJOURNED 12:28

Remaining items deferred to January 19, 2024 meeting

OPERATIONAL

16 Discussion: Launch discussion of annual meeting speakers

17 Discussion: Arleen Navarret Award Nomination form

18 Informational: BACC Update

19 Committee Reports

20 Member highlights

21 Executive Director Report

22 Board Calendar and Action Items

23 Regulatory Program Manager Report

24 Other BACWA Representative Reports

a. RMP Technical Review Committee Samantha Engelage, Alicia Chakrabarti

b. RMP Steering Committee Karin North; Amanda Roa; Eric Dunlavey

c. Summit Partners Lorien Fono; Amit Mutsuddy

d. ASC/SFEI Lorien Fono; Amit Mutsuddy; Lori Schectel

e. Nutrient Governance Steering Committee Eric Dunlavey; alternates: Lori Schectel

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h. BAIRWMP Cheryl Munoz; Florence Wedington; Jackie Zipkin

i. NACWA Emerging Contaminants Karin North; Melody LaBella

j. CASA State Legislative Committee Lori Schectel

k. CASA Regulatory Workgroup Lorien Fono; Mary Cousins

l. RMP Microplastics Liaison Artem Dyachenko

m. Bay Area Regional Reliability Project Jackie Zipkin

n. WateReuse Working Group Cheryl Munoz

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p. CPSC Policy Education Advisory Committee Colleen Henry

q. California Ocean Protection Council Lorien Fono

r. Countywide Water Reuse Master Plan Karin North, Pedro Hernandez

s. CHARG - Coastal Hazards Adaptation Resiliency Group Jackie Zipkin

t. California Water Quality Monitoring Council Lorien Fono

25 SUGGESTIONS FOR FUTURE AGENDA ITEMS

NEXT MEETING The next meeting of the Board is scheduled for January 19, 2024 at EBMUD

Nutrient Strategy Team
December 15, 2023 Meeting Summary

ATTENDEES:

Executive Board Representatives: Amit Mutsuddy (EBMUD), Jackie Zipkin (East Bay Dischargers Authority, Lori Schectel (Central San), Amy Chastain (SFPUC), and Eric Dunlavey (San José),)

Other Attendees:

Name	Agency/Company
Lorien Fono, Mary Cousins	BACWA
Paul Ward	Black and Veatch
Linda Sawyer	Brown and Caldwell
Andre Gharagozian	Carollo
Blake Brown, Dan Frost, Amanda Cauble	CCCSD
Michael Connor	Consultant
Amanda Roa	Delta Diablo
Don Gray	EBMUD
Tom Hall	EOA
Talyon Sortor, Jordan Damerel	FSSD
Rion Merlo, Irene Chu	Hazen and Sawyer
Mallika Ramanathan, Mike Falk	HDR
Denise Conners	LWA
Samantha Engelage	Palo Alto
Tom Mumley	Regional Water Board
Tim Lewis	San José
Matt Fabry	San Mateo
Joel Prather, Nohemy Revilla	SFPUC
Melody Tovar	Sunnyvale
Teresa Herrera	SVCW
Armando Lopez, Tim Grillo	USD
Jennifer Harrington	Vallejo FWD

Amit Mutsuddy called the meeting to order at 1 pm and led introductions. The meeting was conducted in hybrid format, with participants joining virtually and in-person at SFPUC's headquarters in San Francisco. There was no public comment.

NUTRIENT WATERSHED PERMIT ADOPTION SCHEDULE

BACWA'S Executive Director provided an update on the anticipated schedule for adoption of the 3rd Nutrient Watershed Permit in 2024. The next regularly scheduled Executive Board meeting with Regional Water Board staff is January 30th, and the administrative draft will likely be released around the same time. Regional Water Board staff from the NPDES permit division will also join the January 19th Nutrient Strategy Team meetings. All meetings will be held in hybrid format (virtual + in-person option). The permit is scheduled for adoption at the May 8th Regional Water Board meeting.

PROPOSED PERMIT LANGUAGE FOR FACT SHEET

BACWA's Executive Director shared draft concepts for fact sheet language regarding the need for a 10-year compliance schedule. Members provided feedback, noting that wastewater agencies need time to avoid stranded assets, pilot emerging technologies, maintain customer affordability, and provide long

lead times for public messaging on potable reuse projects. A draft will be circulated soon for member review.

INTERIM LIMITS

BACWA has shared a table of proposed interim limits with members, and has asked members to provide notice as soon as possible if the proposed values are problematic. A few agencies may require short-term accommodation for biosolids and/or co-digestion projects. The interim limits would apply to individual agencies, with no Bay-wide limit.

KEY TENETS DOCUMENT and WATER BOARDS UPDATE

Before the meeting, BACWA circulated a 3rd Watershed Permit key tenets document provided by Regional Water Board staff. BACWA plans to solicit input from members on proposed edits, including edits to (1) note the need for adaptive management based on observed effects of nutrient loading on the Bay, and (2) consider compliance calculations during unusually wet weather or other unexpected changes to recycled water deliveries.

Tom Mumley joined the meeting to provide an overview of the Regional Water Board's plan for preparing the 3rd Watershed Permit. Regional Water Board staff are currently preparing draft permit language, including Fact Sheet language that synthesizes the results of recently completed model scenarios. Tom also shared the plan for crafting final effluent limits, which he expects will target at least a 40% Baywide load reduction for Total Inorganic Nitrogen (TIN) compared to the "current performance" baseline established in the 2019 Watershed Permit. NGOs may request larger load reductions, which could be prohibitively costly to implement within 10 years. Tom also noted that the "final" 10-year limits will not go into effect within the term of the 3rd Watershed Permit, and are likely to be adjusted when the 4th Watershed Permit is adopted around 2029.

Accommodating "early actors" is an important goal shared by Regional Water Board staff and BACWA; to make this accommodation, Regional Water Board staff will need information about the expected performance of proposed projects. Members discussed the need to differentiate between expected performance and the corresponding permit limits for "early actors," as those two values may not always be the same. After Tom left the meeting, members continue to discuss ways to incorporate this differential (i.e., expected performance vs. anticipated limits) within the permit.

Attendees requested that the Regional Water Board prepare a "Staff Report" or similar document to encapsulate concepts that may not be included within the permit itself.

NEXT STEPS

- Circulate to members a draft version of fact sheet language regarding the need for a 10-year compliance schedule.
- Based on feedback from members, prepare proposed edits to the Regional Water Board's key tenets document to add concepts related to adaptive management.
- Update proposed special study language to identify a plan to reach 60% TIN removal via multi-benefit projects.
- Continue to work with members to identify options for establishing final load limitations.

Amit Mutsuddy adjourned the meeting at 3 PM.

BACWA
BAY AREA
CLEAN WATER
AGENCIES

December 27, 2023

MEMO TO**:** Bay Area Clean Water Agencies Executive Board

MEMO FROM: Phoebe Grow, Treasurer, East Bay Municipal Utility District

SUBJECT: Fifth Month FY 2024 Treasurer's Report

As required by section eight of the Joint Powers Agreement establishing the Bay Area Clean Water Agencies (BACWA) and California Government Code Sections 6500 et seq., attached is the BACWA Treasurer's Report for the period covering **July 1, 2023 through November 30, 2023** (Five months of Fiscal Year 2024). This report covers expenditures, cash receipts, and cash transfers for the following BACWA funds:

- Bay Area Clean Water Agencies (BACWA),
- BACWA Legal Reserve Fund (Legal Rsrv),
- Water Quality Attainment Strategy (WQA CBC),
- Bay Area Biosolids Coalition (BABC),
- Bay Area Chemical Consortium (BACC),
- BACC Legal Reserve Fund (BACC Legal Rsrv),
- Water/Wastewater Operator Training (WOT),

Houck, Matt

From: Grow, Phoebe
Sent: Friday, December 29, 2023 9:28 AM
To: Houck, Matt
Subject: RE: November 2023 Treasurer's Report

Hi Matt – Report looks good. Thanks.

Happy holidays!

Phoebe Grow, P.E. (she/her) | **Principal Management Analyst** | 510.287.0205 | phoebe.grow@ebmud.com

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From: Houck, Matt <matt.houck@ebmud.com>
Sent: Wednesday, December 27, 2023 2:47 PM
To: Grow, Phoebe <phoebe.grow@ebmud.com>
Subject: November 2023 Treasurer's Report

Hi Phoebe,

Hope you had a nice Holiday!

Please approve BACWA – November 2023 Treasurer's Report for distribution.

Let me know if you have any questions.

Thanks,

Matt Houck
Accountant III
East Bay Municipal Utility District
375 11TH St, MS 402, Oakland, CA 94607
P 510-287-0238

Fund Balances

In FY24 BACWA has three operating funds (BACWA, Legal, and CBC) and three pass-through funds for which BACWA provides only contract administration services (WOT, BABC & BACC). As of October 31st, 2021, revenues are recognized when billed, not when payments are received.

BACWA Fund: This fund provides resources for BACWA staff, its committees, and other administrative needs. The ending fund balance on November 30, 2023, was $812,550 which is significantly higher than the target reserve of $366,899 which is intended to cover 3 months of normal operating expenses based on the BACWA FY24 budget. $538,915 of the ending fund balance is shown on the BACWA Fund & Investments Balance Report November 30, 2023, as encumbered to meet ongoing operating line-item expenses for BAPPG Committee Support, Legal services, IT services, Board meeting expenses, accounting services and BACWA staff support. This leaves an actual unencumbered reserve of negative $93,264 (i.e., actual fund balance of $273,635 less target reserves) as of November 30, 2023. Reserves will increase as agencies remit their FY24 BACWA dues payments.

CBC Fund: This fund provides the resources for completing special investigations as well as meeting regulatory requirements. The ending fund balance on November 30, 2023, was $2,961,670 which is higher than the target reserve of $1,000,000. $485,236 of the ending fund balance is encumbered to meet line-item expenses for completion of the Group Annual Report contract, completion of the NBS Study, Recycled Water Evaluation, and the PFAS Regional Study. This leaves an actual unencumbered reserve balance of $1,476,434 (i.e., actual fund balance of $2,476,434 less target reserves) as of November 30, 2023. As directed by the BACWA Executive Board, the CBC fund has diminished over time due to BACWA's ongoing funding of the NMS program to comply with the Nutrient Watershed Permit.

Legal Fund: This fund provides for needed legal services. The ending balance was $300,000 which is at the target reserve of $300,000.

Budget to Actual

The BACWA Annual Budget includes all expected revenues as well as budgeted expenses. Transfers are made from the BACWA Fund and/or the CBC Fund to balance the Annual Budget if expenses exceed revenues and vice versa. It is therefore important to achieve the anticipated revenues and not exceed the budgeted expenses on an annual basis to maintain the BACWA and CBC Fund balances at the levels projected in the 5 Year Plan.

Revenues as of November 30, 2023 (41% of the FY) are at 98%

Expenses as of November 30, 2023 (41% of the FY) are at 42%

FY 2023
BACWA BUDGET to ACTUAL

BACWA FY24 BUDGET	Line Item Description	FY 2024 Budget	Projected Revenue as of Nov 2023 Changes from budget in blue	Actual Nov 2023	Actual % of Budget Nov 2023	Variance	NOTES
REVENUES & FUNDING							
Dues	Principals' Contributions	$537,795	$537,795	$537,795	100%	$0	FY24: 2% increase 5 @ $107,559
	Associate & Affiliate Contributions	$190,078	$190,078	$190,578	100%	$500	FY24: 2% increase. 12 Assoc: $8876; 47 Affiliate: $1778; UC Berkeley $500
Fees	Clean Bay Collaborative	$675,000	$675,000	$673,500	100%	-$1,500	Same as FY23 Prin: $450,000; Assoc/Affil: $225,000
	Nutrient Surcharge	$1,400,000	$1,400,000	$1,400,751	100%	$751	See Nutrient Surcharge Spreadsheet
	Voluntary Nutrient Contributions			$0	0%	$0	
Other Receipts	AIR Non-Member	$7,361	$7,361	$7,361	100%	$0	2% increase (Santa Rosa)
	BAPPG Non-Members	$4,114	$4,114	$4,140	101%	$26	2% increase (Sta Rosa, Sac Reg'l, Vacaville) $1,380/each
	Other			$2,653		$2,653	BAWSCA Annual Membership
Fund Transfer	Special Program Admin Fees (WOT)	$1,000	$1,000	$0	0%	-$1,000	
	Special Program Admin Fees (BACC)	$38,250	$38,250	$0	0%	-$38,250	400 hours of AED support $96.30/hr
	Special Program Admin Fees (BABC)	$6,000	$6,000	$0	0%	-$6,000	ED, AED and RPM support
Interest Income	LAIF	$60,000	$60,000	$38,170	64%	-$21,830	BACWA, Legal, & CBC Funds invested in LAIF
	Higher Yield Investments						
	Total Revenue	**$2,919,598**		**$2,854,948**	**97.79%**	**-$64,650**	

BACWA FY24 BUDGET	Line Item Description	FY 2024 Budget	Projected Expense as of Nov 2023 Changes from budget in blue	Actual Nov 2023	Actual % of Budget Nov 2023	Variance	NOTES
EXPENSES							
Labor							
	Executive Director	$218,548	$218,548	$72,848	33%	-$145,700	7% (incl. 4.9% CPI SF Bay Metro Area Dec 2022)
	Assistant Executive Director	$92,024	$92,024	$36,236	39%	-$55,788	7% (incl. 4.9% CPI SF Bay Metro Area Dec 2022); $76.69/hour; Reflects 1200 hours
	BACC Administrator	$38,520	$38,520	$9,823	26%	-$28,697	400 hrs AED support at $96.30 per hr
	Regulatory Program Manager	$152,179	$152,179	$50,245	33%	-$101,934	7% (incl. 4.9% CPI SF Bay Metro Area Dec 2022); $112.72/hour, Reflects 1350 hours
	Total	**$501,271**	**$501,271**	**$169,152**	**34%**	**-$332,119**	
Administration							
	EBMUD Financial Services	$43,297	$43,297	$11,516	27%	-$31,781	FY24 no change
	Auditing Services	$5,561	$5,561	$0	0%	-$5,561	Finanical Auditors through EBMUD; per auditor rate schedule
	Administrative Expenses	$8,118	$8,118	$49	1%	-$8,070	FY24 no change
	Insurance	$9,351	$9,351	$8,169	87%	-$1,182	15% increase over FY23 (10-15% est. increase per Alliant)
	Total	**$66,327**	**$66,327**	**$19,733**	**30%**	**-$46,594**	
Meetings							
	EB Meetings	$2,760	$2,760	$1,383	50%	-$1,377	2% increase from FY23
	Annual Meeting	$14,369	$14,369	$0	0%	-$14,369	FY24 no change
	Pardee	$6,801	$6,801	$2,567	38%	-$4,234	2% increase from FY23
	Misc. Meetings	$7,500	$7,500	$5,168	69%	-$2,332	30% increase from FY23 to accommodate conferences
	Total	**$31,430**	**$31,430**	**$9,118**	**29%**	**-$22,312**	
Communication							
	Website Hosting	$728	$728	$0	0%	-$728	2% increase from FY23, Go Daddy website hosting and domain registration
	File Storage	$796	$796	$0	0%	-$796	2% increase from FY22, box.net
	Website Development/Maintenance	$1,592	$1,592	$0	0%	-$1,592	2% increase from FY22
	IT Support	$2,759	$2,759	$0	0%	-$2,759	2% increase from FY22
	BACWA Value of Water Communication	$40,000	$40,000	$11,105	28%	-$28,895	New line in FY24
	Other Commun	$1,857	$1,857	$160	9%	-$1,697	2% increase from FY23; MS Exchange, Survey Monkey, PollEv, Zoom, Netfile
	Total	**$47,732**	**$47,732**	**$11,265**	**24%**	**-$36,467**	

FY 2023
BACWA BUDGET to ACTUAL

EXPENSES							
Legal							
	Regulatory Support	$2,929	$2,929	$0	0%	-$2,929	2% increase from FY23, Downey Brand LLP
	Executive Board Support	$2,355	$2,355	$0	0%	-$2,355	2% increase from FY23, Day Carter & Murphy LLP
	Total	**$5,284**	**$5,284**	**$0**	**0%**	**-$5,284**	
Committees							
	AIR	$76,000	$76,000	$26,891	35%	-$49,109	$75k consulting support, $1k misc expenses. Carollo Engineers
	AIR Support for ACE	$20,000	$20,000	$0	0%	-$20,000	New in FY23
	BAPPG	$159,000	$159,000	$65,130	41%	-$93,870	17% increase from FY23. Includes CPSC @ $5,000, OWOW @ $10,000, NSAC @ $10,00 and Pest. Reg Spt. @ $71,500
	Biosolids Committee	$0	$0	$0		$0	
	Collections System	$56,000	$56,000	$0	0%	-$56,000	SSS WDR Support
	InfoShare Groups	$500	$500	$333	67%	-$167	$500 decrease from FY23
	Laboratory Committee	$4,050	$4,050	$1,820	45%	-$2,230	$2350 less than FY23, TNI Training
	Permits Committee	$500	$500	$0	0%	-$500	$500 decrease from FY23
	Pretreatment	$500	$500	$0	0%	-$500	$500 decrease from FY23
	Recycled Water Committee	$10,000	$10,000	$0	0%	-$10,000	Carry forward from FY23
	Misc Committee Support	$45,000	$45,000	$3,740	8%	-$41,260	Same as FY23
	Manager's Roundtable	$1,000	$1,000	$254	25%	-$746	Same as FY23
	Total	**$372,550**	**$372,550**	**$98,170**	**26%**	**-$274,380**	
Collaboratives							
	Collaboratives						
	State of the Estuary (SFEP-biennial)	$0	$0	$0	0%	$0	Bienniel in Odd Fiscal Years. (Paid bienniely in odd years for even year conference)
	Arleen Navarret Award	$2,500	$2,500	$0	0%	-$2,500	Bienniel in Even Fiscal Years. FY24 Award likely to be paid in FY24
	BayCAN	$5,000	$5,000	$0	0%	-$5,000	
	Bay Area One Water Network	$5,000	$5,000	$0	0%	-$5,000	Same as FY23
	Bruce Wolf Scholarship	$4,000	$4,000	$0	0%	-$4,000	FY22, FY23, FY24, FY25 FY26
	Passthrough for CASA for air toxics	$425,000	$425,000	$0	100%	-$425,000	Estimate - new line in FY24
	Misc	$1,500	$1,500	$0	0%	-$1,500	NBWA ($1,500)
	Total	**$443,000**	**$443,000**	**$0**	**0%**	**-$443,000**	
Other							
	Unbudgeted Items						
	Other	$0	$0	$0	0%	$0	
		$0		**$0**	**0%**	**$0**	
Tech Support							
	Technical Support						
	Nutrients						
	Watershed	$1,800,000	$1,800,000	$1,000,000	56%	-$800,000	Advance funding for 2nd Watershed Permit Sciece Studies; Final $ TBD
	NMS Voluntary Contributions	$0	$0	$0	0%	$0	
	Additional work under permit	$100,000	$100,000	$18,281	18%	-$81,719	Includes HDR PO for $225k spread out over FY20-24.
	Regional Study on Nature based systems	$80,000	$80,000	$95,464	119%	$15,464	SFEI $500K, expires 06/30/2023: Possible funds left over from FY23 to be spent on additional work
	Regional Recycling Evaluation	$0	$0	$17,493	0%	$17,493	HDR $154K, expires 12/31/2023
	Nutrient Workshop(s)	$0	$0	$0	0%	$0	Pilot Studies/Plant Review/InDecative Technologies
	NMS Reviewer	$50,000	$50,000	$9,010	18%	-$40,990	M. Connor Contract
	General Tech Support	$100,000	$100,000	$2,634	3%	-$97,366	AB617 emissions factors, PFAS, other nutrient support
	CEC Investigations	$60,000	$60,000	$86,529	144%	$26,529	PFAS Study Phase II
	Risk Reduction	$12,500	$12,500	$0	0%	-$12,500	APA FSS completed $12,500 contract in FY20, CIEA will complete $12,500 contract in FY23
	Total	**$2,202,500**	**$2,202,500**	**$1,229,410**	**56%**	**-$973,090**	
	TOTAL EXPENSES	**$3,670,094**	**$3,670,094**	**$1,536,847**	**41.87%**	**-$2,133,248**	
	PROJECTED EXPENSE DEVIATION FROM BUDGET		**$0**				
	NET INCOME BEFORE TRANSFERS	**-$750,496**					
	TRANSFERS FROM RESERVES	**$750,496**					aligns with strategy of drawing down reserves to lessen impact of Nutrient Surcharge
	NET INCOME AFTER TRANSFERS	**$0**					
	TOTAL OPERATING BUDGET	**$1,467,594**					

FY 2023
BACWA BUDGET to ACTUAL

EXPENSES							
	OPERATING RESERVE	**$366,899**					

BACWA Fund Report as of November 30, 2023

BACWA FUND BALANCES - DATA PROVIDED BY ACCOUNTING DEPT.

DEPTID	DESCRIPTION	FISCAL YEAR BEGINNING FUND BALANCE	TOTAL BILLED REVENUE TO-DATE	TOTAL DISBURSEMENTS TO-DATE	MONTH-ENDING FUND BALANCE	OUTSTANDING ENCUMBRANCES	MONTH-END UNOBLIGATED FUND BALANCE
600	BACWA	347,671	750,668	285,789	812,550	538,915	273,635
604	LEGAL RSRV	300,000	-	-	300,000	-	300,000
605	CBC	2,097,905	2,104,280	1,240,515	2,961,670	485,236	2,476,434
	SUBTOTAL 1	*2,745,576*	*2,854,948*	*1,526,304*	*4,074,220*	*1,024,151*	*3,050,069*
602	BABC	*190,244*	175,600	43,342	322,502	*82,716*	239,786
606	BACC	*31,025*	*837*	*39,822*	(7,960)	*28,697*	(36,657)
607	BACC LEGAL RSRV	*60,000*	*30,000*	-	90,000	-	90,000
610	WOT	*253,257*	-	*(10,000)*	263,257	-	263,257
	SUBTOTAL 2	*534,526*	*206,437*	*73,164*	*667,799*	*111,413*	*556,386*
	GRAND TOTAL	**3,280,102**	**3,061,385**	**1,599,468**	**4,742,019**	**1,135,564**	**3,606,455**

Top Chart: Reflects CASH on the Books — Includes Encumbrances
Bottom Chart: Reflects CASH in the Bank — Includes Payables (bills received but not paid)
Allocations: Priority for non-liquid investments

BACWA INVESTMENTS BALANCES - DATA PROVIDED BY TREASURY DEPT.

DEPTID	DESCRIPTION	FISCAL YEAR BEGINNING FUND BALANCE	TOTAL BILLED REVENUE TO-DATE	TOTAL DISBURSEMENTS TO-DATE	MONTH-ENDING FUND BALANCE	RECONCILIATION TO FINANCIAL STATEMENTS A/R	RECONCILIATION TO FINANCIAL STATEMENTS A/P	MONTH-END RECONCILED FUND BALANCE	UNINVESTED CASH BALANCES	LAIF INVESTMENTS AMOUNTS	LAIF INVESTMENTS PERCENTAGE	ALTERNATIVE INVESTMENTS AMOUNTS	ALTERNATIVE INVESTMENTS IDENTIFIERS	ALTERNATIVE INVESTMENT INSTRUCTIONS AND NOTES
600	BACWA	347,671	750,668	285,789	812,550	(328,527)	16,656	500,679	-	500,679	21%	-		priority # 3 for allocation
604	LEGAL RSRV	300,000	-	-	300,000	-	-	300,000	-	300,000	13%	-		priority # 1 for allocation
605	CBC	2,097,905	2,104,280	1,240,515	2,961,670	(870,472)	35,774	2,126,972	676,449	1,450,523	62%	-		priority # 4 for allocation
	SUBTOTAL 1	2,745,576	2,854,948	1,526,304	4,074,220	(1,198,999)	52,430	2,927,651	676,449	2,251,202	96%	-		
602	BABC	190,244	175,600	43,342	322,502	(75,700)	-	246,802	246,802	-	0%	-		pass-through funds, no allocation
606	BACC	31,025	837	39,822	(7,960)	-	-	(7,960)	(7,960)	-	0%	-		
607	BACC LEGAL RSRV	60,000	30,000	-	90,000	-	-	90,000	-	90,000	4%	-		priority # 2 for allocation
610	WOT	253,257	-	(10,000)	263,257	-	-	263,257	263,257	-	0%	-		pass-through funds, no allocation
	SUBTOTAL 2	534,526	206,437	73,164	667,799	(75,700)	-	592,099	502,099	90,000	4%	-		
	GRAND TOTAL	**3,280,102**	**3,061,385**	**1,599,468**	**4,742,019**	**(1,274,699)**	**52,430**	**3,519,750**	**1,178,548**	**2,341,202**	**100%**			
						-	-	-	-					

To be used to cover Reconciliation to Financial Statements ($0)

Reconciliation to Trial Balance

Per Report above:					
General	2,854,948	STB	14930	2,341,202	
WOT, BABC, & BACC	206,437	STB	15050	1,178,548	
PROP	-			**3,519,750**	-
subtotal	**3,061,385**	STB	16300	1,274,699	
		STB	21350	(52,430)	
				4,742,019	-

Trial Balance Revenue Accounts

40100	Interest	(39,007)
40101	Mem Contrib	(1,386,895)
40102	Transfer	(30,000)
40103	Assoc Contrib	(190,578)
40104	Other	(1,414,905)
47310	State Grant	-
47320	Grant Retention	-
subtotal		**(3,061,385)**
Difference		**-**

BACWA Revenue Report as of November 30, 2023

Cost Center Code	Cost Center Description	Program Segment Description	Program Segment Value	Amended Budget	Current Period	FY24 - Year to Date	Unobligated
600	Bay Area Clean Water Agencies	BABC - AED and RPM Support	6200	(6,000.00)	-	-	6,000.00
		BACC - AED Support	6199	(38,250.00)	-	-	38,250.00
		BDO Affil/CS/Assoc Dues	6104	-	-	(39,616.00)	(39,616.00)
		BDO Affiliate/Associate Dues	6103	-	-	(44,450.00)	(44,450.00)
		BDO Assoc.&Affiliate Contr	6102	(190,078.00)	(8,876.00)	(106,512.00)	83,566.00
		BDO Fund Transfers	6141	(1,000.00)	-	-	1,000.00
		BDO Member Contributions	6101	(537,795.00)	-	(537,795.00)	-
		BDO Non-Member Contr AIR	6136	(7,361.00)	(5,981.00)	(7,361.00)	-
		BDO Non-Member Contr BAPPG	6135	(4,114.00)	5,981.00	(4,140.00)	(26.00)
		BDO Other Receipts	6105	-	286.00	-	-
		BDO Other Receipts (Misc)	6140	-	-	(2,653.00)	(2,653.00)
		BDO- Interest Income from LAIF	6142	(60,000.00)	-	(8,140.78)	51,859.22
		BDO-Alternative Investment Inc	6143	-	-	-	-
600 Total				**(844,598.00)**	**(8,590.00)**	**(750,667.78)**	**93,930.22**
602	Bay Area Biosolids Coalition	BDO Fund Transfers	6141		-	-	-
		BDO Member Contributions	6101		1,000.00	(175,600.00)	(175,600.00)
602 Total				**-**	**1,000.00**	**(175,600.00)**	**(175,600.00)**
605	Clean Bay Collaborative	BDO Fund Transfers	6141	-	-	-	-
		BDO Member Contributions	6101	(675,000.00)	8,876.00	(673,500.00)	1,500.00
		BDO Other Receipts	6105	(1,400,000.00)	-	(1,400,751.00)	(751.00)
		BDO- Interest Income from LAIF	6142	-	-	(30,028.80)	(30,028.80)
605 Total				**(2,075,000.00)**	**8,876.00**	**(2,104,279.80)**	**(29,279.80)**
606	Bay Area Chemical Consortium	BDO Member Contributions	6101	-	-	-	-
		BDO- Interest Income from LAIF	6142	-	-	(837.24)	(837.24)
606 Total				**-**	**-**	**(837.24)**	**(837.24)**
607	BACC Legal RSRV	BDO Fund Transfers	6141	-	-	(30,000.00)	(30,000.00)
607 Total				**-**	**-**	**(30,000.00)**	**(30,000.00)**
Grand Total				**(2,919,598.00)**	**1,286.00**	**(3,061,384.82)**	**(141,786.82)**

BACWA Expense Detail Report for November 30, 2023

Cost Center Code	Program Segment Description	Program Segment Value	Balance Type	Current Period Activity	FY24 - Year to Date
600	AIR-Air Issues&Regulation Grp	6153	Actual	4,400.00	26,891.25
			Encumbrance	(4,400.00)	60,874.09
			Obligated	-	87,765.34
	AS-Assistant Executive Directo	6175	Actual	8,665.97	36,236.03
			Encumbrance	(8,665.97)	55,787.97
			Obligated	-	92,024.00
	AS-Audit Services	6180	Actual	-	-
			Encumbrance		
			Obligated	-	-
	AS-BACWA Admin Expense	6173	Actual	48.62	48.62
			Obligated	48.62	48.62
	AS-EBMUD Financial Services	6176	Actual	-	11,515.79
			Encumbrance	-	31,781.21
			Obligated	-	43,297.00
	AS-Executive Director	6174	Actual	18,212.00	72,848.00
			Encumbrance	(18,212.00)	145,700.04
			Obligated	-	218,548.04
	AS-Insurance	6177	Actual	-	8,168.68
			Obligated	-	8,168.68
	AS-Regulatory Program Manager	6179	Actual	14,287.26	50,244.94
			Encumbrance	(14,287.26)	96,421.06
			Obligated	-	146,666.00
	Administrative Support	6178	Actual	-	-
			Obligated	-	-
	BC-BAPPG	6152	Actual	22,228.34	65,130.47
			Encumbrance	(7,228.34)	82,497.64
			Obligated	15,000.00	147,628.11
	BC-Collections System	6144	Actual	-	-
			Encumbrance	50,000.00	50,000.00
			Obligated	50,000.00	50,000.00
	BC-InfoShare Groups	6148	Actual	333.41	333.41
			Obligated	333.41	333.41
	BC-Laboratory Committee	6149	Actual	698.75	1,820.00
			Encumbrance	(698.75)	2,080.00
			Obligated	-	3,900.00
	BC-Manager's Roundtable	6154	Actual	-	254.34
			Obligated	-	254.34
	BC-Miscellaneous Committee Sup	6150	Actual	-	3,740.15
			Encumbrance	-	211.25
			Obligated	-	3,951.40
	BC-Permit Committee	6145	Actual	-	-
			Obligated	-	-
	BC-Pretreatment Committee	6151	Actual	-	-
			Obligated	-	-
	BC-Water Recycling Committee	6146	Actual	-	-
			Encumbrance	-	666.74
			Obligated	-	666.74
	CAR-BACWA File Storage	6165	Actual	-	(720.00)
			Obligated	-	(720.00)
	CAR-BACWA IT Software	6167	Actual	-	159.79
			Obligated	-	159.79
	CAR-BACWA IT Support	6166	Actual	-	-
			Encumbrance	-	2,652.00
			Obligated	-	2,652.00
	CAR-BACWA Website Dev/Maint	6163	Actual	-	-
			Obligated	-	-
	CAR-BACWA Website Hosting	6164	Actual	-	-

Cost Center Code	Program Segment Description	Program Segment Value	Balance Type	Current Period Activity	FY24 - Year to Date
			Obligated	-	-
	CAS-Arleen Navaret Award	6160	Actual	-	-
			Obligated	-	-
	CAS-BayCAN	6204	Actual	-	-
			Obligated	-	-
	CAS-Misc Collaborative Sup	6162	Actual	-	-
			Obligated	-	-
	CAS-PSSEP	6157	Actual	-	-
			Obligated	-	-
	CAS-Stanford ERC	6159	Actual	-	-
			Obligated	-	-
	GBS-Meeting Support-Annual	6170	Actual	-	-
			Obligated	-	-
	GBS-Meeting Support-Exec Bd	6169	Actual	362.38	1,383.28
			Obligated	362.38	1,383.28
	GBS-Meeting Support-Misc	6172	Actual	2,347.76	5,167.53
			Obligated	2,347.76	5,167.53
	GBS-Meeting Support-Pardee	6171	Actual	-	2,566.70
			Obligated	-	2,566.70
	LS-Executive Board Support	6156	Actual	-	-
			Encumbrance	-	4,499.00
			Obligated	-	4,499.00
	LS-Regulatory Support	6155	Actual	-	-
			Encumbrance	-	5,744.00
			Obligated	-	5,744.00
	WQA-CE-Nature Based Solutions	6196	Actual	-	-
			Obligated	-	-
	Write-Off Doubtful Accounts	6208	Actual	-	-
			Obligated	-	-
600 Total			**Actual**	**71,584.49**	**285,788.98**
600 Total			**Encumbrance**	**(3,492.32)**	**538,915.00**
600 Total			**Obligated**	**68,092.17**	**824,703.98**
602	AS-Assistant Executive Directo	6175	Actual	-	-
			Obligated	-	-
	AS-Regulatory Program Manager	6179	Actual	-	-
			Obligated	-	-
	Academia Research & Development	6203	Actual	-	-
			Obligated	-	-
	Administrative Support	6178	Actual	-	-
			Obligated	-	-
	BDO Contract Expenses	6186	Actual	-	-
			Obligated	-	-
	Collateral Development	6197	Actual	-	-
			Obligated	-	-
	Program Manager Expense	6202	Actual	9,677.75	43,342.25
			Encumbrance	(9,677.75)	82,716.35
			Obligated	-	126,058.60
	Technology Research & Development	6206	Actual	-	-
			Obligated	-	-
602 Total			**Actual**	**9,677.75**	**43,342.25**
602 Total			**Encumbrance**	**(9,677.75)**	**82,716.35**
602 Total			**Obligated**	**-**	**126,058.60**
605	Recycled Water Evaluation	6198	Actual	17,492.59	17,492.59
			Encumbrance	(17,492.59)	34,999.76
			Obligated	-	52,492.35
	WQA - CEC Investigations	6201	Actual	-	86,528.60
			Encumbrance	-	63,924.60
			Obligated	-	150,453.20
	WQA-CE Addl Work Under Permit	6191	Actual	18,281.05	18,281.05
			Encumbrance	(18,281.05)	60,116.95

Cost Center Code	Program Segment Description	Program Segment Value	Balance Type	Current Period Activity	FY24 - Year to Date
			Obligated	-	78,398.00
	WQA-CE Risk Reduction	6190	Actual	-	-
			Encumbrance	-	12,500.00
			Obligated	-	12,500.00
	WQA-CE Voluntary Nutr Contrib	6193	Actual	-	-
			Obligated	-	-
	WQA-CE-Nature Based Solutions	6196	Actual	-	95,463.80
			Encumbrance	-	167,803.22
			Obligated	-	263,267.02
	WQA-CE-Nutrient WS Permit Comm	6188	Actual	-	1,000,000.00
			Obligated	-	1,000,000.00
	WQA-CE-Technical Support	6181	Actual	2,633.75	13,738.75
			Encumbrance	(2,633.75)	67,651.00
			Obligated	-	81,389.75
	WQA-NMSReviewer	6205	Actual	6,800.00	9,010.00
			Encumbrance	(6,800.00)	78,240.00
			Obligated	-	87,250.00
605 Total			**Actual**	**45,207.39**	**1,240,514.79**
605 Total			**Encumbrance**	**(45,207.39)**	**485,235.53**
605 Total			**Obligated**	**-**	**1,725,750.32**
606	Administrative Support	6178	Actual	3,563.10	9,822.60
			Encumbrance	(3,563.10)	28,697.40
			Obligated	-	38,520.00
	BDO Fund Transfers	6141	Actual	-	30,000.00
			Obligated	-	30,000.00
	GBS-Meeting Support-Misc	6172	Actual	-	-
			Obligated	-	-
606 Total			**Actual**	**3,563.10**	**39,822.60**
606 Total			**Encumbrance**	**(3,563.10)**	**28,697.40**
606 Total			**Obligated**	**-**	**68,520.00**
610	Administrative Support	6178	Actual	-	-
			Obligated	-	-
	BC-BAPPG	6152	Actual	-	(10,000.00)
			Obligated	-	(10,000.00)
	BDO Contract Expenses	6186	Actual	-	-
			Obligated	-	-
610 Total			**Actual**	**-**	**(10,000.00)**
610 Total			**Encumbrance**	**-**	**-**
610 Total			**Obligated**	**-**	**(10,000.00)**
Grand Total Actual				**130,032.73**	**1,599,468.62**
Grand Total Encumbrance				**(61,940.56)**	**1,135,564.28**
Grand Total Obligated				**68,092.17**	**2,735,032.90**

BACWA EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 4

MEETING DATE: January 19, 2024

TITLE: Request for BACWA 2nd Watershed Permit funding commitment - second installment of $800,000

☐ **RECEIPT** ☐ **DISCUSSION** ☐ **RESOLUTION** ☒ **APPROVAL**

RECOMMENDED ACTION

Authorize second installment of payment in the amount of $800,000 to San Francisco Estuary Institute (SFEI) to comply with the provisions of the 2nd Watershed Permit for FY20.

SUMMARY

The Watershed Permit for Nutrients from Municipal Wastewater Dischargers to San Francisco Bay, NPDES Permit No. CA 0038873 adopted May 8, 2019, requires the commitment of $2,200,000 per year from POTW Dischargers as a collective effort to fund needed scientific studies as part of the implementation of the Regional Water Quality Control Board's Nutrient Management Strategy. The commitment is on a fiscal year basis and began July 1, 2019. BACWA's role in meeting this commitment is to collect the needed funds from its membership and provide those funds for the undertaking of the scientific studies. The identification of the studies to be undertaken is through a stakeholder governance Steering Committee on which BACWA holds two seats. Several studies are ongoing as a result of approvals of programs and projects by the Steering Committee.

Due to the importance of accelerating the pace of the scientific studies to obtain results that will inform management actions in the 3rd Watershed Permit, BACWA reallocated how the funds have been delivered to SFEI over the five-year permit term. The $2,200,000 per year over five years totals $11,000,000. The following chart reflects BACWA's planned schedule to deliver the $11,000,000 to make the bulk of the funds available sooner:

FY19	**FY20**	**FY21**	**FY22**	**FY23**	**FY24** (budgeted)	**Total**
$200,000	$2,400,000	$2,600,000	$2,200,000	$1,800,000	$1,800,000	**$11,000,000**

At the August 18, 2023, BACWA Executive Board meeting, the Board approved a first payment of $1,000,000 to the NMS. The current requested authorization of payment in the amount of $800,000 to SFEI will meet the obligation for the final year of the Discharger's annual obligation under the five-year Watershed Permit per the above schedule. The purpose of delivering the payment in two installments was to ensure continuity in the Science Program in FY24. The second installment of $800,000 is being brought to the Executive Board for approval now that the bulk of the FY24 nutrient surcharge revenues have been received from member agencies.

FISCAL IMPACT

Annual payments to fund the scientific studies are collected from the BACWA membership through a Nutrient Surcharge that is included on the annual dues invoices to the BACWA members, as well as a drawdown of BACWA reserves, as authorized by BACWA's Executive Board. Funds are currently available in the BACWA CBC Fund to pay the $800,000 invoice.

ALTERNATIVES

1. No alternatives are considered for this item, as the payment is a permit requirement.

Attachments: SFEI Invoice

Approved: Date:

January 19,2024

Amit Mutsuddy, Chair
BACWA Executive Board

Invoice

San Francisco Estuary Institute
4911 Central Ave.
Richmond, CA 94804
EIN 94-2951373

January 5, 2024
Project No: 1092.24
Invoice No: 1092242

Bay Area Clean Water Agency
PO Box 24055, MS702
Oakland, CA 94623

Project 1092.24 SF Bay Nutrient Strategy Support FY2024
Attn:Lorien Fono

Professional Services from July 01, 2023 to June 30, 2024

Fee	**$800,000.00**
Total this Invoice	**$800,000.00**

Contact Meredith Lofthouse at 510-746-7357 or contracts@sfei.org for questions.

BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO 5

MEETING DATE: January 19, 2024

TITLE: TO PROVIDE PASSTHROUGH FUNDS FROM BACWA MEMBER AGENCIES TO CASA FOR STATEWIDE WASTEWATER AIR TOXICS POOLED EMISSIONS STUDY PRIMER

☐**RECEIPT** ☐**DISCUSSION** ☐**RESOLUTION** ☒**APPROVAL**

RECOMMENDED ACTION
Approve passthrough of funds to support Statewide Wastewater Air Toxics Pooled Emissions Study.

SUMMARY

Reporting requirements for air toxics emitted from permitted stationary sources in California (including WWTPs) have expanded since the state Air Resources Board's (CARB) latest amendments to the Emissions Inventory Criteria and Guidelines (EICG) and the Reporting of Criteria Air Pollutants and Toxic Air Contaminants Regulations (CTR) became effective January 1, 2022. WWTPs can report business-as-usual through 2027 but are required to conduct a two-step process (on their own or as a group) to determine which of the 1,700+ air toxics referenced in the latest EICG need to be monitored and reported beginning in 2028. As of January 1, 2022, CARB requires wastewater agencies treating 5 MGD or more to perform a study to determine if there are emissions of air toxics from WWTPs in addition to those already reported (refer to the attached primer for more detail). Identifying a shortlist of relevant air toxic compounds to be tested requires:

1. Scanning emissions from representative WWTPs and unit processes to determine detectable air toxics
2. Quantifying emissions of the detectable air toxics using approved sampling and analysis methods to determine which must continue to be monitored and reported beginning with calendar year 2028

CARB agreed the wastewater sector could work as a group in order to reduce the overall costs to the sector, reduce the burden on source test specialists and laboratories, and reduce the burden on regulatory staff. The statewide study is estimated to cost up to $10 million spread over the next 3-4 years, to be shared by sector participants. The expected outcome is a shortlist of air toxics the sector must start monitoring and reporting beginning in 2028.

CASA has agreed to serve as the fiscal administrator with support from the regional associations (BACWA, CVCWA, Clean Water SoCal), and will also coordinate the needs of the statewide study with a hired Project Manager who will oversee day-to-day activities and coordination of source testing, laboratory analyses, and report development. BACWA will have two representatives on the steering committee assisting this effort.

CASA will begin collecting funds to support this effort in FY24. However, due to the uncertainties in this project and lack of awareness of the regulations, many agencies have not budgeted funding to support this effort in FY24. While preparing the FY24 budget, the BACWA Board supported the concept of BACWA providing funds from our reserves to support the effort on behalf of our members, and then recouping those funds in the FY25 invoices sent out to members. This practice would continue each project year assuming BACWA has adequate reserve levels.

While CASA has not finalized the budget for this process, it is likely that the FY24 request from BACWA's

members will not exceed $100,000 in aggregate. This level is equivalent to $200 per mgd of actual flow (2019-202 average) for the BACWA agencies covered by this regulation (list of agencies attached). This approval will allow BACWA to provide funding to this project, contingent upon receiving the following items:

1. A signed contract between CASA and a Program Manager with a scope of work and budget for the first phase of the project.
2. Written agreement from each agency who wishes to participate in this project and wants to have their agency's contribution provided to CASA by BACWA. Each agency will agree to be invoiced for that amount by BACWA in FY25.

FISCAL IMPACT

BACWA's approved FY24 Budget included a $400,000 line item to cover this Air Toxics Passthrough effort.

ALTERNATIVES

1. *Do not provide funding for the CASA Pooled Emissions Study on behalf of BACWA's members. This* is not recommended as many BACWA members have not budgeted for this contribution to CASA in FY24. If CASA cannot collect sufficient funding from Statewide participants, then the Pooled Emissions Study may not move forward.

Attachments: Draft CASA email and primer on Pooled Emissions Study
List of BACWA member Agencies potentially impacted by Air Toxics regulation

January 19, 2024

Approved: _____ Date: _____

Amit Mutsuddy, Chair,
BACWA Executive Board

DRAFT EMAIL to CA POTWs

Hello,

CASA is reaching out to raise awareness of an air quality related regulation that impacts the entire wastewater sector and needs action now for the sector to be compliant by 2028.

As of January 1, 2022, the CA Air Resources Board (CARB) requires wastewater agencies treating 5 MGD or more to perform a study to determine if there are emissions of air toxics from WWTPs in addition to those already reported (refer to the attached primer for more detail). CARB agreed the wastewater sector could work as a group in order to reduce the overall costs to the sector, reduce the burden on source test specialists and laboratories, and reduce the burden on regulatory staff. The statewide study is estimated to cost up to $10 million spread over the next 3-4 years, to be shared by sector participants. The expected outcome is a shortlist of air toxics the sector must start monitoring and reporting beginning in 2028.

For this to be successful, the wastewater sector needs a champion – CASA has agreed to serve as the fiscal administrator with support from the regional associations (BACWA, CVCWA, Clean Water SoCal), and will also coordinate the needs of the statewide study with a hired Project Manager who will oversee day-to-day activities and coordination of source testing, laboratory analyses, and report development.

What do the regulations require of you? CARB requires your participation in a study, either on your own or as a group, to determine which (if any) air toxics are being emitted from the WWTP that you do not already report, and to begin monitoring those in 2028 and reporting those emissions in 2029.

What is our ask of you? Participate in the statewide group to share the cost of the study (estimated contributions are based on your average annual daily flow for years 2019-2021) and support a more consistent/scientifically sound outcome for the wastewater sector. Please confirm your participation in the statewide group and your contribution of $xxx per average annual MGD for Phase 1 by March 31st, 2024, with Shacara Gamboa at sgamboa@casaweb.org and provide a point of contact for billing. If you had not already budgeted for the study and need to do so, Phase 1 contributions can also be provided at the turn of the fiscal year (i.e., July 1st, 2024). At the appropriate time, CASA will send an invoice for your contribution or work with your respective regional association (BACWA – ED Lorien Fono, CVCWA – ED Debbie Mackey, or Clean Water SoCal – ED Steve Jepsen) to administer the invoice.

Please see the attached for more details and let us know if you have any questions.

Thank you!

CALIFORNIA ASSOCIATION of SANITATION AGENCIES
925 L Street, Suite 200 • Sacramento, CA 95814 • TEL: (916) 446-0388 • www.casaweb.org

Statewide Wastewater Air Toxics Pooled Emissions Study Primer

The following document describes recent developments related to the "two-step process" and pooled emissions study that is required by the California Air Resources Board (CARB) and local air districts in the coming years. CASA has agreed to serve as the fiscal agent for this project and a stakeholder group composed of regional associations (Bay Area Clean Water Agencies, Clean Water SoCal, and Central Valley Clean Water Association).

Background

Reporting requirements for air toxics emitted from permitted stationary sources in California (including WWTPs) have expanded since the state Air Resources Board's (CARB) latest amendments to the Emissions Inventory Criteria and Guidelines (EICG) and the Reporting of Criteria Air Pollutants and Toxic Air Contaminants Regulations (CTR) became effective January 1, 2022. WWTPs can report business-as-usual through 2027 but are required to conduct a two-step process (on their own or as a group) to determine which of the 1,700+ air toxics referenced in the latest EICG need to be monitored and reported beginning in 2028. CARB's provision for the wastewater sector to complete a two-step process to establish air toxics emission factors that can be adjusted for the capacity of the WWTP and will be applicable to all WWTPs. Identifying a shortlist of relevant air toxic compounds to be tested requires:

1. Scanning emissions from representative WWTPs and unit processes to determine detectable air toxics
2. Quantifying emissions of the detectable air toxics using approved sampling and analysis methods to determine which must continue to be monitored and reported beginning with calendar year 2028

For the past few years, CASA has been working with a variety of agencies, stakeholders, regional associations, and through our Air, Climate Change, and Energy (ACE) Workgroup and Air Toxics Subgroup to develop an appropriate approach to initiating this two-step process on behalf of the clean water community.

Benefits of Engaging in the Two-Step Process and Pooled Emissions Study

Through CASA and the Regional Associations' leadership, the wastewater sector is uniquely positioned to help lead the execution of a statewide two-step process in the form of a pooled emissions study (Study). Conducting the Study as a statewide group offers numerous benefits to the sector, including:

- **Representative Testing Cost Savings:** Having a select number of WWTPs[1] perform the Study and represent the sector versus every WWTP having to perform the Study. This allows the sector to streamline the work, avoid overwhelming source test specialists (which are already overextended across the state) and significantly reduce costs.[1]
- **Administrative Cost Savings:** Pooling funds as a sector and having CASA serve as the fiscal administrator relieves WWTPs of the burden of managing individual contracts and coordinating comparisons of the results across the state, significantly reducing overall administrative costs.
- **Streamlined Project Execution:** Hiring a single project manager (PM) to coordinate and produce a sound technical approach/source test protocol[2] that is consistently applied across the state, including selection of the source test specialists and laboratory, to streamline the execution of the Study and the analysis of the results.
- **Coordinated Statewide Action:** Close coordination by the PM across CASA staff, regional association staff, WWTPs, CARB staff, Air District staff (including the California Air Pollution Control Officers' Association or CAPCOA), Source Test Specialists, and other technical experts as needed to complete the Study in time for expanded monitoring and reporting to begin in 2028.

[1] Per the regulations, WWTPs include covered (≥10 million gallons annual average daily flow) and uncovered (≥5 million gallons annual average daily flow) systems. Covered systems are defined as "…wastewater treatment having a covering over the physical area where the primary settling process occurs in the wastewater treatment process, such as sedimentation tanks. The primary tanks may be sealed or covered with a fixed, floating or retractable cover and shall be airtight, thus preventing emissions from being released to the air."

[2] Scanning and sampling protocols will be developed in collaboration with and approved by local air districts and CARB staff. The PM and CASA Steering Committee will lead the coordination and development of the overarching Source Test Protocol.

- **Single Reference Set for Future Use:** Producing a single set of emission factors for a shortlist of air toxics that all WWTPs can use for reporting purposes beginning in 2028.

The alternative would be for every WWTP (or smaller groups of WWTPs) to perform their own two-step process for the 1700+ air toxics identified by CARB. That approach poses significant challenges to the wastewater sector as well as CARB and air districts. First, there would be significant undue burden placed on air district and CARB staff having to approve and oversee a multitude of two-step process efforts across the state. Additionally, the numerous efforts will likely yield inconsistent results, in part from having to use multiple source test specialists and laboratories, which will make it very challenging to determine a single emission factor for any air toxic. Finally, the sampling and analyses necessary would be cost prohibitive for most WWTPs on their own. That is why the underlying goal of CASA and the stakeholder group is to maximize individual WWTP participation and contributions to the Study, which will serve as documentation for your agency's compliance with the requirements under CARB's EICG and CTR.

Pooled Emissions Study Details and Next Steps

CASA estimates the Study, in its entirety, could take three to four years and could cost up to $10 million for the wastewater sector to complete as a group. This time and cost factor is based on an assumption that we would be required to sample and analyze over seven families of air toxics across various WWTPs and unit processes, and extrapolation from a previous similar effort, the 1990 Pooled Emissions Estimation Program, which took just over two years to complete and focused on only one family of compounds.

The Study will be performed in two phases, with the majority of costs incurred in Phase 2:

1. During Phase 1 (2024), the selected PM in collaboration with CASA and a Source Test Specialist will develop (and gain approval from CARB and Air Districts for) the overarching Source Test Protocol necessary to perform the two-step process.
2. During Phase 2 (2025-2027), the PM will coordinate the completion of the two-step process with the selected Source Test Specialist and in close collaboration with CARB, Air Districts, CASA Steering Committee, and WWTPs.

The results of Phase 1 of this Study will inform the details needed as part of Phase 2 (i.e., number of WWTPs, number of unit treatment processes to be sampled at each WWTP, and number of air toxics that will need to sampled and analyzed from each unit process), at which time CASA will be able to refine the estimated cost and timeline to perform Step 2. As of December 18, 2023, CASA and the regional associations have distributed a request for qualifications to interested entities, and plan to select a suitable PM for Phase 1 at the beginning of 2024, with work to begin shortly thereafter.

Agency Cost Sharing and Planning for Future Budget Allocations

The $10 million estimated budget is to be shared by the ~145 WWTPs[1] across the state who have annual average daily flows near or exceeding the regulatory threshold.[1] CASA has estimated individual agency contributions per million gallons of average annual daily flow, with the costs spread over the next three to four fiscal years. This resulted in a total project estimate of approximately $3,700 per MGD of average annual daily flow (based on 2019-2021 flows) for each of the ~145 WWTPs[1]. For FY24 and FY24 CASA is requesting the following from agencies who wish to participate in this project:

PAY NOW FOR FY24	BUDGET FOR FY25	TENTATIVE BUDGET FOR LATER
Delayed payment in FY25 OK if you did not budget for it	**Pre-payment now is OK**	Estimated Total for FY26 through FY27
$200 per MGD of Annual Average Flow*	$1,000 per MGD of Annual Average Flow	TBD, Budget approx. $2,500 per MGD of Annual Average Flow

*Annual Average based on 2019-2021

We recognize that some agencies many not have budgeted for FY24, and those agencies may pay both the FY2 and FY25 amounts as a lump sum in FY25. Any funds not spent on Phase 1 of the projects will be applied to Phase 2. FY26 funding levels will be determined as part of the Phase 1 work performed.

Contact Information

Please contact Shacara Gamboa at sgamboa@casaweb.org to confirm participation in the statewide group and ability to contribute in FY 23/24 and 24/25. Please also provide a point of contact for billing. At the appropriate time, CASA can send an invoice for your contribution to the Study or work with your respective regional association (BACWA, CVCWA, or Clean Water SoCal) to administer the invoice. For substantive questions about the Study, please reach out to Sarah Deslauriers at sdeslauriers@carollo.com.

List of BACWA Member Agencies Covered by Air Toxics Reporting Requirements

- San Jose/Santa Clara WPCP
- EBMUD WPCP
- SF-SE Water Pollution Control Plant
- Central Contra Costa SD WWTP
- SF - OCEANSIDE Water Pollution Control Plant
- Palo Alto Regional WQCP
- Raymond A. Boege Alvarado WWTP (Union SD)
- Sunnyvale WPCP
- SVCW WWTP
- Fairfield-Suisun
- Oro Loma/Castro Valley SD WPCP
- Delta Diablo Wastewater Treatment Plant
- Hayward WPCF
- Dublin San Ramon SD WWTP
- Richmond WPCP
- San Mateo WWTP
- Vallejo Flood and Wastewater District WWTP
- Napa SD WWTP (Soscol Water Recycling Facility)
- South San Francisco-San Bruno WQCP
- West County WW District WPCP
- Central Marin San. Agcy. WWTP
- City of Livermore Water Reclamation Plant
- San Leandro WPCP
- Petaluma - Ellis Creek Water Recycling Facility
- Santa Rosa Laguna Treatment Plant - BACWA AIR member

Additional Agencies in the Bay Area AQMD Covered by Air Toxics Reporting Requirements (not to be invoiced by BACWA)

- South County Regional Wastewater Authority WWTP (SCRWA)

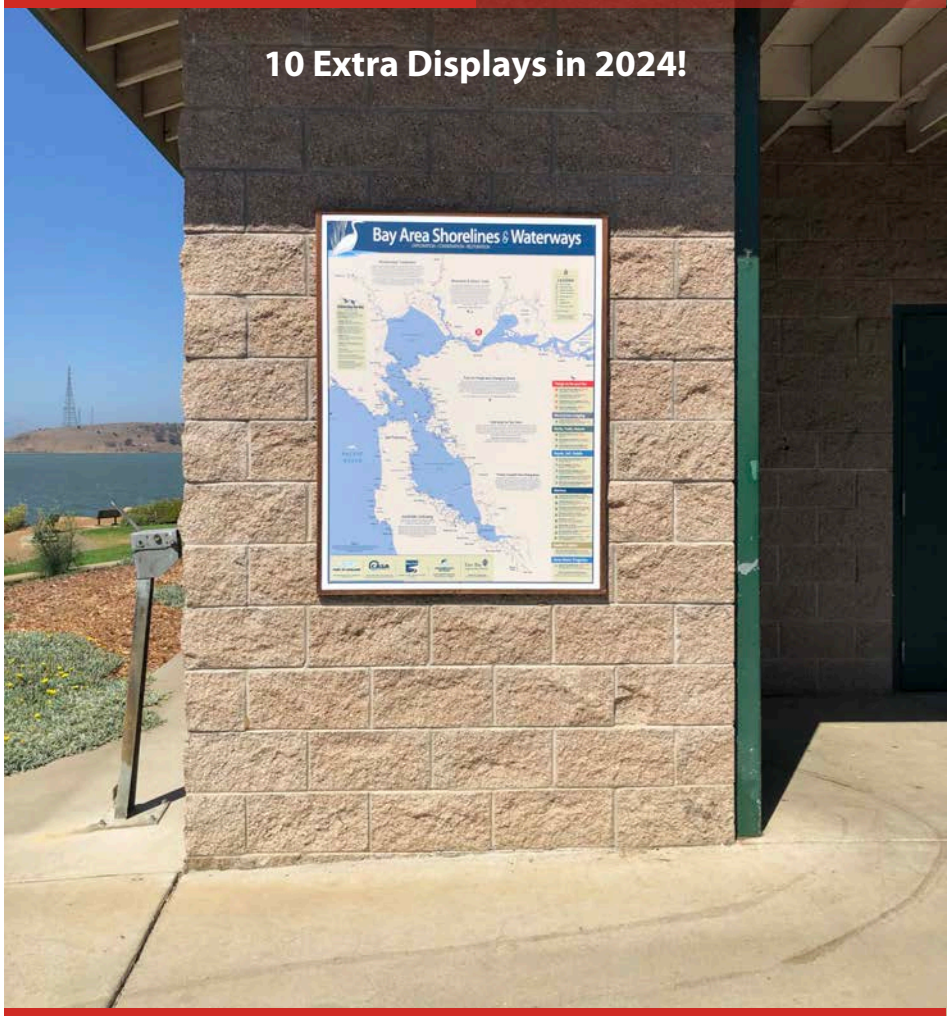
Notes

- North San Mateo County Sanitation District and Novato Sanitary District are not included with the assumption that the average annual flows are less than 10 MGD and the facilities have covered primaries.
- Burlingame and Brentwood are not included with the assumption that the average annual flows are less than 5 MGD (although permitted ADWF exceeds 5 MGD)

Bay Area Shorelines & Waterways

Sixty strategically placed displays provide a unique, cost-effective opportunity to reach all those most interested the Bay Area's shorelines and waterways. Tourists, boaters, bike riders, water-sport enthusiasts, nature lovers and the general public will see and use these displays. People viewing these displays are in a relaxed frame of mind and looking for things to do and see. It's a very cost effective way to promote your shoreline business or reach out with a sustainability message.

Sustainability Theme | **Over 1 Million Viewers***



60 Outdoor Displays All Around the Bay!
Reach the Bay Area's shoreline and waterway enthusiasts

Sponsor Logo and Map Message: $8,200

60 prime locations • 23 month period • 3" tall by 3" wide formatted space

Optional: Generic paragraph of your choice including agency website/contact OR 3-line listing/locator
Cost effectiveness: Estimated viewers: 1,050,0000* • Cost per viewer: less than a penny • $357 per month
* based on an average of 25 viewers per day, per display

Listing and Locator: $1,960

3-line listing with 1 locator • Works out to $85 per month • Locates your business directly on map

For more information call Paul Sherwin at 206-378-1055 or email paul@bricomm.com
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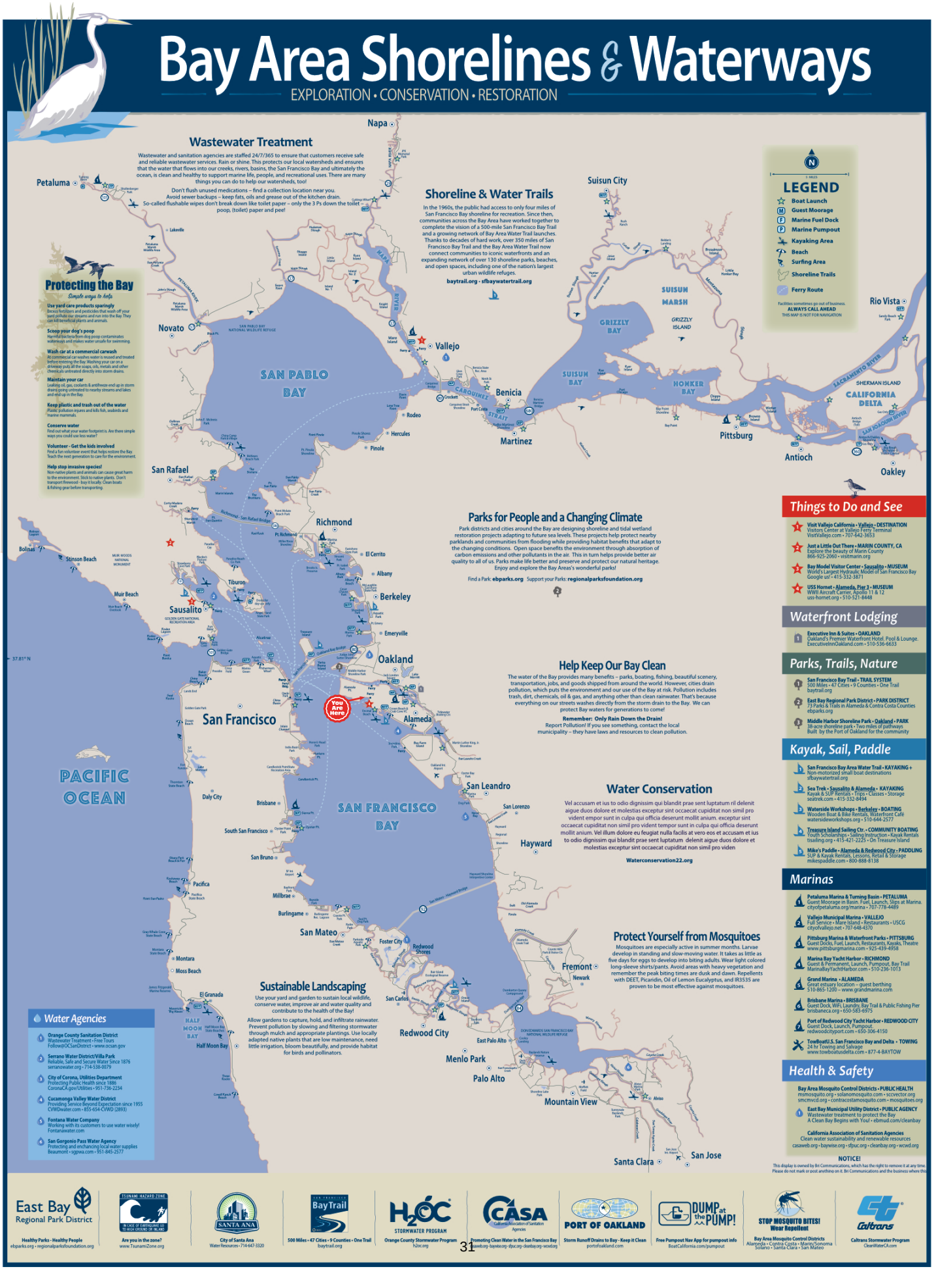
60 WATERFRONT LOCATIONS
23 month period

** Individual locations not guaranteed*
Berkeley Marina
Shorebird Center (Berkeley)
Seabreeze Market (Berkeley)
REI (Berkeley)*
Marina Bay (3) (Richmond)
Oakland-Alameda Ferry (JLS)
Brotzeit Lokal (Oakland)
Jack London Square (Oakland)
USS Hornet (Alameda)
Encinal Boat Launch (Alameda)*
Grand Street Boat Launch (Alameda)*
Shoreline Park (Alameda)*
Grand Marina (Alameda)
Ballena Isle Marina (Alameda)
Marina Park (San Leandro)
Suisun City Marina
Suisun City Boat Launch
Belden's Landing (Suisun Marsh)*
Benicia Marina
First Street Pier (Benicia)
Ninth Street Park (Benicia)
Vallejo Waterfront (2)
Vallejo Ferry Terminal
Martinez Waterfront
Pittsburg Marina (2)*
Treasure Island Sailing Center*
South Beach Waterfront (SF) (2)
Pier 40 (SF)
Fisherman's Wharf (Scoma Way)
Pier 23 Cafe (SF)
Marina Green (SF) (2)
Marina Park (2) (Emeryville)
Port of Redwood City (2)
Brisbane Waterfront (3)
Oyster Point Marina
Coyote Pt. Marina (San Mateo)
Coyote Pt. Co. Park Beach (San Mateo)
Seal Point Park (San Mateo)
Baylands Nature Preserve (Palo Alto)
Alviso County Park (San Jose)
Petaluma Marina*
Strawberry Cove Park (Marin Co.)
Harbor Cove Park (Marin Co.)
Schoonmaker Pt. (Sausalito)
Bicycle Odyssey (Sausalito)
Sea Trek (Sausalito)
Bay Model (Sauasalito)
Scoma's Restaurant (Sausalito)
Golden Gate Market (Sausalito)
Loch Lomond Marina
101 Surf Sports (San Rafael)
McNear's Beach Park (San Rafael)
China Camp State Park
* New Location

See page 2 for new display →

New Sustainability Theme • MOCK-UP ONLY

Actual Size: 36" by 48" • Made for Outdoors



DRAFT

BACWA BAY AREA CLEAN WATER AGENCIES JANUARY 2024 FACT SHEET

Study of PFAS in Bay Area Wastewater

KEY POINTS

- PFAS are ubiquitous in numerous everyday products and in the environment.
- PFAS will be present in wastewater influent, effluent, and biosolids as long as we continue to utilize these chemicals in common products.

HOW MUCH PFAS is in BAY AREA WASTEWATER?

This study quantified PFAS in wastewater using a comprehensive lab method called the Total Oxidizable Precursors (TOP) assay. This method captures more of the total PFAS load than other typical lab methods.

WHERE is the PFAS COMING FROM?

Residential loads are likely the largest source of PFAS to wastewater treatment plants. Several industrial and commercial facilities were included in this BACWA study. Industrial laundries showed the highest concentrations, followed by car washes.

Per- and polyfluoroalkyl substances (PFAS) are a large group of human-made compounds that are resistant to heat, water, and oil. Common PFAS-containing products include non-stick cookware, cardboard/paper food packaging, water-resistant clothing, carpets, personal care products, and fire-fighting foam. PFAS are persistent in the environment, can accumulate within the human body, and have demonstrated toxicity at relatively low concentrations.

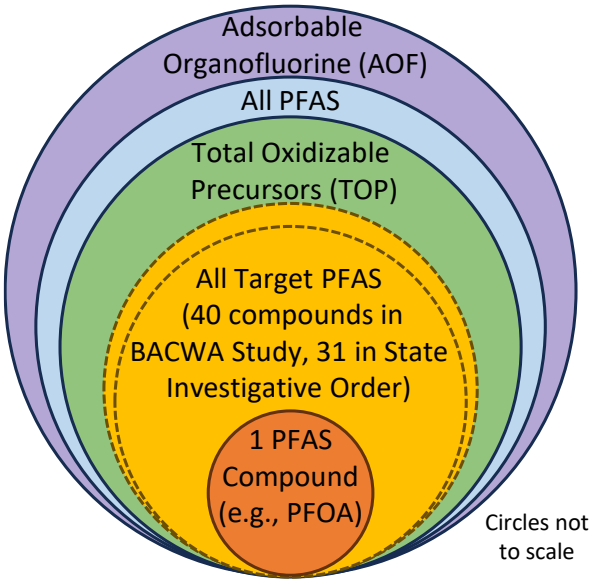
Publicly Owned Treatment Works (POTWs) receive PFAS from residential and industrial customers in their service areas. PFAS present in treatment plant influent are transformed to other PFAS compounds, but are not destroyed during treatment. PFAS received in POTW influent ultimately partition into effluent or biosolids depending on the individual compound's chemical characteristics.

Why did BACWA Complete this Study?

In 2019, the State Water Board developed a phased investigation plan requiring testing of drinking water systems and other high-risk locations for PFAS[a]. Investigative orders were issued for landfills, airports, industrial chrome-platers, refineries & bulk terminals, and POTWs. The July 2020 State Water Board Investigative Order for POTWs was not applicable to San Francisco Bay Area agencies. Instead, the Bay Area Clean Water Agencies (BACWA) worked with Water Board staff and obtained approval to fund and conduct a regional study led by San Francisco Estuary Institute (SFEI)[b,c]. With assistance from BACWA members, SFEI conducted the study in two phases:

- **Phase 1** (Fall 2020). Fourteen representative facilities collected influent, effluent, and biosolids samples. Facilities were selected based on their size, location, level of industry in their service area, treatment technology, and whether they had participated in previous SFEI PFAS studies, so that trends in individual PFAS compounds could be tracked over time. The final report for Phase 1 was released in October 2021[d].

- **Phase 2** (Mid-2022). Seven facilities collected samples of influent, effluent, and biosolids samples. Samples were also collected in residential areas and at industrial and commercial facilities. Due to the staff time required to collect field samples, Phase 2 facilities were from larger agencies that volunteered to participate. Results from Phase 2 were shared at the Regional Monitoring Program Annual Meeting in October 2023[e], and the final report for Phase 2 was completed in December 2023. The report is available from BACWA staff upon request.



While the Water Board's Investigative Orders required 31 individual PFAS analytes to be measured, the SFEI study included 40 individual analytes, as well as performing a Total Oxidizable Precursors (TOP) assay on influent and biosolid samples. The TOP assay involves oxidizing the sample to convert PFAS to their terminal transformation products, then measuring those products. The advantage of the TOP analysis is that it gives a better estimate of the total PFAS in a sample, and not just the individual analytes that are being targeted by a specific analytical method (see figure at right). Phase 2 also included analysis of Adsorbable Organofluorine (AOF) via USEPA Draft Method 1621.

What did the Study Find?

Phase 1 of the study demonstrated that sampling a representative selection of POTWs (rather than all POTWs) was an appropriate strategy for characterizing PFAS. PFAS levels were similar across the 14 facilities that participated, as summarized in the Phase 1 report[d]. Both phases of the BACWA study showed similar results to the State Water Board's Investigative Order[f] for the targeted analysis. Phase 1 also showed that the targeted analysis only captures a fraction of total PFAS compounds. In Phase 1 influent samples, the median for sum of PFAS via the TOP method was more than 8 times greater than the target analysis. In Phase 2 influent samples, the median for TOP was 5 times greater than the median for target analysis, while the ratio was about 2 for effluent.

KEY FINDING

In Phase 2, TOP analysis was completed for influent, effluent and biosolids from 5 facilities.

On average, about half of the mass of total PFAS contained in POTW influent was partitioned to biosolids.

Phase 2 showed that PFAS in influent is both transformed and partitioned to biosolids before leaving as treated effluent, as shown in **Figure 1** (see below)**.** This finding may seem self-evident, but the results of the Phase 1 study and the statewide Investigative Order were not conclusive on this point. Based on targeted analysis, the total PFAS concentration is often *higher* in effluent than influent, potentially leading to the false conclusio n that PFAS are added or created within treatment plants. As expected, total PFAS based on Phase 2 TOP analysis conclusively showed removal from influent to effluent at each of the seven facilities sampled (*see orange bars for influent and effluent, Figure 1*). AOF data showed a similar trend.

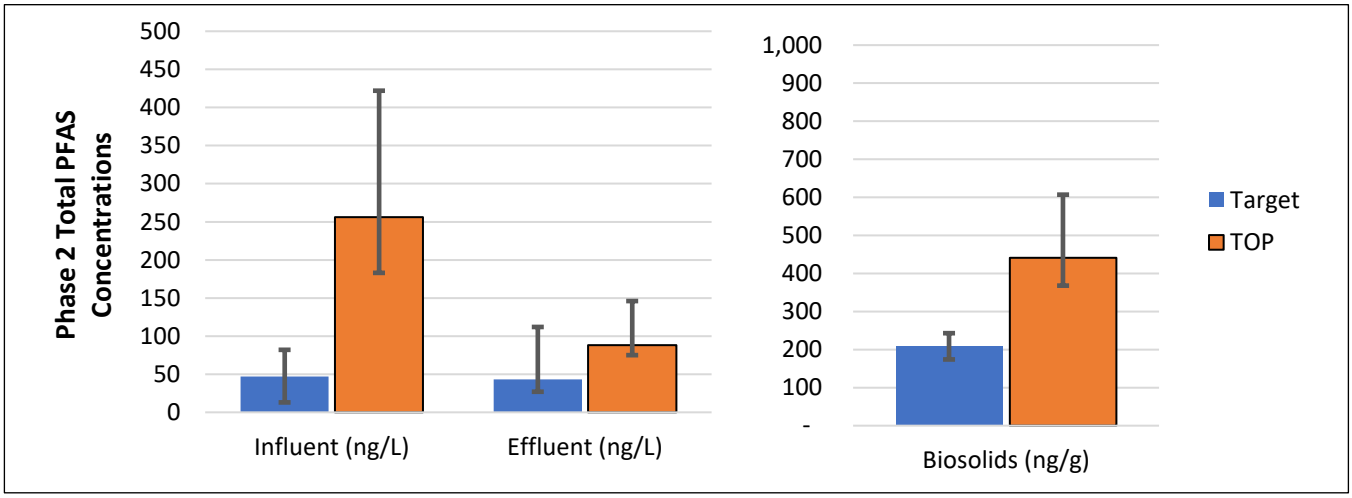


Figure 1. *Phase 2 Total PFAS based on a sum of targeted analysis of 40 compounds("Target") and Total Oxidizable Precursors analysis ("TOP"). Influent and Effluent data are in units ng/L and Biosolids are in ng/g (dry weight). The height of each bar chart indicates the median, while the error bars show the minimum and maximum. Phase 1 data are excluded because the TOP analysis was not performed.*

How do PFAS Levels in Bay Area Wastewater Compared to Regulatory Thresholds?

There are currently no water quality objectives for PFAS applicable to San Francisco Bay, although human health objectives based on fish consumption are under development by USEPA (see side bar). Although surface water quality objectives do not yet exist, both the State Water Board and USEPA have developed regulatory thresholds for treated drinking water. Drinking water criteria are not applicable to most Bay Area POTWs, since the Bay is not used as a drinking water supply. They are included here for informational purposes only.

The State Water Board has adopted notification levels of 6.5 ng/L for perfluorooctane sulfonic acid (PFOS), 5.1 ng/L for perfluorooctanoic acid (PFOA), and 3 ng/L for perfluorohexane sulfonic acid (PFHxS)[g]. The USEPA's proposed drinking water Maximum Contaminant Level is 4 ng/L for

PFOS and PFOA[h]. The proposed MCL for PFHxS is included as part of a unitless "Hazard Index." Effluent concentrations observed from Phase 1 and 2 are compared to these thresholds in **Figure 2** (below). Although production of both PFOS and PFOA has been phased out in the United States, these compounds were detected in all but one of the effluent samples collected in the BACWA study.

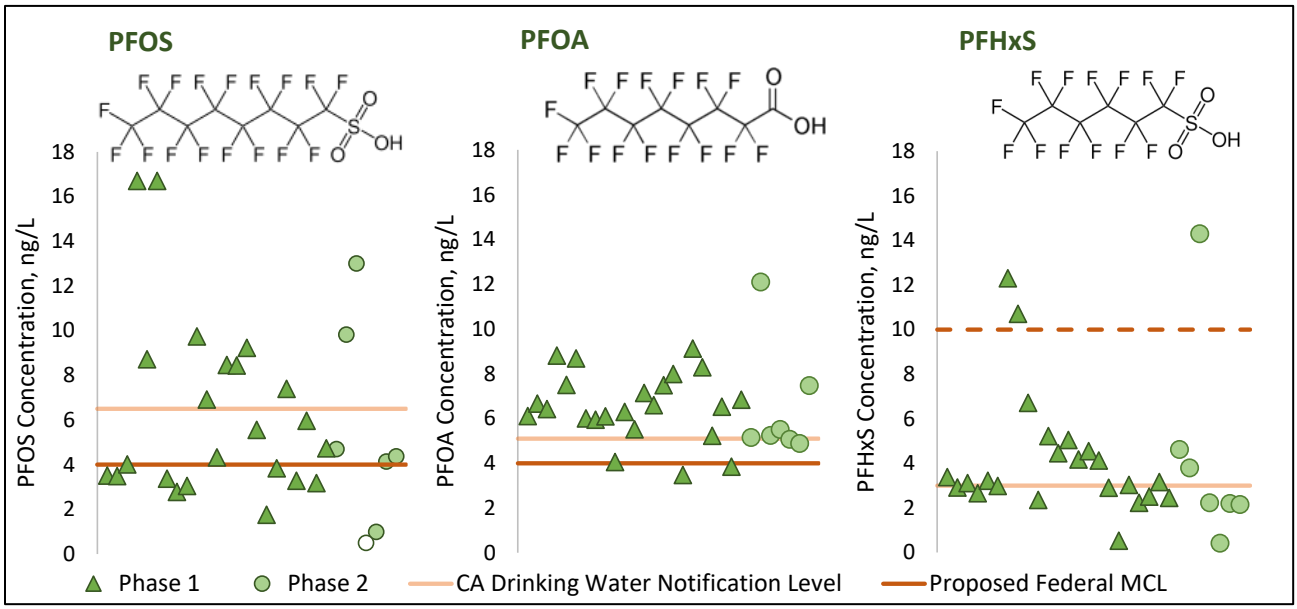


Figure 2. *Phase 1 and 2 effluent concentrations of PFOA, PFOS, and PFHxS compared to California notification levels and proposed USEPA Maximum Contaminant Levels (MCLs) for drinking water. For PFHxS, the proposed MCLs is illustrated as 10 ng/L; the unitless Hazard Index of 1.0 is calculated by dividing PFHxS concentrations by 10. The 3 other compounds included in the Hazard Index were primarily non-detects. The open circle for PFOS indicates a non-detected value; all filled shapes indicate a detected result.*

How do PFAS Levels in Bay Area Biosolids Compared to Regulatory Thresholds?

PFAS is a potential concern for biosolids end uses, particularly land application or other uses where PFAs could migrate to food crops or drinking water. There are currently no federal or state standards for PFAS in biosolids. However, several other states have established "action levels" for biosolids that may be "industrially impacted." When PFOA or PFOS concentrations in biosolids exceed the action level of 20 ng/g (µg/kg or ppb), utilities in Michigan[i] and New York[j] are subject to restrictions on biosolids recycling. In the BACWA study, the only biosolids samples that exceeded these thresholds were from agencies that have exceptionally long storage times in lagoons and storage beds, allowing PFAS to become more concentrated on a dry weight basis. Bay Area biosolids do not appear to be "industrially impacted."

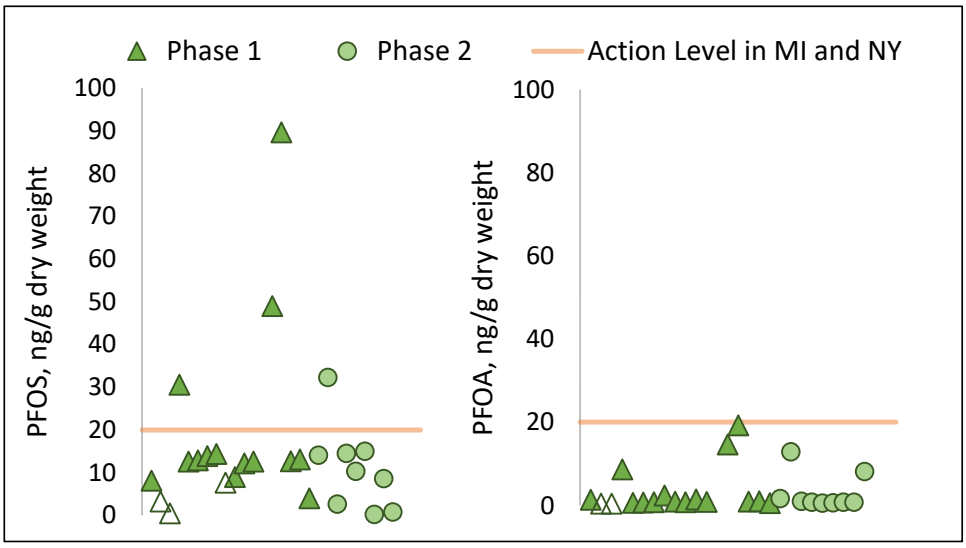


Figure 3. *Phase 1 and 2 biosolids concentrations of PFOA and PFOS (ng/g dry weight) compared to action levels in Michigan and New York. Filled shapes indicate detected values. Unfilled shapes indicate non-detects.*

Where is PFAS in Bay Area Wastewater Coming From?

To identify potential sources of PFAS, Phase 2 of the BACWA study focused on sampling in residential areas and at commercial and industrial facilities. Samples were collected from residential areas (n=14), industrial laundries (n=5), hospitals (n=4), facilities with chrome plating onsite (n=3), semiconductor manufacturing (n=2), car washes (n=3), a military site, and a pulp paperboard manufacturing facility. Results of this collection system monitoring are shown in **Figure 4** and indicate that:

- **Residential Signal.** Residential samples showed a large range of total PFAS concentrations. The median sum of TOP and target analytes were only slightly lower than those found in plant influent.
- **Industrial Laundries as a potential source.** Concentrations of total PFAS measured as TOP was significantly higher than

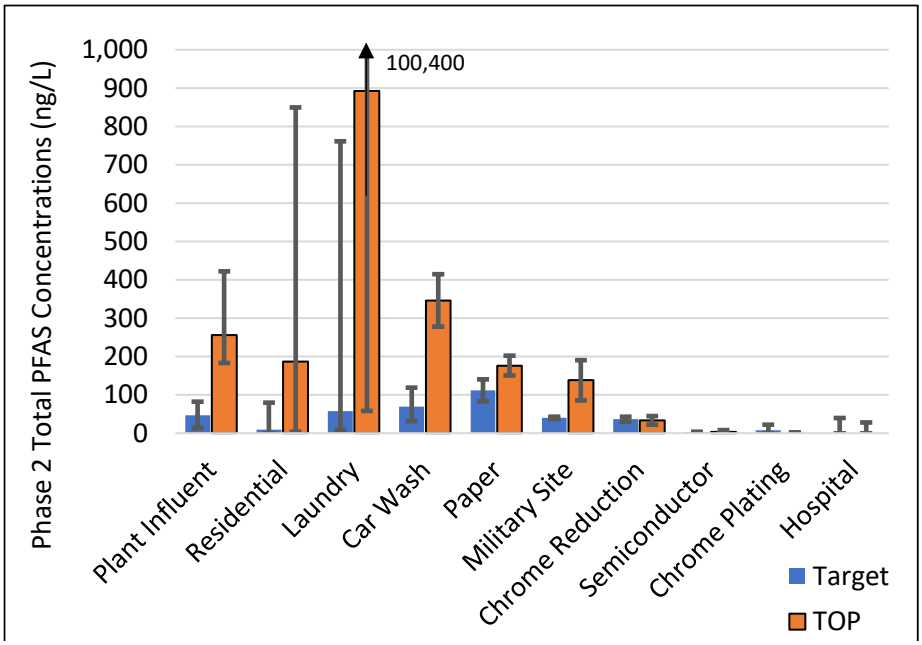


Figure 4. *Comparison of Phase 2 plant influent results with residential, commercial, and industrial wastewater (ng/L). Total PFAS is based on a sum of targeted analysis of 40 compounds("Target") and Total Oxidizable Precursor analysis ("TOP"). The height of each bar chart indicates the median, while the error bars show the minimum and maximum.*

median influent concentrations at several (but not all) industrial laundries. These facilities typically launder uniforms, linens, floor mats, and similar items. Some laundered textiles could contain intentionally added PFAS (e.g., for stain resistance)

- **Car Washes as a potential source.** Car washes showed total PFAS measured as TOP at moderately higher concentrations than plant influent. Unlike industrial laundries, however, there were not any extremely high values at the car washes.

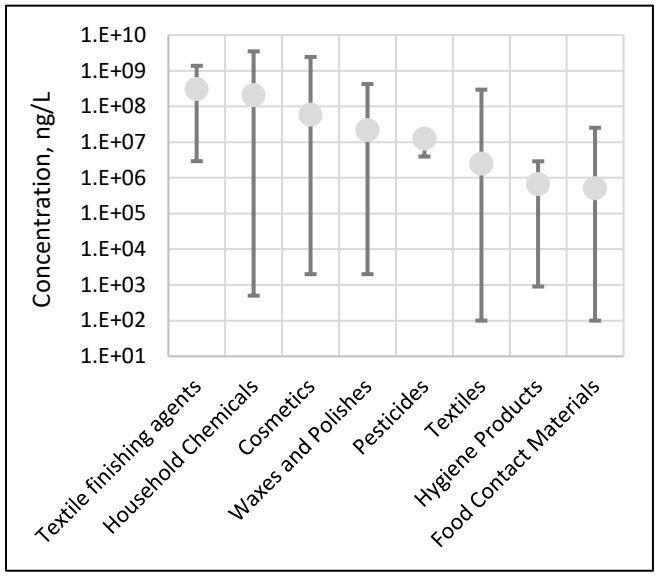


Figure 5. *PFAS concentrations in select categories of consumer products. Figure adapted from Dewapriya et al., 2023[a]. The round marker indicates the average, while the error bars show the minimum and maximum values.*

At most Bay Area treatment plants, more than 95% of flows are from residential and commercial customers. Phase 2 results indicate that residential areas are contributing PFAS at concentrations similar to plant influent, which means that residential users are likely the dominant source of PFAS to many treatment facilities. PFAS is found in many consumer products, including textiles, household chemicals, cosmetics, and food packaging, at concentrations several orders of magnitude higher than those found in this study, as shown below in **Figure 5**. This source of PFAS can only be controlled by removing or reducing the amount of PFAS found in consumer products.

What is BACWA Doing Next?

BACWA and its members plan to continue working with SFEI, the Water Board, and the California Department of Toxic Substances Control to identify consumer products with PFAS that have a potential nexus to wastewater, stormwater, and surface waters like San Francisco Bay. BACWA and its members are particularly interested in developing actionable data that will inform future source control or other management efforts. To this end, analysis will likely continue to focus on identifying controllable sources within sewer service areas.

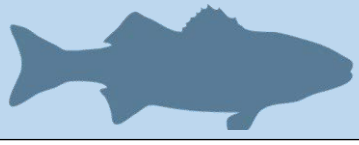
Where Can I Find More Information?

References are listed on the next page.

PFAS IN THE BAY

Through the Regional Monitoring Program, SFEI scientists are monitoring PFAS in San Francisco Bay water, sediment, and sport fish. PFOS is the predominant compound in sport fish, and fish caught in the South Bay have the highest concentrations.

As part of its PFAS Strategic Roadmap, USEPA is planning to publish water quality criteria based on fish consumption in Fall 2024. In the future, the levels of PFAS in sport fish may cause San Francisco Bay to be listed as an impaired water body per section 303(d) of the federal Clean Water Act.



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

[b] Study of PFAS in Bay Area POTWs: Phase 1 Sampling and Analysis Plan: https://bacwa.org/wp-content/uploads/2020/12/SFEI-Final-PFAS-SAP-Phase-1-2020-11-23.pdf

[c] Study of PFAS in Bay Area POTWs: Phase 2 Sampling and Analysis Plan: https://bacwa.org/wp-content/uploads/2022/03/Final-PFAS-Phase-2-SAP-2022-03-28.pdf

[d] Study of PFAS in Bay Area POTWs, Phase 1 Memo: https://bacwa.org/wp-content/uploads/2023/03/Memo_BACWA-PFAS-Phase-1.pdf

[e] Lin, D. and Fono, L. Investigation of PFAS Sources to Municipal Wastewater. Presentation to 2023 Regional Monitoring Program Annual Meeting, October 2023. Video and slides available at https://www.sfei.org/projects/rmp-annual-meeting

[f] Aflaki, R. "What can we learn from the GeoTracker PFAS data?" Presentation to CASA; Available at https://casaweb.org/wp-content/uploads/2023/10/Aflaki-Roshan.pdf

[g] SWRCB. "PFAS Regulations for California Drinking Water." Available at https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/pfas.html

[h] USEPA. Proposed PFAS National Drinking Water Regulation. Available at https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas

[i] Michigan Department of Environment, Great Lakes, and Energy. "Interim Strategy – Land Application of Biosolids Containing PFAS (2024)." Available at https://www.michigan.gov/egle/about/organization/water-resources/biosolids/pfas-related

[j] New York State Department of Environmental Conservation. "Biosolids Recycling in New York State – Interim Strategy for the Control of PFAS Compounds." September 7, 2023. Available at https://extapps.dec.ny.gov/docs/materials_minerals_pdf/dmm7.pdf

BACWA
BAY AREA
CLEAN WATER
AGENCIES

January 15, 2024

Eileen White, Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, 14th Floor
Oakland, CA 94612

VIA EMAIL: Eileen.White@Waterboards.ca.gov

Subject: NPDES Permit Requirements for Receiving Water Quality Monitoring, TMDL/SSO Support, Mercury and PCBs Watershed Permit Support, and Implementation of Copper Action Plans

Dear Eileen White:

I am writing on behalf of the Bay Area Clean Water Agencies (BACWA) and its members that own and operate publicly-owned treatment works (POTWs) and that have National Pollutant Discharge Elimination System (NPDES) permits to discharge to San Francisco Bay Area waters. The NPDES permits issued to these agencies impose some requirements that are most efficiently fulfilled as a group. The purpose of this letter is to report on behalf of BACWA members that those requirements are being met, including permit provisions related to: (A) Receiving Water Quality Monitoring; (B) Support for the RMP for supplemental monitoring of constituents of emerging concern; (C) Mercury and PCBs Watershed Permit Support; (D) Cyanide Action Plan; (E) Copper Action Plan; (F) Nutrient Watershed Permit Support; and (G) Total Maximum Daily Load Support.

A. Receiving Water Quality Monitoring

Various NPDES permits require that the permittees support the Regional Monitoring Program for Water Quality in the San Francisco Estuary (RMP), administered by the San Francisco Estuary Institute (SFEI), and established by San Francisco Bay Regional Water Quality Control Board (Regional Water Board) Resolution 92-043, adopted April 15, 1992. BACWA members have and continue to fulfill this requirement by participating in and providing funding to the RMP. A letter from SFEI, dated January 5, 2024, confirming BACWA member agencies' contributions to the RMP, is attached for reference.

B. Support for Monitoring of Constituents of Emerging Concern

Individual NPDES permits as issued or as amended by Order No. R2-2021-0028 require POTWs to provide supplemental funding to the RMP to support additional studies for constituents of emerging concern. POTWs that made supplemental contributions to the RMP per this requirement are listed in the attached January 5, 2024 letter from SFEI.

In addition to the special studies supported by these supplemental funds (listed below), the priorities of the RMP have been migrating away from legacy contaminants in favor of CECs. The RMP will continue to evaluate the status of legacy contaminants in all matrices, and CECs are being added based on the results of an extensive review of the RMP's Status and Trends (S&T) Program. As of 2023, the following

CECs have been added to the S&T Program: PFAS (water, sediment, prey fish, sport fish, bird eggs, marine mammals), bisphenols (water, sediment), and organophosphate esters (water).

Supplemental fees fully or partially funded the following projects in 2023 (dollar amounts were budgeted for 2023):

- Ethoxylated Surfactants in Bay Water, Margin Sediment, and Wastewater, Part 2 (Year 2 of 2; $30k)
- Tire and roadway contaminants in wet season Bay Water (Year 1 of 2; $40k)
- Groundwork for monitoring of CECs in stormwater ($250k)
- PFAS in archived sport fish ($9.6k)

Reports on emerging and legacy contaminants published in 2023:

- San Francisco Estuary Institute (SFEI). *2023 RMP Update*. San Francisco Estuary Institute: Richmond, California, 2023. SFEI Contribution No. 1148. https://www.sfei.org/documents/2023-rmp-update
- Lindborg, A.R., et al. Assessment of Long-Chain Polyethoxylate Surfactants in Wastewater Effluent, Stormwater Runoff, and Ambient Water of San Francisco Bay, CA. SFEI Contribution No. 1126. A*CS EST Water,* 2023, 3, 4, 1233–1242. https://doi.org/10.1021/acsestwater.3c00024
- Méndez, M., et al. *Concentrations of Select Commonly Used Organic UV Filters in San Francisco Bay Wastewater Effluent*. San Francisco Estuary Institute: Richmond, California, 2023. SFEI Contribution No. 1111. https://www.sfei.org/documents/concentrations-select-commonly-used-organic-uv-filters-san-francisco-bay-wastewater
- Vuckovic D., et al. Pharmaceuticals, pesticides, and ultraviolet filters in wastewater discharges to San Francisco Bay as drivers of ecotoxicity. SFEI Contribution No. 1153. *Environmental Pollution,* Volume 336, November 2023, 122432. https://doi.org/10.1016/j.envpol.2023.122432
- Arnold, W.A., et al. Quaternary Ammonium Compounds: A Chemical Class of Emerging Concern. *Environmental Science & Technology*, 57, 20, 7645-7665. https://doi.org/10.1021/acs.est.2c08244
- Moran, K., et al. *Tire Wear: Emissions Estimates and Market Insights to Inform Monitoring Design*. San Francisco Estuary Institute: Richmond, California, 2023. SFEI Contribution No. 1109. https://www.sfei.org/documents/tire-wear-emissions-estimates-and-market-insights-inform-monitoring-design
- Lin, D, et al. Triclosan and Methyl Triclosan in Prey Fish in a Wastewater-influenced Estuary. SFEI Contribution No. 1112. *Environmental Toxicology and Chemistry*, March 2023, 42, 3, 620-627. https://doi.org/10.1002/etc.5557

C. Mercury and PCBs Watershed Permit Support

The Mercury and PCBs Watershed Permit (NPDES No. CA 0038849) was reissued as Order No. R2-2017-0041 effective January 1, 2018, then subsequently reissued as Order No. R2-2022-0038 with an effective date of February 1, 2023. Both the 2018 and 2023 versions of the Mercury/PCB Watershed Permit require source control and risk reduction activities by permittees. Risk reduction activities for both permit terms are covered in this section.

In 2023, BACWA's Bay Area Pollution Prevention Group (BAPPG) continued to reach out to dental assistant and dental hygienist students to educate them about proper amalgam management and disposal. This campaign reached approximately 170 students and instructors through six in-person visits to the following institutions:

- San José City College (two visits)

- Foothill College, Los Altos
- Santa Rosa Junior College
- College of Marin, Novato
- City College of San Francisco

The instructors have come to rely on these annual visits and have incorporated BAPPG's program into their instructional calendar. Further, this is a relevant audience for other messages, such as wipes, microplastics, and flea control.

The Mercury and PCB Watershed permit requires that permittees conduct or participate in programs to reduce mercury-related risks to humans from the consumption of Bay fish. For the 2018 permit, BACWA provided two $25,000 grants for risk reduction activities related to fish consumption in vulnerable populations. APA Family Support Services completed work related to the grant in 2019 and California Indian Environmental Alliance completed their work in 2023. In August 2023, both APA Family Support Services and the California Indian Environmental Alliance provided presentations to Regional Water Board staff summarizing these efforts. Materials generated with support from BACWA's grants are available on BACWA's website at https://bacwa.org/mercurypcb-risk-reduction-materials/.

Throughout 2023, BACWA conducted planning activities for risk reduction work to be conducted for the 2023 Mercury and PCB Watershed permit. BACWA is exploring opportunities to fund public outreach or data collection activities related to the development of subsistence fishing water quality objectives for San Francisco Bay. BACWA is also exploring opportunities related to the Water Board's Bioaccumulation Monitoring Program Realignment in the San Francisco Bay region, which is scheduled for 2024-2026. Either of these efforts would involve coordination with Regional Water Board staff and community-based organizations with a focus risk reduction related to fish consumption.

In 2023, the RMP status & trends workgroup also conducted fish tissue sampling for PCBs in San Leandro Bay. Meanwhile, the RMP sediment workgroup continued efforts to develop an in-Bay fate model for PCBs and other contaminants. The project is the latest extension of a phased, multi-year effort to develop a Watershed Dynamic Model (WDM), including both hydrology and sediment transport modules. In 2023, the modeling effort focused on PCBs in San Leandro Bay. A report on results for San Leandro Bay will be available in 2024.

- McKee, L.; Peterson, D.; Braud, A.; Foley, M.; Dusterhoff, S.; Lowe, J.; King, A.; and Davis, J. *San Francisco Bay Sediment Modeling and Monitoring Workplan.* SFEI Contribution No. 1100. San Francisco Estuary Institute: Richmond, California, 2023. https://www.sfei.org/documents/san-francisco-bay-sediment-modeling-and-monitoring-workplan

D. Cyanide Action Plan

As part of the site-specific objective (SSO) for cyanide, NPDES dischargers are required to calculate the 3-event rolling average of total cyanide concentrations in each segment of the Bay, based on RMP data. In 2023, RMP scientists tabulated results from the cyanide sampling completed during the 2021 water cruise. The results were published in early 2024:

- Trinh, M. *2021 Update to Cyanide Rolling Averages.* San Francisco Estuary Institute: Richmond, California, 2024. https://www.sfei.org/documents/2021-update-cyanide-rolling-averages

The 2021 sample results indicate that ambient cyanide concentrations continue to be below the trigger level of 1.0 µg/L in all five segments of the Bay. The most recent round of sampling occurred in summer 2023, and results will be tabulated in 2024.

E. Copper Action Plan

The copper action plan contained in many Bay Area POTW permits requires permittees to implement a plan to reduce copper discharges, conduct studies to reduce copper pollutant impact uncertainties, and implement additional measures should the three-year rolling mean in various parts of the Bay exceed site-specific concentration triggers. In 2023, RMP scientists tabulated results from the copper sampling completed during the 2021 water cruise. The results were published in early 2024:

- Trinh, M. *2021 Update to Copper Rolling Average.* San Francisco Estuary Institute: Richmond, California, 2024. https://www.sfei.org/documents/2021-copper-rolling-averages

Results indicate that ambient copper concentrations are below the respective trigger levels for all five segments of the Bay. The most recent round of sampling occurred in summer 2023, and results will be tabulated in 2024.

The BAPPG-hosted website Baywise.org contains resources for plumbers that focus on the key messages pertaining to copper control: use of ASTM B813 flux, and other best management practices to reduce pipe corrosion. Outreach materials are available at https://baywise.org/business/plumbing-resources.

F. Nutrient Watershed Permit Compliance

The 2nd Nutrient Watershed Permit (NPDES No. CA0038873) was adopted on May 8, 2019 as Order No. R2-2019-0017, with an effective date of July 1, 2019. Through the nutrient surcharge levied on permittees, BACWA is funding compliance with the following provisions of the Nutrient Watershed Permit on behalf of its members:

- Group Annual Reporting – BACWA submitted the eighth Group Annual Report on February 1, 2023 on behalf of all the permittees under the Nutrient Watershed Permit. The next Group Annual Report will be submitted by the February 1, 2024 deadline. The 2023 Group Annual Report is available at https://bacwa.org/document/bacwa-group-nutrient-annual-report-02-01-23/.

- Nutrient Reduction by Recycled Water and Nature Based Systems Special Studies – Final reports for each of these special studies were submitted by the July 1, 2023 due date and are listed below:
    - *Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling*. June 2023. Prepared for BACWA by HDR and Woodard & Curran. Available at https://bacwa.org/wp-content/uploads/2023/06/BACWA_RW_Final_Report_20230628A_withAppendices.pdf
    - *Nature-Based Solutions for Nutrient Removal – Opportunities and Constraints Analysis*, June 2023. Phase 1 Study prepared for BACWA by SFEI. Available at https://bacwa.org/document/phase-1-nbs-opportunities-and-constraints-analysis/
    - *Nature-Based Solutions for Nutrient Removal – Phase II Site Evaluations*, June 2023. Prepared for BACWA by SFEI. Available at https://bacwa.org/document/phase-2-nbs-site-evaluations/

- Support of scientific studies as part of the Nutrient Management Strategy (NMS) – BACWA is providing a total of $1,800,000 to SFEI in Fiscal Year 2024, as required by the Permit.

- An update on the science plan reflecting the 2023 calendar year will be submitted by the February 1, 2024 deadline.

The current Watershed Permit will expire on June 30, 2024, and it is anticipated that BACWA will continue to fund compliance with the reissued permit.

G. Total Maximum Daily Load Support

Some POTW permits previously included a requirement that permittees report to the Regional Water Board any actions taken in support of Total Maximum Daily Loads (TMDLs) for 303(d) listed pollutants. Support for these efforts has been provided largely through support of the RMP.

In 2014, the RMP convened a Selenium Strategy Team and developed a Selenium Strategy in the Multi-Year Plan. In 2023, the RMP conducted the following activities implementing the Strategy:

- Continued implementation of the Selenium Strategy to track the implementation of the North Bay Selenium TMDL.
- Continued the monitoring program for selenium in clams and water to support the North Bay selenium TMDL. Sampling typically occurs every 2 years and last occurred in 2022. Sampling for selenium will be paused in 2024 for a review of the data collected through 2022. Sampling is expected to resume in 2025.

Please contact me if you have any questions about the information contained in this letter.

Respectfully Submitted,

Lorien Fono, Ph.D., P.E.
Executive Director
Bay Area Clean Water Agencies

Encl: SFEI Letter regarding RMP Participation, January 5, 2024

cc: Thomas Mumley, Assistant Executive Officer, Regional Water Board
Bill Johnson, Chief, NPDES Wastewater and Enforcement Division, Regional Water Board
Xavier Fernandez, Chief, Planning and TMDL Division, Regional Water Board
BACWA Executive Board
Amanda Roa, BACWA Permits Committee Chair

SFEI AQUATIC SCIENCE CENTER
4911 Central Ave, Richmond, CA 94804, p: (510) 746-7334, f: (510) 746-7300 www.sfei.org

January 5, 2024

Lorien Fono
Executive Director
Bay Area Clean Water Agencies
PO Box 24055, MS 702
Oakland, CA 94623

Dear Dr. Fono,

The Regional Monitoring Program for Water Quality in San Francisco Bay (RMP) is the only comprehensive environmental monitoring program to measure pollutants and trends in the Bay. The RMP, which began in 1993, is a successful partnership of scientists, government, municipalities, and industry to understand and improve the health of the Bay.

The goal of the RMP is to collect data and communicate information about water quality in the San Francisco Estuary in support of management decisions. The accomplishments of the RMP are summarized in the RMP Update and the Pulse. The RMP Update was published in October 2023. Current and past Pulses can be downloaded here; RMP Updates can be found here.

In 2023, 35 wastewater treatment facilities collectively contributed the full amount of the core RMP program costs assigned to publicly owned treatment works ($1,848,292; see Table 1 for a complete list of agencies). The process used to determine the core fees for each participant group are outlined in the Program Charter: http://www.sfei.org/documents/charter-regional-monitoring-program-water-quality-san-francisco-bay.

In December 2021, the Water Board adopted Order R2-2021-0028, which requires publicly owned treatment works to provide supplemental funding to the RMP to support additional studies for constituents of emerging concern. In 2023, 35 wastewater treatment facilities made supplemental contributions to the Program under Order R2-2021-0028 and similar requirements found in reissued individual NPDES permits ($330,094 see Table 1).

Your support is essential to the RMP. Through these financial contributions, the RMP is able to conduct regional monitoring to assess the cumulative impact of multiple sources of pollutants to the Bay, including the growing number of emerging contaminants that are a concern. We thank you and your members for the support and look forward to serving you in 2024.

Sincerely,

Amy E Kleckner

Amy Kleckner
RMP Manager

Table 1

Wastewater Treatment Facilities Contributing to the RMP in 2023 and AMR in FY23

POTW Dischargers	Core RMP Fees	AMR Order Fees
American Canyon, City of	YES	YES
Benicia, City of	YES	YES
Burlingame, City of	YES	YES
Calistoga, City of	YES	YES
Central Contra Costa Sanitary District	YES	YES
Central Marin Sanitation Agency	YES	YES
Crockett Community Services District, Port Costa Sanitary Department	NO	(1)
Delta Diablo	YES	YES
East Bay Dischargers Authority	YES	YES
East Bay Municipal Utilities District	YES	YES
Fairfield-Suisun Sewer District	YES	YES
Las Gallinas Valley Sanitary District	YES	YES
Marin County (Paradise Cove), Sanitary District No. 5 of	NO	(1)
Marin County (Tiburon), Sanitary District No. 5 of	YES	YES
Millbrae, City of	YES	YES
Mountain View Sanitary District	YES	YES
Napa Sanitation District	YES	YES
Novato Sanitary District	YES	YES
Palo Alto, City of	YES	YES
Petaluma, City of	YES	YES
Pinole/Hercules, City of	YES	YES
Rodeo Sanitary District	YES	YES
San Francisco, City and County Of, San Francisco International Airport	YES	YES
San Francisco (Southeast Plant), City and County of	YES	YES
San José-Santa Clara Regional Wastewater Facility	YES	YES
San Mateo, City of	YES	YES
Sausalito - Marin City Sanitary District	YES	YES
Sewerage Agency of Southern Marin	YES	YES
Silicon Valley Clean Water	YES	YES
Sonoma Valley County Sanitary District	YES	YES
South San Francisco and San Bruno, Cities of	YES	YES
St. Helena, City of	YES	YES
Sunnyvale, City of	YES	YES
US Navy (Treasure Island)	YES	YES
Vallejo Flood and Wastewater District	YES	YES
West County Wastewater District	YES	YES
Yountville, Town of	YES	YES

(1) This facility is listed in the 2021 Order requiring supplemental funding of CEC monitoring, but its requested contribution was $0 due to the agency's small size.

Executive Board Special Meeting Agenda

SF Bay Regional Water Board /
BACWA Executive Board Joint Meeting
Tuesday, January 30, 2024, 9 AM – 11 AM
Regional Water Board Offices - 1515 Clay St., Oakland
[Insert Room # and Virtual Meeting Information when Available]

ROLL CALL AND INTRODUCTIONS – 9 a.m.

PUBLIC COMMENT – 9:05 a.m.

DISCUSSION/OTHER BUSINESS- 9:10 a.m.

Topic	Goal	Time
1. Agency Updates	• Roundtable from BACWA and Water Board	9:10
2. PFAS	• Update on BACWA's PFAS Regional Study • Other regulatory and legislative updates	9:20
3. Sea Level Rise	• BCDC Regional Shoreline Adaptation Plan Update • BACWA Climate Change Community of Practice	9:25
4. Hg / PCB Risk Reduction	• BACWA Planning for Support of Risk Reduction Activities o Bioaccumulation Monitoring Program Realignment o Survey Support for Subsistence Fishing Beneficial Use	9:30
5. Nutrients	• Review of Group Annual Report • Water Board and BACWA updates on planning for 3rd Watershed Permit, including: • Final Limits • Support for Early Actors and Multi-Benefit Projects • Timing for review of draft permit materials • What does the Water Board need from BACWA to write the permit?	9:40
6. Upcoming Events	• 2024 BACWA Annual Members Meeting – May 3, 2024 • 2024 Pardee Technical Seminar – Sept 6 (moved from Sep 13)	10:50

ADJOURNMENT

DRAFT
EPA REGION 9 SAN FRANCISCO BAY PROGRAM OFFICE
FY24 ANNUAL PRIORITY LIST

- In December of 2022, the Fiscal Year 2023 National Defense Authorization Act (NDAA) was signed into law and authorized the establishment of San Francisco Bay Program Office, specifically with this language:

(1) Establishment

The Administrator shall establish in the Environmental Protection Agency a San Francisco Bay Program Office. The Office shall be located at the headquarters of Region 9 of the Environmental Protection Agency.

- The authorizing language in the NDAA set out certain expectations for the Program Office including an annual priority list to direct funding towards:

The annual priority list shall include the following:

(A) Projects, activities, and studies, including restoration projects and habitat improvement for fish, waterfowl, and wildlife, that advance the goals and objectives of the San Francisco Bay Plan, for-

(i) water quality improvement, including the reduction of marine litter;
(ii) wetland, riverine, and estuary restoration and protection;
(iii) nearshore and endangered species recovery; and
(iv) adaptation to climate change.

And consult with and consider the recommendations of-

(A) the Estuary Partnership;
(B) the State of California and affected local governments in the San Francisco Bay estuary watershed;
(C) the San Francisco Bay Restoration Authority; and
(D) other relevant stakeholder involved with the protection and restoration of the San Francisco Bay estuary.

- EPA has developed this list to reflect mutual priorities identified in the CCMP, the Water Board's Basin Plan, the Restoration Authority's stated objectives, and Implementation Plan of the San Francisco Bay Joint Venture.

Priority Projects, Activities and Studies Needed to Restore San Francisco Bay and Build Its Climate Resilience

Project/Activity/Study	**Link to CCMP**
Wetlands Regional Monitoring Program	Action 8: Implementing a Wetlands Regional Monitoring Program Action 10: Protect, restore, and enhance tidal marsh habitat
Beneficial Reuse of Dredged Material Support	Action 6: Manage sediment and soil on a regional scale and advance beneficial use.
Nutrient Management Strategy	Action 20: Advance nutrient management in the Estuary.
Subtidal habitat, eelgrass and oyster reef restoration	Action 4: Implement climate adaptation projects that prioritize natural and nature-based strategies. Action 9: Protect, restore, and enhance intertidal and subtidal habitats.
BRRIT	Action 3: Overcome challenges to accelerate implementation of climate adaptation projects that prioritize natural and nature-based strategies.

	Action 9: Protect, restore, and enhance intertidal and subtidal habitats.
Large scale tidal wetlands restoration	Action 4: Implement climate adaptation projects that prioritize natural and nature-based strategies. Action 7: Decrease carbon emissions and subsidence in the Delta and increase carbon sequestration on natural and agricultural lands. Action 12: Maximize habitat benefits of managed ponds and other non-tidal wetlands and waters.
In-Bay Monitoring of Pollutants, including trash, and Algal Species under the Regional Monitoring Program	Action 20: Advance nutrient management in the Estuary. Action 21: Address emerging contaminants in the Estuary's waters.
Large scale shoreline resilience, multi-benefit projects	Action 1: Plan for increased climate resilience that incorporates natural resource protection. Action 4: Implement climate adaptation projects that prioritize natural and nature-based strategies.
Large scale implementation of urban green stormwater infrastructure	Action 19: Manage stormwater with low impact development and green stormwater infrastructure. Action 23: Reduce trash and marine debris in the Estuary
Special studies/projects for addressing PFAS in SF Bay	Action 21: Address emerging contaminants in the Estuary’s waters. Action 22: Reduce human health risks due to legacy contaminants and contaminants in fish.
Special studies/projects for addressing PCBs under TMDL implementation plan	Action 22: Reduce human health risks due to legacy contaminants and contaminants in fish.

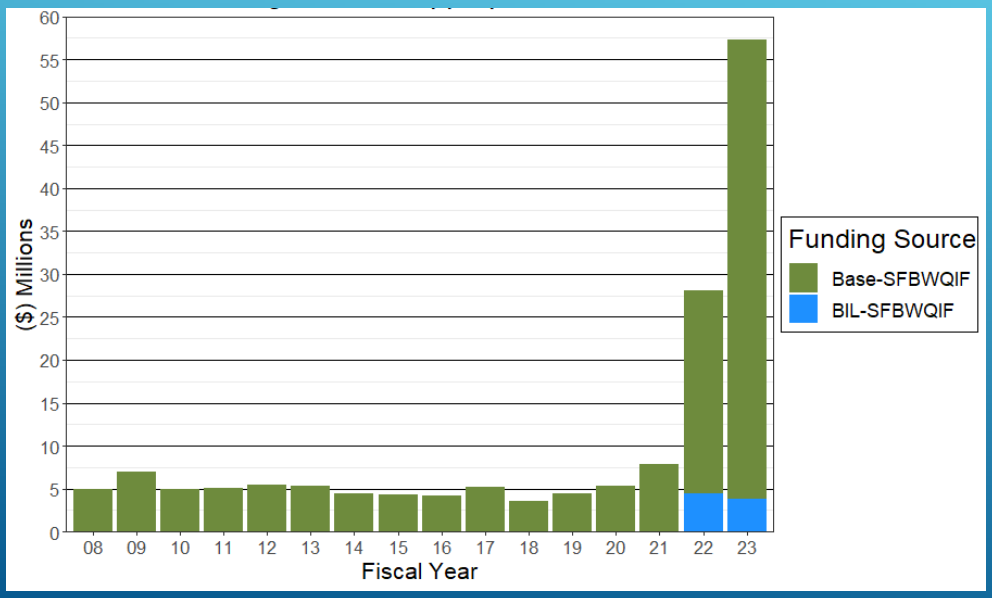
SAN FRANCISCO BAY PROGRAM OFFICE
Fiscal Year 2024 Draft Annual Priority List
US EPA Region 9

- BACWA Meeting
- January 19, 2024
- Luisa Valiela, valiela.luisa@epa.gov

Timeline Leading to Priority List

- National Defense Authorization Act (NDAA) passed Dec. 2022
- NDAA is legislation that included authorization for a new San Francisco Bay Program Office at EPA R9
  - Legislative language also included direction to EPA to create an Annual Priority List which identifies needed projects and studies
  - In creating the list, EPA should consider recommendations from:
    - SFEP, SF Water Board, SFBRA, other stakeholders

Congressional Appropriations to Date



EPA Region 9
San Francisco Bay Program Office
FY24 Draft Annual Priority List

- Subtidal eelgrass and oyster reef restoration
- Wetlands Regional Monitoring Program
- Beneficial Reuse of Dredged Material Support
- In-Bay Monitoring of Pollutants, including trash, and algal species under the Regional Monitoring Program
- Large scale shoreline resilience, multi-benefit projects including horizontal levees and wastewater treatment/reuse
- Nutrient Management Strategy
- Special studies/projects for addressing PFAS in SF Bay
- Large scale tidal wetlands restoration
- Special studies/projects for addressing PCBs under TMDL implementation plan
- Large scale implementation of urban green stormwater infrastructure
- BRRIT (Bay Restoration Regulatory Integration Team)

What We are Asking of You

- Feedback on the draft Annual Priority List
- Any suggestions for other venues/stakeholders to present list to this year or in future years
- Recommendations for regular updates on funding allocations to priorities

Next Steps

- Present at other stakeholder meetings
- Finalize list in Winter/Spring 2024
- Summer 2024 begin putting in place grants to recipients that address priorities

BACWA
BAY AREA
CLEAN WATER
AGENCIES

Arleen Navarret Leadership Award

Nominee:
Name: _____ *E-mail:* _____

Nominator:
Name: _____ *E-mail:* _____

Agency: _____ *Phone:* _____

What is it?

This award of $2,500 was created in honor of Arleen Navarret and her dedication to improving the health of the San Francisco Bay. Arleen spent nearly 30 years with the San Francisco Public Utilities Commission and provided leadership to BACWA and Tri-TAC boards and committees. Her combination of technical and regulatory expertise and interpersonal skills has been invaluable to BACWA. Her development of effective relationships with regulators and community-based non-profits has resulted in the development of more thoughtful and effective water quality regulations. This is a biennial award honoring emerging leaders in the wastewater community exhibiting characteristics possessed by former BACWA Chair, Arleen Navarret:

- Leadership in the workplace and wastewater community
- Commitment to environmental protection
- Mentorship of and compassion for others
- Technical expertise
- Ability to communicate effectively with a myriad of people
- Exemplary public service.

Who is eligible?

Only current employees of BACWA member agencies are eligible to receive this award.

How to apply

Applicants may nominate themselves, or be nominated by their colleagues. Applications must include:

1. Completed Nomination Form
2. Individual Narrative (in the following format)
    a. nominee name at the top of each page
    b. no more than 2 pages of double-spaced, 12 point font
    c. concise introductory paragraph describing who the individual is and why they are being nominated
    d. subsequent paragraphs that address
        i. specific work or activities of the nominee that meet the one or more of the following criteria for the award: leadership; environmental protection; mentorship; tech expertise; effective communication; public service
        ii. the specific opportunity to which the award could be applied and how it would benefit the awardee in their professional development related to one or more of the following: leadership; environmental protection; tech skills development

Arleen Navarret Leadership Award

e. concluding paragraph describing how this individual has or has the potential to positively impact and contribute to the wastewater community.

Deadline and Selection

Applications are due March 27, 2024 and should be submitted by e-mail as an attachment to jdyment@bacwa.org. The winner will be selected by the Award Committee and the award will be presented to the recipient at the BACWA Annual meeting on May 3, 2024. (Funds may be used for travel, lodging and meals, but not any alcoholic beverages.)

FY2024-25 BACC Update

January 2024

Based on the results of the BACC Annual Chemical Survey we will be preparing the bid documents for the following chemicals:
Aluminum Sulfate
Ammonium Sulfate
Aqueous Ammonia
Citric Acid
Ferric Chloride
Ferrous Chloride
Hydrofluosilicic Acid (Fluoride)
Liquid Chlorine
Sodium Bisulfite
Sodium Hydroxide
Sodium Hypochlorite
Sulfuric Acid

BACC Agencies submitted their Estimated Quantities and Delivery Details spreadsheets. By December 1, 2023.

FY2024-25 BACC Bid Timeline

- ~~Agency FY2024-25 Estimated Quantities, Delivery Details, Contact information due December 1, 2023~~
- ~~Updating database and preparing draft of bid documents. December 2023~~
- **Agencies will review and approve FY2024-25 BACC bid documents late December 2023 until first week or two of January 2024**
- Bids will go live in Planet Bids on January 25, 2024
- Bids will be opened in Planet Bids on February 22, 2024
- Preliminary Bid Results reports will be available for agencies to review February 27, 2024
- Recommendations will be available for agencies to review mid March 2024
- Awards Letters will be issued to vendors late March early April 2024

ANNUAL REPORT to the SOLANO COUNTY BOARD OF SUPERVISORS

LAND APPLICATION of BIOSOLIDS in SOLANO COUNTY

Photo Credit: Bay Area Biosolids Coalition, Robin Scheswohl

BACWA BAY AREA CLEAN WATER AGENCIES

Prepared by the BACWA Biosolids Committee
December 2023

Table of Contents

Introduction

With the 2023 application season recently completed, the Bay Area Clean Water Agencies (BACWA) Biosolids Committee is pleased to present its annual summary report on land application of biosolids in Solano County. BACWA wishes to express its sincere appreciation to the staff of the Environmental Health Services Division of the Department of Resource Management for the continuing support of the biosolids land application program. This program allows for the effective use of biosolids as an agricultural soil amendment in the County. We believe this partnership provides a valuable resource to Solano County agriculture and provides many Bay Area agencies with an opportunity to ensure their biosolids are put to their highest and best use by making a positive impact on the environment.

This report provides information on trends in the use of biosolids resources in California and the Bay Area, an update on regional biosolids programs, and specific information on projects from individual agencies currently applying biosolids in the County. It highlights each agency's compliance with the requirement in Solano County Code, Sec. 25-400[1] that "Class B biosolids may only be land applied provided that the generator of the Class B biosolids is individually or as part of a consortium having a portion of their biosolids produced as Class A Exceptional Quality biosolids, converting biosolids to energy, or otherwise diverting Class B biosolids away from land spreading or landfilling (as waste or as alternative daily cover)."

This report is intended as supplemental information to the report submitted by the County Department of Resource Management staff and by Synagro, a contract hauler and applier of biosolids. It has been prepared for the Solano County Board of Supervisors in response to the Board's request for an annual update on agency activities and progress towards compliance with the goals set forth in County Code, Chapter 25. The affected agencies have coordinated the required reporting through BACWA to produce a single report for the Board.

[1] Source: *Solano County Code.* Available online at https://www.codepublishing.com/CA/SolanoCounty/#!/SolanoCounty2500.html#25-400. Accessed November 28, 2023.

We would like to acknowledge the assistance of your staff in working with BACWA member agencies throughout the year, including Edmond "Trey" Strickland (Program Manager), Jeffrey Bell (Supervisor), Anthony Endow (Senior Inspector), Robert Liu (Civil Engineer), Ashley Feigel (Inspector), and Nailah Souder (Inspector).

Municipal Agencies Applying Biosolids in Solano County

The use of biosolids as an amendment supplies valuable plant nutrients, organic matter, and carbon to soils, enhancing the productivity and financial resilience of local farms. Each agency that applies biosolids must meet strict standards and provides a report annually to the United States Environmental Protection Agency (USEPA) to demonstrate compliance. In 2023, seven Northern California agencies transported biosolids to agricultural land in Solano County through a contract with Synagro:

- City of Calistoga
- Central Marin Sanitation Agency (San Rafael, Ross Valley, Larkspur, Corte Madera)
- Delta Diablo (Antioch, Pittsburg, Bay Point)
- City of Petaluma
- San Francisco Public Utilities Commission, Southeast and Oceanside Water Pollution Control Plants
- Union Sanitary District (Union City, Newark, Fremont)
- Town of Windsor

A total of 2,613 dry tons were land applied on agricultural sites in Solano County in 2023. The portion from each agency is shown below in **Figure 1**.

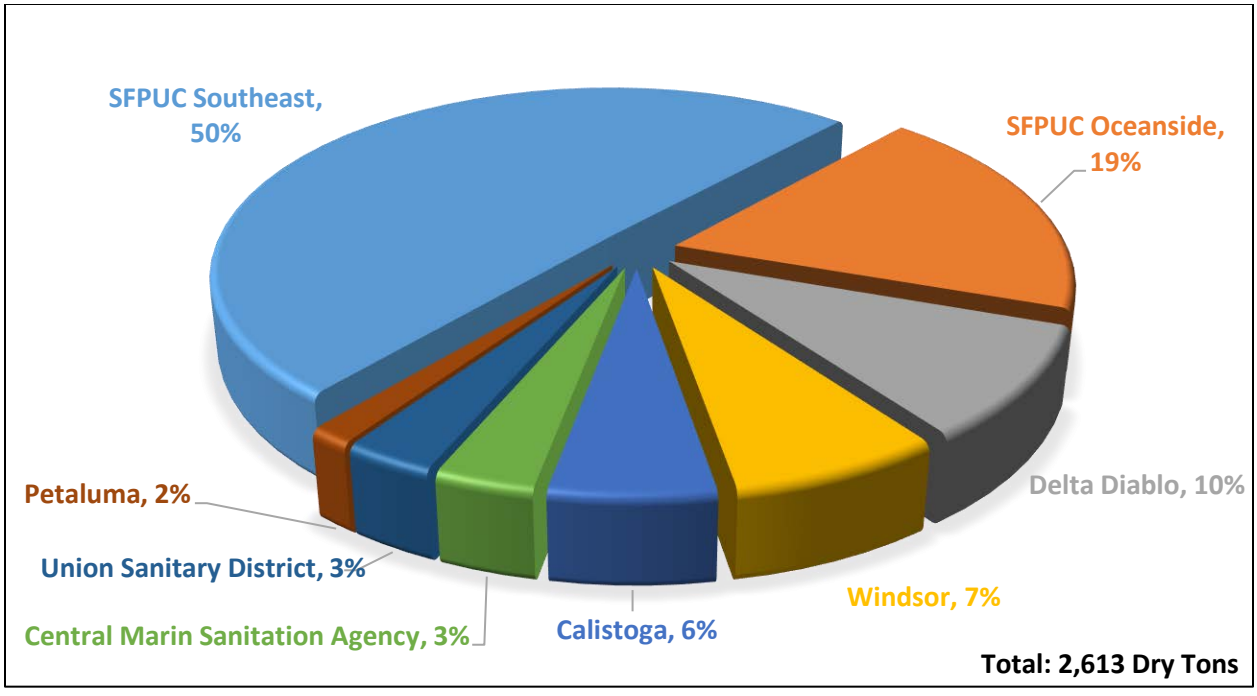


Figure 1. Biosolids (Dry Tons) Land Applied in Solano County by Each Agency, 2023
Data provided by Synagro

The annual quantities of biosolids applied to agricultural land in Solano County since 2011 is shown in **Figure 2**. The quantity of biosolids land applied in Solano County in 2023 was significantly lower than historic levels (about 1/3 of the previous year), in part because some property owners elected against allowing land application on newly acquired properties.

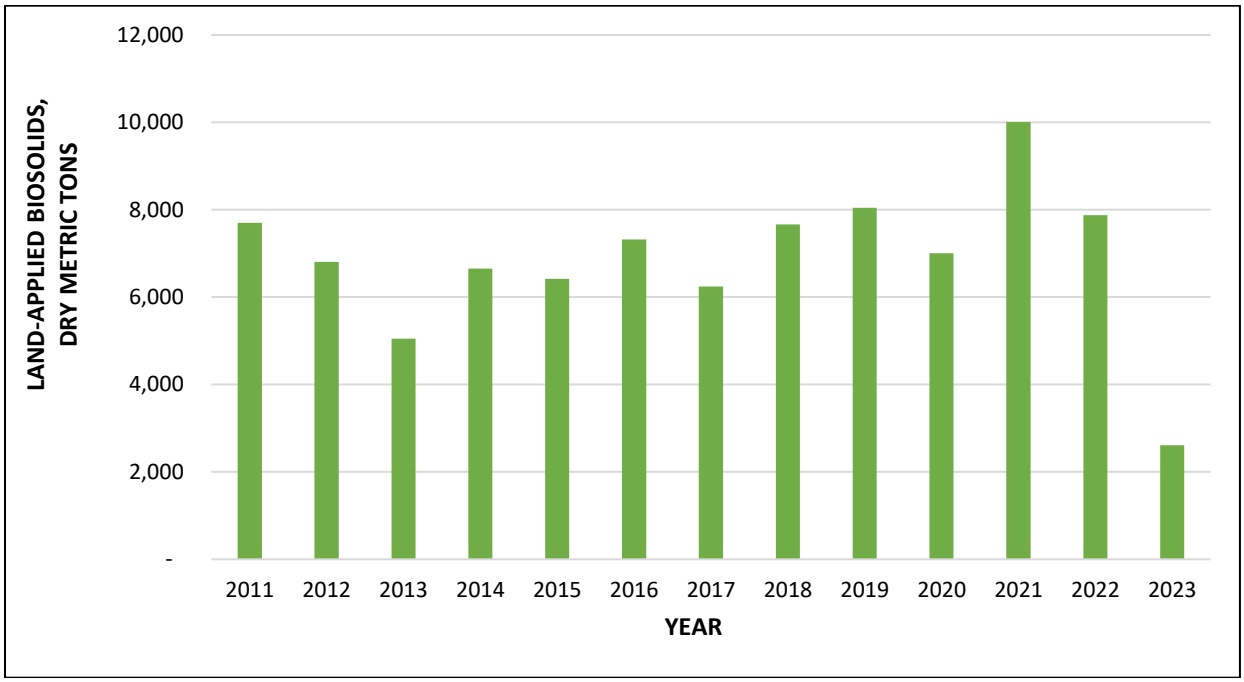


Figure 2. Total Annual Biosolids (Dry Tons) Land Applied in Solano County, 2011-2023
Data provided by Synagro

Trends in Biosolids Usage in California

Wastewater agencies in California are continuing to identify and evaluate new options for biosolids beneficial use and recycling, including emerging technologies as well as established practices such as composting and heat drying.

Overall California Use Summary. The use of biosolids in California for calendar years 2009 through 2022 is summarized in **Figure 3**. Statewide data for 2023 are not yet available and will be included in the 2024 report. The number one use statewide continues to be land application for agriculture in the form of compost, Class B biosolids and Class A biosolids, which together accounted for 59% of biosolids uses in 2022. Biosolids have proven to be a safe, reliable, and nutrient-rich soil amendment that offers a more cost-effective alternative to chemical fertilizers, which are energy intensive and increasingly expensive to produce.

Landfill disposal and the beneficial use of biosolids at landfills (primarily for use as alternative daily cover) are also common management practices for biosolids in California, together accounting for 33% of statewide biosolids use. In recent years, biosolids have also been used for backfilling of the H.M. Holloway gypsum mine in Kern County. In 2022, about 1% of all biosolids generated in California went to this purpose. This use is tracked as "landfill beneficial use" in Figure 3.

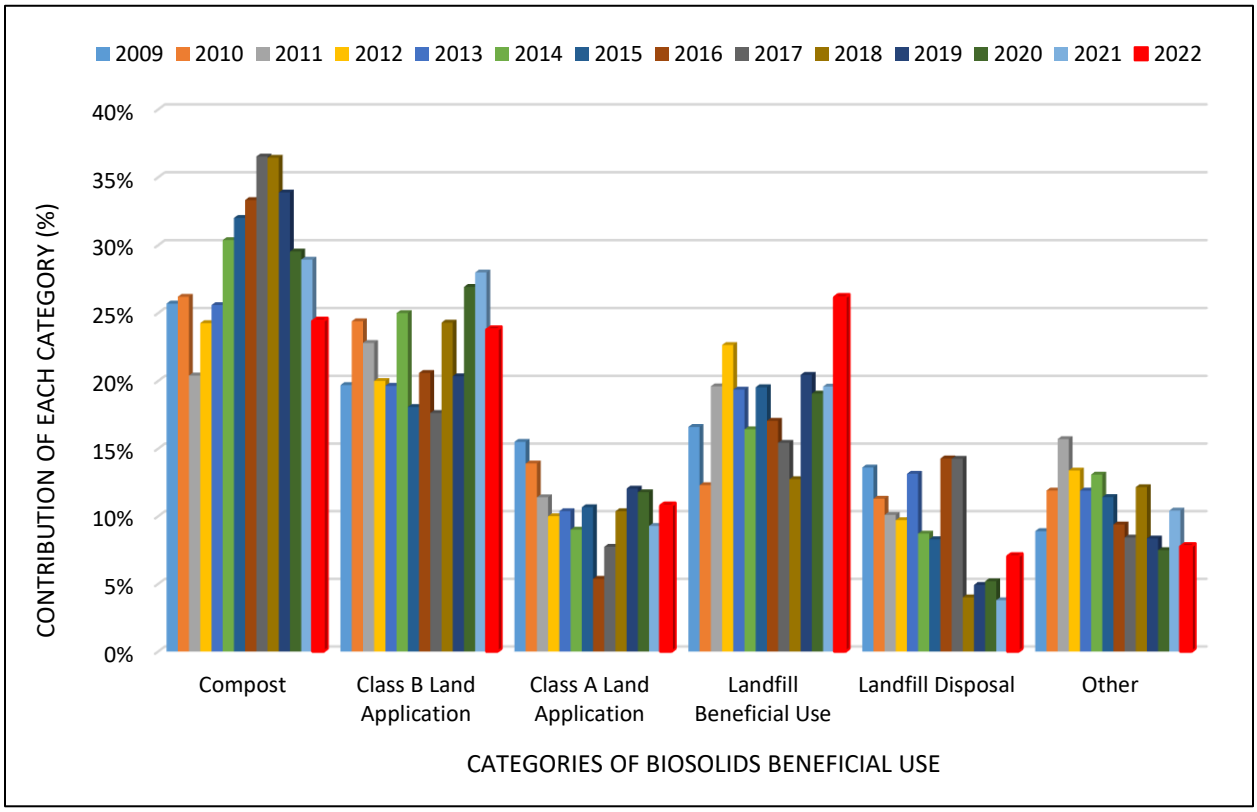


Figure 3. California Trends in Biosolids Uses, 2009-2022
Data provided by USEPA Region 9

Bay Area Trends. Looking solely at the nine-county Bay Area, **Figure 4** illustrates end uses of biosolids in 2022. The primary uses continue to be landfill beneficial use (as alternative daily cover), land application, and incineration, which together account for 84% of biosolids end uses in the Bay Area. Compost (5%) and surface disposal levels (2%) also remained similar to past years.

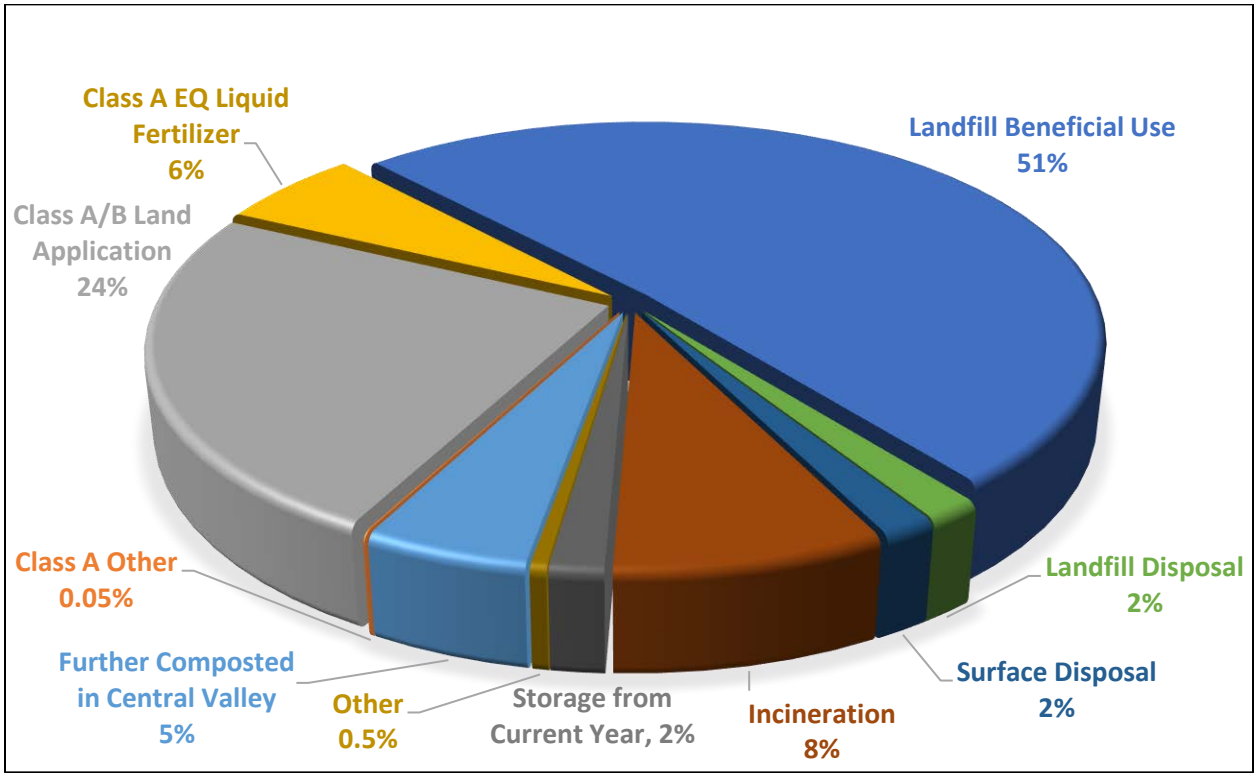


Figure 4. Bay Area Usage of Biosolids, 2022
Data from USEPA Region 9

Tonnage for biosolids conveyed to the Lystek Organic Materials Recovery Center (OMRC) in Fairfield is categorized as Class A liquid fertilizer and represented 6% of biosolids end uses in 2022. The OMRC conducts further biosolids processing by utilizing LysteGro technology to create a Class A product. Lystek's hydrolysis process uses high speed shearing, low pressure steam and alkali addition in an enclosed reactor to transform organic residuals and biosolids into a liquid fertilizer. Lystek's fertilizer program in Solano County began in spring 2017. Thirteen Bay Area agencies and one industrial generator sent material to Lystek in 2023:

- Benicia, City of
- Budweiser Brewery of Fairfield
- Central Marin Sanitation Agency
- Central Contra Costa Sanitary District
- Delta Diablo
- East Bay Municipal Utility District
- Fairfield-Suisun Sewer District

- Mt. View Sanitary District
- Palo Alto Regional Water Quality Control Plant
- Petaluma, City of
- San Francisco Public Utilities Commission
- Sanitary District No. 5 of Marin County
- Santa Rosa, City of
- Vallejo Flood & Wastewater District

LysteGro is used primarily in Solano County, and the product is registered as a fertilizer with the California Department of Food and Agriculture. As a Class A product, LysteGro can be used with no restrictions, and is not subject to the Solano County biosolids ordinance (Solano County Code, Sec. 25-400). Use of LysteGro is classified as "Class A Land Application" in **Figure 3.** LysteGro is also an approved commercial fertilizer for use in Colusa, Contra Costa, and Yolo Counties.

Counties where biosolids are land applied. Biosolids were predominantly applied to agricultural land in three Northern California counties in 2022 – Sacramento, Merced, and Solano – with Solano County ranking third. **Figure 5** illustrates the distribution of land-applied biosolids among counties in Northern California. Smaller amounts were also land applied in Sonoma, San Joaquin, Stanislaus, and Napa counties, typically by agencies that operate their own land application programs.

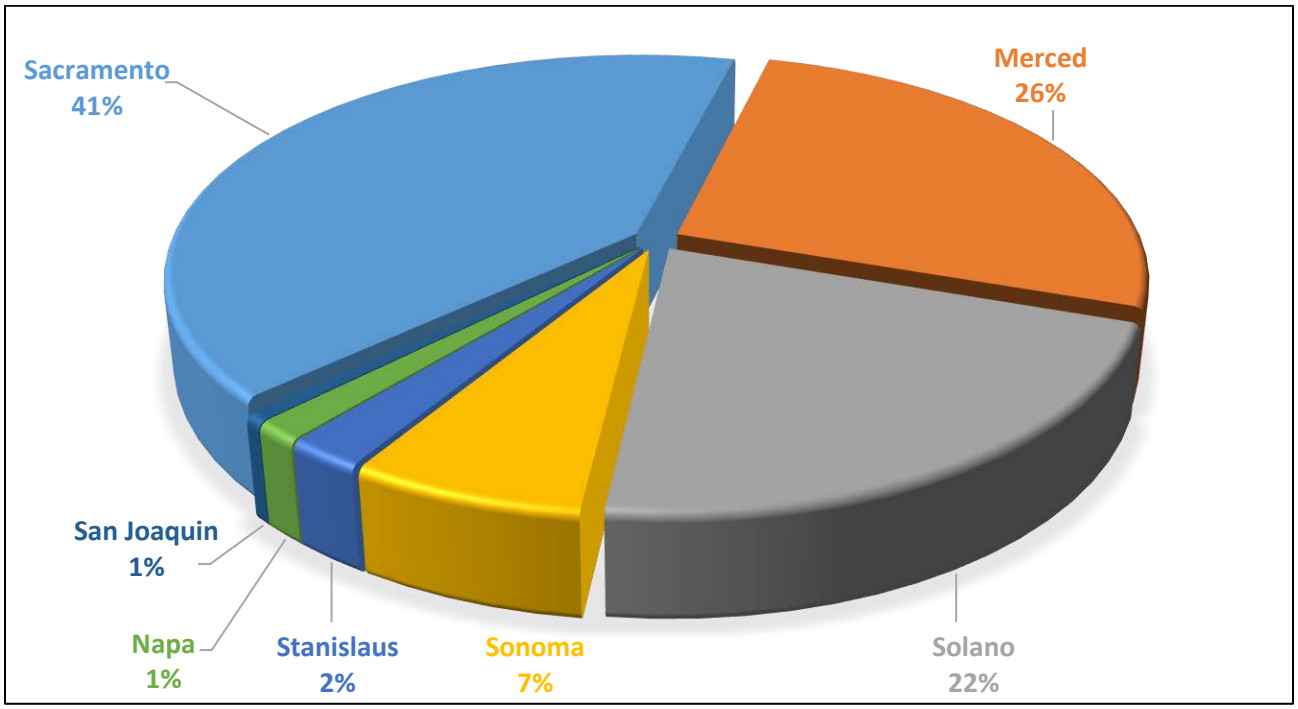


Figure 5. Distribution of Biosolids Land Application among Northern California Counties, 2022

Data provided by USEPA Region 9 and ECHO Database

Bay Area Regional Efforts

BACWA Biosolids Committee. The mission of the BACWA Biosolids Committee (The Committee) is to support the development and maintenance of cost-effective, sustainable biosolids management options for the approximately 150,000 dry metric tons of biosolids produced in the Bay Area annually. The Committee was formed to provide proactive support and information sharing to member agencies on regional biosolids issues, projects, and proposed regulations and legislation.

In 2021, the Committee completed the 2020 Biosolids Trends Survey Report, which is available at https://bacwa.org/wp-content/uploads/2021/12/BACWA-2021-Biosolids-Trends-Survey-Report.pdf. The survey will be updated in 2024.

Because of member agencies' level of engagement in the Bay Area Biosolids Coalition at the current time (see below), the Biosolids Committee was placed on hiatus in 2019. The email distribution list continues to be maintained so that the Committee can meet again when there is interest. For example, committee members convened in November 2023 to discuss biosolids-related projects at their respective agencies. While regular meetings are on hiatus, the Committee will continue to produce this Annual BACWA Report to Solano County, as well as the BACWA Biosolids Trends Survey.

Bay Area Biosolids Coalition. The members of the Bay Area Biosolids Coalition, originally formed in 2004, work together to advance research, expand land application and share new opportunities and information on biosolids. The Coalition is pursuing a multi-pronged approach that includes:

- Educating the public on biosolids management issues in California through public outreach efforts, including the creation of a public website and securing media coverage.
- Advancing the industry and legislative state of knowledge on biosolids as a valuable resource.
- Investigating viable, year-long (weather resilient) alternatives to land application that look beyond "biosolids to energy" and seek to responsibly recycle back value-added products of biosolids to the environment.
- Serving as a technology incubator - particularly for pre-commercial technologies.
- Supporting land application in the Bay Area by seeking to create more capacity for biosolids in the Bay Area marketplace.

The Coalition has established the following goals in support of achieving the above-mentioned objectives, for which associated strategies and key outcomes have been defined that will be pursued over the next one to two years:

- Communicate the value of biosolids for the purposes of increasing understanding, support, and market demand for biosolids.
- Advance independent scientific research on the safety and efficacy of biosolids to inform science-based regulations, guidelines and best management practices.
- Support and expand biosolids land application in the Bay Area.
- Support the development of diverse, cost-effective, and reliable all-weather biosolids projects for the San Francisco Bay Area.

Current Coalition members include the following public agencies:

Central Marin Sanitation Agency	East Bay Municipal Utility District
City of Millbrae	Ironhouse Sanitary District
City of Petaluma	North San Mateo County Sanitation District
City of San José	San Francisco Public Utilities Commission
City of Santa Rosa	Union Sanitary District
Delta Diablo	Vallejo Flood & Wastewater District
Dublin San Ramon Services District	West County Wastewater District

Individual Agency Programs. Individual BACWA agencies are responsible for their own biosolids management programs, and each develops its own plan in addition to participating in regional programs. Below are program descriptions from all agencies which sent biosolids to Solano County for agricultural use via land application. All agencies described below produce biosolids according to 40 CFR regulations.

All seven agencies that land applied Class B biosolids in Solano County in 2023 converted a portion of their biosolids to Class A, either through their own means or at a 3rd party conversion facility (e.g., compost facility or Lystek OMRC).

City of Calistoga. At the City's Dunaweal Wastewater Treatment Facility, solids are processed by the treatment methods of thickening and application to drying beds. The material is picked up and land applied to various fields in Solano County by Synagro, and a portion of this material is diverted to produce Class A Biosolids at Synagro's Central Valley Compost site.

Central Marin Sanitation Agency. The Central Marin Sanitation Agency (CMSA) has a contract with Synagro for land application of its biosolids during the dry weather season in Solano County. CMSA also has contracts in place for sending the biosolids to Redwood Landfill for landfill beneficial use and to Lystek International for further processing to produce Class A (EQ) liquid fertilizer. CMSA is a member of the Bay Area Biosolids Coalition.

Delta Diablo. Diablo produces Class B biosolids and contracts with Synagro for biosolids management. In 2022, 92% of the biosolids were land applied in Solano, Sacramento, or Merced Counties. The remaining biosolids are either sent to Synagro's Central Valley Compost facility or to the Lystek facility at Fairfield Suisun Sewer District for further processing to Class A standards (2 truckloads per month for the first half of 2023 and 4 truckloads per month for the

second half of 2023). Delta Diablo is a member of the Bay Area Biosolids Coalition and continues to explore additional and alternative biosolids management options.

City of Petaluma. The City of Petaluma's Ellis Creek Water Recycling Facility produces Class B biosolids. Biosolids produced at Ellis Creek are applied to agricultural land in Solano and Sacramento Counties, or transferred to the Lystek OMRC for production of and subsequent reuse as Class A biosolids. The City of Petaluma is a member of the Bay Area Biosolids Coalition.

San Francisco Public Utilities Commission (Southeast and Oceanside Facilities). The San Francisco Public Utilities Commission (SFPUC) produces Class B biosolids at its two facilities. In addition to sending biosolids to Solano County for use as a fertilizer, the SFPUC also contracts with Synagro to use Class B biosolids as a fertilizer in Sacramento County and to produce compost in Merced County and contracts with Lystek to produce a Class A EQ liquid fertilizer. The SFPUC's biosolids are now used as either a fertilizer or compost and are no longer used for alternative daily cover in landfills. The SFPUC is an active participant in the Bay Area Biosolids Coalition.

Town of Windsor. The Town of Windsor Water Reclamation Facility contracts with Synagro to land apply biosolids to farmland in Solano and Sacramento Counties. As part of the Synagro contract, Synagro diverts a portion of its biosolids to its Merced County facility for composting. The Town of Windsor continues to investigate feasible and cost-effective Class A biosolids treatment and process options. The Town is currently at 30% design for a biosolids handling facility, including biodrying and pyrolysis.

Union Sanitary District. Union Sanitary District (USD) beneficially used most of its biosolids in 2023 and met all USEPA regulations for the 30th consecutive year. USD continues to contract with Synagro for its biosolids management. The majority of USD's biosolids are land applied to farmland in Sacramento, Merced and Solano Counties. The remainder are delivered to Synagro for producing Class A compost. USD is a member of the Bay Area Biosolids Coalition.

Laboratory and Permits Committees – Report to BACWA Board

Committee Meeting Date: December 12, 2023
Executive Board Meeting Date: January 19, 2024
Permits Committee Chair: Amanda Roa, Delta Diablo
Lab Committee Chair: Blake Brown, Central San

Special Joint Meeting: 40 attendees via Zoom and in-person, representing 20 member agencies

Recruitment for Vice Chair. Meg Herston has volunteered to serve as vice chair for the Permits committee. The Lab committee is looking for a volunteer to begin as vice-chair in summer 2024.

Regulatory Updates

- An NPDES Corrections Basin Plan Amendment to better accommodate water recycling projects was adopted by the Regional Water Board on December 13th. The Basin Plan Amendment must be approved by the State Water Board, Office of Administrative Law, and USEPA before it is becomes effective, which will likely occur no sooner than Fall 2024.
- A Tentative Order for 27 landfills requires planning for sea level rise. Comments are due 1/8/24.
- CASA held a webinar on the *Ceriodaphnia dubia* study completed by SCCWRP. The final report contains "must do" and "should do" recommendations. Dischargers using *C. dubia* for chronic toxicity testing (either in a screening study or for routine testing) should be familiar with the report's findings.
- The State Water Board recently updated its Water Quality Enforcement Policy, which becomes effective 4/1/24. The updated policy will change how the "Degree of Culpability" is assessed. Dischargers should check their permits regarding requirements to retain physical records on-site, as this will no longer be considered a "minor" violation.
- BACWA is working on a PFAS Fact Sheet, which will summarize and supplement the regional study report that is nearly final. A draft Fact Sheet will be shared for committee review before finalization.
- An administrative draft of the 3rd Nutrient Watershed Permit is expected in late January. Members are invited to join the Nutrient Strategy Team meetings coming up in December and January.
- BACWA is forming a community of practice for Climate Change. Contact Mary Cousins to join.

Chlorine Blanket Permit Amendment

The blanket permit amendment for residual chlorine was adopted in November (R2-2023-0023) and becomes effective on 1/1/24. Water Boards staff plan to update DMRs before the first batch of monitoring data is due (1/31/24); if this does not occur, BACWA will seek additional reporting guidance for members. BACWA shared a draft guidance document with committee members ahead of the meeting, and members provided additional input. Suggested additions included:

- Handling situations where the maximum chlorine residual for the day represents fewer than 24 hourly average values because there were fewer than 24 hours of discharge;
- Note that rounding rules also apply to SCADA, not just reporting;
- Handling averaging in situations where the ML may be less than 0.05 mg/L;
- More detailed suggestions about procedures for calibrating chlorine equipment and determining the ML.

ELAP Updates - Blake Brown shared several clarifications recently received from ELAP staff (see slides):

- Technical managers can sign all three certifying signatures on ELAP applications. If there is a change in your technical manager, fill out this ELAP form.
- For the DMR-QA, ELAP does not require Proficiency Testing (PT) data for analyses that are not reported under the NPDES permit, or for auxiliary tests relevant to toxicity testing (e.g., hardness). They do want PT data for analyses related to sanitary sewer spills and recycled water (E. coli, total coliform).
- If you are turning in long reports from contract labs, ELAP suggests including the entire report and providing information about which pages are relevant. It is also acceptable to turn in only part of the report as long as all of the relevant information is included.

TNI Updates

The next TNI training session will be on February 20, 2024 (the December 19th session was cancelled). Members should send questions directly to Diane Lawver. DSRSD recently had a TNI audit, and Kristy Fournier will share the findings at the next committee meeting.

Future Meeting Topics – Potential future meeting topics include managing the process of conducting a chronic toxicity screening study, and interpreting contract laboratory reports for PCBs.

Next Lab Committee Mtg: February 13th, 10 AM **Next Permits Committee Mtg**: February 27th, 12:30 PM

Executive Director's Report to the Board

December 2023

EXECUTIVE BOARD MEETING AND SUPPORT

- Worked with BACWA staff to plan and manage 12/15 Executive Board meeting
- Conducted the Executive Board meeting agenda review with the BACWA Chair
- Hosted 12/15 Executive Board meeting and developed meeting notes
- Continued to track all action items to completion

COMMITTEES:

- Attended AIR Committee meeting, 12/13

REGULATORY:

- Worked with Summit partners to review Air Toxics program management submittals, 12/19
- Reached out to BAAQMD staff to plan next meeting
- Worked to develop survey for RW collaboration workshop participants

NUTRIENTS:

Completed a variety of tasks and activities associated with BACWA's interests on nutrients and collaborating with the Water Board including:

- Met with Water Board staff several times to discuss final TIN limits
- Attended NMS modeling update, 12/1
- Attended WRF Optimization webinar, 12/7
- Met with member agencies to discuss nutrient permitting
- Met with SFPUC to discuss funding advocacy, 12/11
- Met with CASA OAH subgroup, 12/6, 12/12, 12/18, 12/21
- Participated in NWRI OAH IPR Webinar #1, 12/12
- Met with members of SCCWRP OAH IPR Steering committee, 12/13
- Participated in SCCWRP OAH TAC steering committee process, 12/19
- Reviewed and updated nutrient data metrics for interim limits and possible final limit allocations
- Planned and hosted NST meeting, 12/15
- Attended and developed meeting summary for NMS Planning Subcommittee meeting, 12/6
- Discussed annual reporting and financial reporting with NMS staff
- Discussed NMS programmatic issues with SFEI ED

COMMUNICATIONS

- Held weekly progress meetings with Civic Edge
- Reviewed key messaging materials and provided edits
- Discussed bike tours with Central San

FINANCE:

- Reviewed the monthly BACWA financial reports

- Reviewed and approved invoices
- Summarized Nutrient Reduction Study contract and amendment history

COLLABORATIONS:

- Attended CASA Air Toxics meeting 12/13
- Attended CASA RWG water meeting, 12/7
- Met with AQPI leads to discuss POTW involvement, 12/ 11
- Participated in California Water Quality Monitoring Council meeting, 12/14

ASC (AQUATIC SCIENCE CENTER)

- Reviewed materials sent via email by ASC ED

BABC (BAY AREA BIOSOLIDS COALITION)

- Attended meeting and developed meeting summary, 12/11

BACC (BAY AREA CHEMICAL CONSORTIUM)

- Discussed administrative and policy issues with administrator

BACWWE (BAY AREA COALITION FOR WATER/WASTEWATER EDUCATION)

- Planned and hosted scoping meeting for future of program, 12/5
- Developed next steps for bringing on external support for program expansion

ADMINISTRATION:

- Planned for and conducted the monthly BACWA staff meeting to prepare for the Board Meeting and to coordinate and prioritize activities.
- Met with RPM to discuss progress on regulatory issues
- Signed off on invoices, reviewed correspondence, prepared for upcoming Board meetings, responded to inquiries on BACWA efforts, oversaw and participated in updating of web page and provided general direction to BACWA staff.
- Worked with RPM in the preparation of the monthly BACWA Bulletin.
- Developed and responded to numerous emails and phone calls as part of the conduct of BACWA business on a day-to-day basis.

MISCELLANEOUS MEETINGS/CALLS:

- Worked with BACWA Chair and Committee Chairs on items that arose during the month
- Other miscellaneous calls and inquiries regarding BACWA activities
- Responded to Board members' requests for information
- Discussed potential new project of special benefit with Board member

Board Calendar

February 2024 – April 2024 Meetings

DATE	AGENDA ITEMS
February 16, 2024 ***EBMUD Orinda***	**Approvals & Authorizations:** • **Policy / Strategic Discussion:** • Science plan update • BCDC Original Shoreline Adaptation Planning **Operational:** • FY25 Draft Budget first review • RFPs for FY25 • Board Meetings 2024
March 15, 2024 ***Central Sanitary***	**Approvals & Authorizations:** • **Policy / Strategic Discussion:** • **Operational:** • FY25 Draft Budget second review • Committee Budget presentations
April 19, 2024 ***SFPUC***	**Approvals & Authorizations:** • **Policy / Strategic Discussion:** • **Operational:** • FY25 Budget approval

BACWA ACTION ITEMS

Number	Subject	Task	Responsibiity	Deadline	Status
	Action Items from December 15 2023 BACWA Executive Board Meeting		**resp.**	**deadline**	**status**
2023.12.22	CASA Air Toxics Update	BACWA ED will bring a resolution, or draft, to the board at the January 2024 meeting	ED	1/15/2024	complete
2023.12.23	Notes from December 6, 2023 PSC meeting #81	BACWA ED to make update to the meeting notes	ED	1/15/2024	complete
2023.12.24	Agenda for 12/18 meeting with BAAQMD	BACWA ED will reschedule the meeting	ED	1/15/2024	complete
2023.12.25	NMS priorities for next Fiscal Year	BACWA ED to share wastewater communications write up	ED	1/15/2024	complete
	Action Items Remaining from Previous BACWA Executive Board Meetings				
2022.10.22	BACWA Reserve Policy	BACWA ED will bring a revised draft Reserve Policy to the Executive Board for approval at a future meeting.	ED		WIP
2022.3.42	Plain-language review of nutrient science program	BACWA ED to work with SFEI to augment plain-language review to include graphics, simplified text, and a summary of what we have learned so far.	ED		on going
2023.10.8	Informational: BAAQMD 9/18 Workgroup meeting debrief	BACWA Executive Director to request a meeting with BAAQMD's Executive officer.	ED	12/31/2023	WIP
2023.10.9	PFAS - Phase 2 draft report and Summit Partners Workshop	BACWA Executive Director and RPM to produce a FAQ sheet on the PFAS Phase 2 Study	ED / RPM	12/15/2023	WIP
2023.10.10	Debrief from Recycled Water Interagency Workshop Sept 20	BACWA Executive Director to send out a survey about next steps	ED	12/15/2023	WIP
2023.11.16	Recycled Water collaboration workshop follow-up survey	BACWA staff to circulate meeting summary and survey to recycled water workshop participants.	ED	12/15/2023	WIP
2023.11.18	Climate change scoping - AQPI Presentation	BACWA to share with members that they have an opportunity to participate in the AQPI user group led by Jon Rutz.	ED		WIP
2023.11.19	Climate change scoping - AQPI Presentation	BACWA to share information about AQPI with Collection System and O&M committees	ED		WIP

FY24: 18 of 25 Action Items are complete
FY23: 56 of 58 Action Items are complete
FY22: 51 of 52 Action items are completed
FY21: 51 of 51 Action items completed
FY20: *70 of 70 Action Items completed*
FY19: *110 of 110 action Items completed*
FY18: *66 of 66 Action Items completed*
FY17: *90 of 90 Action Items completed*

Regulatory Program Manager's Report to the Executive Board

December 2023

BACWA BULLETIN: Completed and circulated December Bulletin.

CHLORINE: Completed final version of chlorine guidance document and circulated to members.

CLIMATE CHANGE: Set up climate change email group and began strategizing webinar series for 2024.

ENFORCEMENT: Attended meeting with State Water Board staff to advocate for modifications to the revised Water Quality Enforcement Policy.

NPDES – Began preparing NPDES compliance letter for 2023.

NUTRIENTS: Participated in Nutrient Strategy Team meeting and prepared summary; participated in load projection discussion with two member agencies (EBDA and SVCW).

PFAS: Began preparing PFAS Fact Sheet based on outline prepared in November.

COMMITTEE SUPPORT:

AIR – Attended AIR committee meeting; reviewed draft Air Toxics study letter and spreadsheet provided by CASA.
BAPPG – Participated in pesticides subcommittee meeting and BAPPG committee meeting. Prepared and circulated meeting notes.
Biosolids – Finalized and submitted Solano County biosolids report; circulated to committee.
Collection System – Began preparations for February meeting.
Laboratory –Prepared for December meeting; prepared notes, and circulated to committee.
O&M Infoshare Group – Assisted with identifying new committee co-chair.
Permits – Prepared for December meeting; prepared notes, and circulated to committee.
Pretreatment – Began planning for February meeting.
Recycled Water – Began planning for January meeting.
Executive Board – Prepared regulatory updates for Executive Board meeting.

ADMINISTRATION/STAFF MEETING – ?

BACWA MEETINGS ATTENDED:
BAPPG Committee (12/6)
BAPPG Pesticides (12/12)
Permit Committee and Lab Committee Joint Meeting (12/12)
AIR Committee (12/13)
Executive Board (12/15)
Nutrient Strategy Team (12/15)

EXTERNAL EVENTS ATTENDED:
CASA Regulatory Workgroup (12/7)
CASA Ceriodaphnia Webinar (12/13)
CASA ACE Workgroup (12/19)