



**Executive Board Meeting**  
**AGENDA**  
**Friday, August 18, 2025 9:00 AM - 12:30 PM (PDT)**

EBMUD  
Orinda Watershed Headquarters  
500 San Pablo Dam Road, Orinda, CA  
To attend the meeting via Zoom or submit a comment please [request access](#).

Agenda Item	Time	
<b>ROLL CALL, INTRODUCTIONS, AND TELECONFERENCE ETIQUETTE</b>	9:00 AM	
<b>PUBLIC COMMENT</b> <a href="#">Guidelines</a>	9:05 AM	
<b>CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER</b>	9:06 AM	
<b>CONSENT CALENDAR</b>	9:07 AM	
1 June 20, 2025 BACWA Executive Board meeting minutes		3-8
2 June 2026 Treasurer's Report		9-19
<b>APPROVALS AND AUTHORIZATIONS</b>	9:15 AM	
3 <u>Resolution</u> : Resolution Honoring Michael Connor		20
4 <u>Authorization</u> : CAR The Freshwater Trust Trading Feasibility SOW#1 \$9,890		21-27
5 <u>Approval</u> : HDR Regional Study for Watershed Permit #3, \$444,137		28-70
6 <u>Approval</u> : Contribution to CASA Coastal Nutrients modeling support \$35,000		71-77
7 <u>Approval</u> : BABC and City of Santa Rosa Contribution to National Biosolids Collaborative at UAZ, \$60,000		78-80
8 <u>Approval</u> : SFEI contract for risk reduction surveys, \$50,000		81-85
9 <u>Approval</u> : NMS Payment #1 for FY26 \$1.1M		86-87
<b>POLICY/STRATEGIC</b>	9:45 AM	
10 <u>Discussion</u> : BACWA collaborative PFAS Strategy		
11 <u>Discussion</u> : PFAS limits in R2 groundwater discharge permit <a href="#">Tentative Order</a>		
12 <u>Discussion</u> : Communications update - Wastewater 101 Video and PFAS Media Strategy		88
13 <u>Discussion</u> : Nutrient Science Update <a href="#">NMS folder with Science and Program Plan</a>		
i. BACWA NMS Review position		
ii. NMS Deliverables <a href="#">Updated list of NMS Deliverables</a>		89
iii. Central Coast Ocean Modeling <a href="#">Link to preprint</a>		
14 <u>Informational</u> : EPA Region IX SF Bay Program Office funding update		90-93
15 <u>Discussion</u> : Collective advocacy to electeds on funding support		
16 <u>Discussion</u> : BACWA Committee update - Asset Management		
<b>BREAK</b>	10:30 AM	
17 <u>Informational</u> : Onsite Reuse Regulations Response to Comments <a href="#">Link to Proposed Regulations</a>		
18 <u>Informational</u> : Impact of TST finding by 5th Appellate District Court <a href="#">Link to Court Opinion</a>		
19 <u>Discussion</u> : Potential BACWA events		
i. PFAS forum		
ii. AI Infoshare		
iii. Climate Adaptation and RFI		
iv. Nutrient Removal Emerging Technologies		
20 <u>Discussion</u> : Air District Engineering Program Manager Pilot - Webinar Aug 20		94-96
21 <u>Discussion</u> : September 4 Joint Meeting with R2 on Klamath		97
22 <u>Discussion</u> : Pardee Oct 9-10 - Invitations and outreach		98
<b>OPERATIONAL</b>	11:40 AM	
23 <u>Discussion</u> : End of fiscal year 2025 financial overview		
24 <u>Discussion</u> : Succession planning update		99
25 <u>Informational</u> : BACC Update - Annual meeting August 27		
<b>REPORTS</b>	12:10 AM	
26 Committee Reports		100-104
27 Member highlights		
28 Executive Director Report		105-107
29 Board Calendar and Action Items		108-109
30 Regulatory Program Manager Report		110-111
31 Other BACWA Representative Reports		
a. RMP Technical Review Committee	Samantha Engelage, Alicia Chakrabarti,	
b. RMP Steering Committee	Blake Brown	
	Karin North; Amanda Roa; Eric Dunlavey	

c. Summit Partners	Lorien Fono; Jackie Zipkin		
d. ASC/SFEI	Lorien Fono; Amit Mutsuddy; Lori Schectel		
	Amit Mutsuddy, Eric Dunlavey; alternates:		
e. Nutrient Governance Steering Committee	Lori Schectel, Jackie Zipkin		
e.i Nutrient Planning Subcommittee	Eric Dunlavey		
e.ii MERHAB MaTAG	Amit Mutsuddy		
f. SWRCB Nutrient SAG	Lorien Fono		
	Cheryl Munoz; Florence Wedington;		
g. BAIRWMP	Jackie Zipkin		
h. CASA State Legislative Committee	Lori Schectel		
i. CASA Regulatory Workgroup	Lorien Fono; Mary Cousins		
j. RMP Microplastics Liaison	Jesse McDermott		
k. Bay Area Regional Reliability Project	Jackie Zipkin		
l. San Francisco Estuary Partnership	Lorien Fono; Jackie Zipkin		
m. CPSC Policy Education Advisory Committee	Colleen Henry		
n. California Ocean Protection Council	Lorien Fono		
o. California Water Quality Monitoring Council	Lorien Fono		
p. CASA Air Toxics Steering Committee	Lorien Fono, Jason Nettleton		
<b>32 SUGGESTIONS FOR FUTURE AGENDA ITEMS</b>		<b>12:25 PM</b>	
<b>NEXT MEETING</b>			
<b>The next regular meeting of the Board is scheduled for September 19, at Central San, Martinez.</b>			
<b>ADJOURNMENT</b>		<b>12:30 PM</b>	



## Executive Board Meeting Minutes

Friday June 20, 2025, 9:00 AM - 12:00 PM (PDT)

SFPUC

**Executive Board Representatives:** Amy Chastain (San Francisco Public Utilities Commission, **non-voting**); Alicia R. Chakrabarti (East Bay Municipal Utility District); Eric Dunlavey (City of San Jose); Jackie Zipkin (East Bay Dischargers Authority); Lori Schectel (Central Contra Costa Sanitary District).

### Attendees

Name	Agency/Company
Amanda Roa	Fairfield-Suisun Sewer District
David Primozich	The Freshwater Trust
David Richardson	Woodard & Curran
Erik Ringelberg	The Freshwater Trust
Irene Chu	Hazen and Sawyer
Jason Nettleton	City of San Jose
Jennie Pang	SFPUC
Jennifer Dymont	BACWA
Jordan Damerel	FSSD
Lorien Fono	BACWA
Mike Falk	HDR
Ray David	Carollo
Sara Sadreddini	Black & Veatch
Tim Lewis	Dublin San Ramon Services District
Tom Hall	EOA
Vince De Lange	Delta Diablo

Jackie called the meeting to order at 9:01

### Agenda Item

#### ROLL CALL, INTRODUCTIONS, AND TELECONFERENCE ETIQUETTE

**PUBLIC COMMENT**          None.

**CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER** Item 21 will be taken when the presenter arrives.

**1 In Memoriam - Michael J. Connor** - Jackie Zipkin, BACWA Chair, and others shared a few memories about Michael Connor who passed recently. The [Kudoboard](#) for Michael Connor was shared in the Zoom chat.

**Action Item:** BACWA ED to prepare a resolution for August BACWA Board meeting.

## **CONSENT CALENDAR**

**2 April 18, 2025 BACWA Executive Board meeting minutes**

**3 May 12, 2025 BACWA NST Special Executive Board meeting minutes**

**4 June 13, 2025 BACWA Joint Meeting with Water Board meeting minutes**

**5 April 2026 Treasurer's Report**

**Consent Calendar items 1 thru 5:** A motion to approve was made by Lori Schectel (Central Contra Costa Sanitary District) and seconded by Eric Dunlavey (City of San Jose). All were in favor. None opposed. **SFPUC did not vote.**

## **APPROVALS AND AUTHORIZATIONS**

**6 Approval: BAR BACWA Chair and Vice-Chair for FY26**

Approvals and Authorizations item 6: A motion to approve was made by Eric Dunlavey (City of San Jose) and seconded by Lori Schectel (Central Contra Costa Sanitary District) to nominated Jackie Zipkin as BACWA Chair and Amy Chastain as BACWA Vice Chair for FY26. All were in favor. None opposed. **SFPUC did not vote.**

**7 Approval: BAR BACWA FY26 Staff contract amendments**

**8 Approval: BAR BACC FY26 Administration contract**

**9 Approval: BAR Amendment #2 contract for Stephanie Hughes for FY26 BAPPG professional outreach support, \$19,000**

**10 Approval: BAR Amendment #4 Stephanie Hughes pesticides regulatory support FY26 Contract, \$71,400**

**11 Approval: BAR Carollo Contract for FY26 BABC \ Biosolids Committee Support, \$120,000**

**12 Approval: BAR Carollo Contract Amendment #1 for FY26 AIR Committee support, \$93,750**

- 13 Approval: BAR Sagent Amendment #1 for FY26 BAPPG support, \$50,000**
- 14 Approval: BAR Regulatory and Executive Board Legal Support**
- 15 Approval: BAR Civic Edge Amendment #4 for Public Outreach Support \$40,095**

BACWA ED shared a slide with a summary of the contracts, reviewed each item and answered questions. The chair noted that the Board had recommended that staff contracts be increased by 4% over FY25, greater than the 2.4% that was indicated by the December 2024 CPI .

**Approvals and Authorizations item 7 thru 15:** A motion to approve was made by Lori Schectel (Central Contra Costa Sanitary District) and seconded by Alicia R. Chakrabarti (East Bay Municipal Utility District). All were in favor. None opposed. **SFPUC did not vote.**

### **POLICY/STRATEGIC**

**16 Informational: Science Plan Update submitted** - BACWA ED shared that by June 1 each year a science plan must be submitted to the Water Board. The 2025 submittal email is in the packet.

**17 Discussion: Debrief from 6/13 meeting with R2** - BACWA ED said the slides that HDR presented are in the packet. The meeting was a productive discussion and R2 was happy with the outcome. The group discussed early adopters and compliance schedules.

**Action items:** BACWA ED & BACWA Chair to schedule a meeting with RWB staff next week, and depending on outcome BACWA ED & AED to schedule NST Meeting after August BACWA Board Meeting.

**18 Discussion: Regional Plan Scoping Plan** - BACWA ED hopes to meet with BACWA Board Chair and Regional Water Board staff next week in advance of the Regional Scoping Plan due date of July 1, 2025. This item was also covered in Item 17.

### **BREAK**

**19 Discussion: TFT Nutrient Trading feasibility study SOW** - David Primozich from The Freshwater Trust presented how they incorporate basin-wide water quality management strategies into Clean Water Act Compliance programs. David went through his slides and then the group discussed the options. The Freshwater Trust will discuss starting the project with colleagues and get back to BACWA ED with details. The Board supported potentially authorizing a smaller contract via Chair Authorization so TFT can get started prior to August and begin planning meetings with member agencies.

**Action item:** BACWA ED to bring a BAR to the August BACWA Board Meeting.

**20 Discussion: NMS Update** - This item came out of BACWA's last few management meetings.

i. Science Goals - BACWA ED shared a slide of 4 Science Goals from 2025-29 that is in the packet. Meeting participants agreed that the goals are appropriate as presented.

ii. Phytoplankton monitoring - BACWA ED included the slides in the packet from the Delta Science meeting. This is a follow up item from the April 2025 BACWA Board Meeting.

ii. Science update magazine copies - BACWA ED shared that 21 agencies requested 237 magazines. BACWA will order, pay for and deliver the magazines to members.

**21 Discussion: Request for BACWA contribution to Coastal Nutrient Modeling Support** - Jared Voskuhl from CASA shared the project goals: to compile plant performance information for coastal dischargers, produce a ROMS-BEC model running on HDR's systems to allow review of model parameters, and produce a nutrient trending report similar to the effort in Southern California. BACWA ED asked if BACWA would be willing to fund work for research along the central coast. BACWA ED recommended BACWA fund this at \$35,000. Jared shared there is a SCCWRP meeting on July 8, 2025, about modeling.

**Action item:** BACWA ED will work with Jared Voskuhl to get this item approved at the August BACWA Board Meeting.

**22 Discussion: BACWA NMS science advisor contract** - This was Michael Connor's contract. The group discussed potential contract vendors, including a former NMS member who currently resides outside of the US but could join meetings via teleconference.

**Action item:** BACWA ED to review how to contract with vendors outside of the US rules.

**23 Informational: EPA Region IX SF Bay Program Office funding update** - BACWA ED shared that there is not much of an update. The FY25 funding has been paused by DOGE.

**24 Discussion: Air District Engineering Program Manager Pilot** - Ray David from Carollo reviewed the slides that are in the packet. Ray discussed the program, duration and funding of the position as well as the feedback they have received from BACWA agencies on the program. Members have taken a variety of positions on the potential pilot program, from opposed, to potentially interested but with questions about how it will work.

**25 Informational: Summit Partners SSS-WDR Webinar** – BACWA ED shared that the recording is available online.

**26 Informational: Debrief from Summit Partners meeting 5/19** - BACWA ED shared that EBDA hosted a Summit Partners meeting focused on collaborative opportunities. The Summit Partners plan to hold a regulator workshop on cross media issues in the fall.

## **OPERATIONAL**

**27 Discussion: Annual meeting debrief** - BACWA ED asked for feedback on the Annual Meeting. FY26 BACWA Annual Meeting is scheduled for Friday May 1, 2026.

**28 Discussion: Logistics and invitations for Pardee Technical Seminar Oct 9 & 10, 2025** - BACWA ED summarized dates and attendees.

**Action Item:** BACWA ED will send out a survey to ask who will be attending and provide a draft agenda at the August BACWA Board meeting.

**29 Informational: BACWA Representative and leadership succession** - BACWA ED shared a slide of committee leadership and succession.

Action item: BACWA ED to provide updated slide at August BACWA Board meeting.

**30 Informational: BACC Update - Annual meeting August** - BACWA AED scheduled BACC Annual meeting for Wednesday August 27<sup>th</sup> at 10:30am.

**31 Discussion: BACWWE RFP** - Jordan Damerel summarized the BACWWE RFP to seek professional services support to assess the bay area wastewater workforce development. Jordan summarized the RFP, requested spending approval from members and is looking for volunteers for a steering committee to guide future work.

## **REPORTS**

**32 Committee Reports** - in the packet.

**33 Member highlights** - Lori Schectel provided a summary from CASA's Legislative meeting. Meeting attendees shared various open positions at their agencies.

**34 Executive Director Report** - in the packet.

**35 Board Calendar and Action Items** - in the packet.

**36 Regulatory Program Manager Report** - in the packet.

**37 Other BACWA Representative Reports**

- a. RMP Technical Review Committee      Samantha Engelage, Alicia Chakrabarti,  
Blake Brown
- b. RMP Steering Committee Karin North; Amanda Roa; Eric Dunlavey
- c. Summit Partners    Lorien Fono; Jackie Zipkin
- d. ASC/SFEI    Lorien Fono; Amit Mutsuddy; Lori Schectel
- e. Nutrient Governance Steering Committee      Amit Mutsuddy, Eric Dunlavey;  
alternates: Lori Schectel, Jackie Zipkin
- e.i Nutrient Planning Subcommittee      Eric Dunlavey
- e.ii MERHAB MaTAG    Amit Mutsuddy
- f. SWRCB Nutrient SAG      Lorien Fono
- g. BAIRWMP    Cheryl Munoz; Florence Wedington; Jackie Zipkin
- h. CASA State Legislative Committee      Lori Schectel
- i. CASA Regulatory Workgroup      Lorien Fono; Mary Cousins
- j. RMP Microplastics Liaison      Jesse McDermott
- k. Bay Area Regional Reliability Project      Jackie Zipkin
- l. San Francisco Estuary Partnership      Lorien Fono; Jackie Zipkin
- m. CPSC Policy Education Advisory Committee    Colleen Henry
- n. California Ocean Protection Council    Lorien Fono
- o. California Water Quality Monitoring Council    Lorien Fono
- p. CASA Air Toxics Steering Committee    Lorien Fono, Jason Nettleton

### **38      SUGGESTIONS FOR FUTURE AGENDA ITEMS**

#### **NEXT MEETING**

The next regular meeting of the Board is scheduled for August 15, at EBMUD Watershed Headquarters, Orinda

**Meeting Adjourned at 12:32**



# B A C W A B A Y A R E A C L E A N W A T E R A G E N C I E S

July 24, 2025

MEMO TO: Bay Area Clean Water Agencies Executive Board  
MEMO FROM: Phoebe Grow, Treasurer, East Bay Municipal Utility District  
SUBJECT: Twelfth Month FY 2025 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, 2024 through June 30, 2025** (Twelve months of Fiscal Year 2025). 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

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**From:** Grow, Phoebe  
**Sent:** Thursday, August 7, 2025 11:43 AM  
**To:** Houck, Matt  
**Subject:** Re: June 2025 Treasurer's Report

Thanks for the reminder. **Approved!**

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

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**From:** Houck, Matt <matt.houck@ebmud.com>  
**Sent:** Thursday, August 7, 2025 10:15 AM  
**To:** Grow, Phoebe <phoebe.grow@ebmud.com>  
**Subject:** FW: June 2025 Treasurer's Report

Hi Phoebe,

Just wanted to follow up on this.

Thanks,

### **Matt Houck**

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

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**From:** Houck, Matt  
**Sent:** Thursday, July 24, 2025 9:39 AM  
**To:** Grow, Phoebe <phoebe.grow@ebmud.com>  
**Subject:** June 2025 Treasurer's Report

Hi Phoebe,

Please approve BACWA - June 2025 Treasurer's Report for distribution.

Let me know if you have any questions.

Thanks,

### **Matt Houck**

Accountant III  
East Bay Municipal Utility District



## MONTHLY FINANCIAL SUMMARY REPORT

June 2025

### **Fund Balances**

In FY25 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 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 June 30, 2025, was \$244,541, which is lower than the target reserve of \$384,651 which is intended to cover 3 months of normal operating expenses based on the BACWA FY25 budget. \$8,679 is 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, which leaves \$235,862 unobligated.

CBC Fund: This fund provides the resources for completing special investigations as well as meeting regulatory requirements. The ending fund balance on June 30, 2024, was \$2,366,402 which is higher than the target reserve of \$1,000,000. \$325,916 of the ending fund balance is encumbered to meet line-item expenses for completion of the Group Annual Report and Nutrient Watershed Permit contracts. This leaves an actual unencumbered reserve balance of \$ 698,138 (i.e., actual fund balance of \$1,698,138 less target reserves) as of June 30, 2025. 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 June 30, 2025 (100% of the FY) are at 102%

Expenses as of June 30, 2025 (100% of the FY) are at 95.48%

FY 2025  
BACWA BUDGET to ACTUAL

						
<u>BACWA FY25 BUDGET</u>	<u>Line Item Description</u>	<u>FY 2025 Budget</u>	<u>Actual June 2025</u>	<u>Actual % of Budget June 2025</u>	<u>Variance</u>	<u>NOTES</u>
<b>REVENUES &amp; FUNDING</b>						
Dues	Principals' Contributions	\$553,929	\$553,930	100%	\$1	FY25: 3% increase 5 @ \$110,786
	Associate & Affiliate Contributions	\$195,780	\$196,261	100%	\$481	FY25: 3% increase. 12 Assoc: \$9142 47 Affiliate: \$1831; UC Berkeley \$500
Fees	Clean Bay Collaborative	\$675,000	\$674,250	100%	-\$750	Same as FY23. Prin: \$450,000; Assoc/Affil: \$225,000
	Nutrient Surcharge	\$1,600,000	\$1,600,000	100%	\$0	See Nutrient Surcharge Spreadsheet
	Voluntary Nutrient Contributions		\$0	0%	\$0	
Other Receipts	AIR Non-Member	\$7,582	\$7,582	100%	\$0	3% increase (Santa Rosa)
	BAPPG Non-Members	\$4,264	\$4,264	100%	\$0	3% increase (Sta Rosa, Sac Reg'l, Vacaville) \$1,421/each
	Other		\$0		\$0	
Fund Transfer	Special Program Admin Fees (WOT)	\$1,000	\$0	0%	-\$1,000	WOT has been inactive
	Special Program Admin Fees (BACC)	\$39,522	\$39,522	100%	\$0	400 hours of AED support \$98.80/hr
	Special Program Admin Fees (BABC)	\$6,000	\$3,467	58%	-\$2,533	ED, AED and RPM support
Air Toxics	CASA Passthrough	\$600,000	\$538,140	90%	-\$61,860	New in FY25
Interest Income	LAIF	\$80,000	\$221,397	277%	\$141,397	BACWA, Legal, & CBC Funds invested in LAIF Interests rates higher than projected
	<b>Total Revenue</b>	<b>\$3,763,077</b>	<b>\$3,838,813</b>	<b>102.01%</b>	<b>\$75,736</b>	
<b>EXPENSES</b>						
<b>Labor</b>						
	Executive Director	\$224,230	\$224,230	100%	\$0	(incl 2.6% CPI SF Bay Metro Area Dec 2023)
	Assistant Executive Director	\$94,417	\$94,406	100%	-\$11	(incl 2.6% CPI SF Bay Metro Area Dec 2023); \$78.68/hour; Reflects 1200 hours
	BACC Administrator	\$39,522	\$34,350	87%	-\$5,171	400 hrs AED support at \$98.80 per hr
	Regulatory Program Manager	\$156,136	\$154,769	99%	-\$1,367	(2.6% CPI SF Bay Metro Area Dec 2023); \$115.65/hour, Reflects 1350 hours
	<b>Total</b>	<b>\$514,304</b>	<b>\$507,755</b>	<b>99%</b>	<b>-\$6,549</b>	
<b>Administration</b>						
	EBMUD Financial Services	\$43,297	\$40,141	93%	-\$3,156	FY25 no change
	Auditing Services	\$5,672	\$5,672	100%	\$0	Financial Auditors through EBMUD; per auditor rate schedule
	Administrative Expenses	\$4,059	\$1,380	34%	-\$2,679	50% less than FY24
	Insurance	\$10,753	\$8,457	79%	-\$2,296	15% increase from FY24 (10-15% est. increase per Alliant)
	<b>Total</b>	<b>\$63,781</b>	<b>\$55,649</b>	<b>87%</b>	<b>-\$8,132</b>	
<b>Meetings</b>						
	EB Meetings	\$3,500	\$3,406	97%	-\$94	27% increase from FY24
	Annual Meeting	\$14,369	\$13,351	93%	-\$1,018	No change from FY24
	Pardee	\$6,801	\$2,159	32%	-\$4,643	No change from FY24
	Misc. Meetings	\$10,000	\$10,561	106%	\$561	33% increase from FY24 to accommodate conferences
	<b>Total</b>	<b>\$34,670</b>	<b>\$29,476</b>	<b>85%</b>	<b>-\$5,194</b>	
<b>Communication</b>						
	Website Hosting	\$743	\$762	103%	\$19	2% increase from FY24, Go Daddy website hosting and domain registration
	File Storage	\$812	\$720	89%	-\$92	2% increase from FY24, box.net

**FY 2025  
BACWA BUDGET to ACTUAL**

<b>EXPENSES</b>						
	Website Development/Maintenance	\$1,624	\$281	17%	-\$1,342	2% increase from FY24
	IT Support	\$2,814	\$0	0%	-\$2,814	2% increase from FY24
	BACWA Value of Wastewater Communication	\$40,000	\$25,113	63%	-\$14,888	New line item in FY24, no change from FY24
	Other Commun	\$1,894	\$3,643	192%	\$1,748	2% increase from FY23; MS Exchange, Survey Monkey, PollEv, Zoom, Netfile
	<b>Total</b>	<b>\$47,887</b>	<b>\$30,518</b>	<b>64%</b>	<b>-\$17,369</b>	
<b>Legal</b>						
	Regulatory Support	\$50,000	\$86,091	172%	\$36,091	Increase from FY24, new contract with Meyers Nave - <a href="#">received invoices from FY24 late</a>
	Executive Board Support	\$2,403	\$128	5%	-\$2,275	2% increase from FY24
	<b>Total</b>	<b>\$52,403</b>	<b>\$86,218</b>	<b>165%</b>	<b>\$33,816</b>	
<b>Committees</b>						
	AIR	\$76,000	\$90,199	119%	\$14,199	\$75k consulting support, \$1k misc expenses. Carollo Engineers
	BAPPG	\$170,560	\$166,986	98%	-\$3,574	Includes CPSC @ \$5,000, OWOW @ \$10,000, NSAC @ \$10,000 and Pest. Reg Spt. @ \$71,500
	Assest Management Committee	\$500	\$600	120%		No change from FY24
	Biosolids Committee	\$500	\$0	0%	-\$500	\$500 in FY25
	Collections System	\$15,500	\$50,000	323%	\$34,500	SSS WDR Support - <a href="#">Budgeted in FY24 but invoice came late</a>
	O&M Committee	\$1,500	\$413	28%	-\$1,087	Requested \$1000 increase from FY24 for Annual Meeting lunch
	Laboratory Committee	\$500	\$1,609	322%	\$1,109	<a href="#">FY24 TNI invoice paid in FY25.</a>
	Permits Committee	\$500	\$390	78%	-\$110	No change from FY24
	Pretreatment	\$500	\$0	0%	-\$500	No change from FY24
	Recycled Water Committee	\$500	\$0	0%	-\$500	Requested default budget amount for FY25
	Misc Committee Support	\$45,000	\$4,941	11%	-\$40,059	No change from FY24
	Manager's Roundtable	\$1,000	\$0	0%	-\$1,000	No change from FY24
	<b>Total</b>	<b>\$312,560</b>	<b>\$315,138</b>	<b>101%</b>	<b>\$2,578</b>	
<b>Collaboratives</b>						
	<b>Collaboratives</b>					
	State of the Estuary (SFEP-biennial)	\$0	\$0	0%	\$0	Biennial in Even Fiscal Years
	Arleen Navarret Award	\$2,500	\$0	0%	-\$2,500	Next Award will be disbursed in FY27
	BayCAN	\$5,000	\$1,500	30%	-\$3,500	
	Bay Area One Water Network	\$0	\$0	0%	\$0	No change from FY24
	Bruce Wolf Scholarship	\$4,000	\$4,000	0%	\$0	FY22, FY23, FY24, FY25 FY26
	Passthrough for CASA for air toxics	\$500,000	\$496,300	100%	-\$3,700	New line item in FY24
	Misc	\$1,500	\$4,000	267%	\$2,500	NBWA, <a href="#">SFEI Coastal Climate Resilience Scholarship donation</a>
	<b>Total</b>	<b>\$513,000</b>	<b>\$505,800</b>	<b>99%</b>	<b>-\$7,200</b>	
<b>Other</b>						
	<b>Unbudgeted Items</b>					
	Other	\$0	\$0	0%	\$0	
		<b>\$0</b>	<b>\$0</b>	<b>0%</b>	<b>\$0</b>	
<b>Tech Support</b>						
	<b>Technical Support</b>					
	Nutrients					
	Watershed Permit NMS Contribution	\$2,200,000	\$2,200,000	100%	\$0	Advance funding for 2nd Watershed Permit Sciece Studies; Final \$ TBD
	NMS Voluntary Contributions					
	Additional work under permit	\$100,000	\$111,089	111%	\$11,089	Includes HDR PO for \$225k spread out over FY20-24.
	Regional Study on Nature Based Solutions		\$75,436			<a href="#">SFEI FY24 invoice paid in FY25.</a>
	Nutrient Workshop(s)	\$0	\$0	0%	\$0	Pilot Studies/Plant Review/Innovative Technologies; Might change
	NMS Reviewer	\$50,000	\$1,400	3%	-\$48,600	No change from FY24, M. Connor Contract
	Regional Nutrient Special Study	\$100,000	\$0	0%	-\$100,000	New item in FY25
	General Tech Support	\$100,000	\$0	0%	-\$100,000	AB617 emissions factors, PFAS, other nutrient support
	CEC Investigations	\$10,000	\$0	0%	-\$10,000	PFAS Study Phase 3

FY 2025  
BACWA BUDGET to ACTUAL

EXPENSES						
	Risk Reduction	\$12,500	\$6,875	55%	-\$5,625	Will plan new risk reduction tasks for current Hg/PCB Watershed Permit
	Total	\$2,572,500	\$2,394,800	93%	-\$177,700	
	TOTAL EXPENSES	\$4,111,105	\$3,925,355	95.48%	-\$185,750	
	PROJECTED EXPENSE DEVIATION FROM BUDGET					
	NET INCOME BEFORE TRANSFERS	-\$348,028	-\$86,542			
	TRANSFERS FROM RESERVES	\$348,028	\$86,542			aligns with strategy of drawing down reserves to lessen impact of Nutrient Surcharge
	NET INCOME AFTER TRANSFERS	\$0	\$0			
	TOTAL OPERATING BUDGET	\$1,538,605	\$1,530,555			
	OPERATING RESERVE	\$384,651	\$382,639			

**BACWA Fund Report as of June 30, 2025**

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	332,398	912,257	1,000,114	244,541	8,679	235,862
604	LEGAL RSRV	300,000	-	-	300,000	-	300,000
605	CBC	2,038,831	2,351,625	2,366,402	2,024,054	325,916	1,698,138
	<b>SUBTOTAL 1</b>	<b>2,671,229</b>	<b>3,263,882</b>	<b>3,366,516</b>	<b>2,568,595</b>	<b>334,595</b>	<b>2,234,000</b>
602	BABC	240,179	177,000	123,490	293,689	-	293,689
606	BACC	35,351	84,253	77,072	42,532	-	42,532
607	BACC LEGAL RSRV	90,000	30,000	-	120,000	-	120,000
610	WOT	259,201	-	25	259,176	-	259,176
612	CASA Air Toxics	(41,840)	538,140	496,300	-	-	-
	<b>SUBTOTAL 2</b>	<b>582,891</b>	<b>829,393</b>	<b>696,887</b>	<b>715,397</b>	<b>-</b>	<b>715,397</b>
	<b>GRAND TOTAL</b>	<b>3,254,120</b>	<b>4,093,275</b>	<b>4,063,403</b>	<b>3,283,992</b>	<b>334,595</b>	<b>2,949,397</b>

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	332,398	912,257	1,000,114	244,541	(200)	170,812	415,153	357,316	57,837	2%	-		priority # 4 for allocation
604	LEGAL RSRV	300,000	-	-	300,000	-	-	300,000	-	300,000	12%	-		priority # 1 for allocation
605	CBC	2,038,831	2,351,625	2,366,402	2,024,054	-	-	2,024,054	-	2,024,054	81%	-		priority # 3 for allocation
	<b>SUBTOTAL 1</b>	<b>2,671,229</b>	<b>3,263,882</b>	<b>3,366,516</b>	<b>2,568,595</b>	<b>(200)</b>	<b>170,812</b>	<b>2,739,207</b>	<b>357,316</b>	<b>2,381,891</b>	<b>95%</b>	<b>-</b>		
602	BABC	240,179	177,000	123,490	293,689	-	-	293,689	293,689	-	0%	-		pass-through funds, no allocation
606	BACC	35,351	84,253	77,072	42,532	-	-	42,532	42,532	-	0%	-		
607	BACC LEGAL RSRV	90,000	30,000	-	120,000	-	-	120,000	-	120,000	5%	-		priority # 2 for allocation
610	WOT	259,201	-	25	259,176	-	-	259,176	259,176	-	0%	-		pass-through funds, no allocation
612	CASA Air Toxics	(41,840)	538,140	496,300	-	-	-	-	-	-	0%	-		pass-through funds, no allocation
	<b>SUBTOTAL 2</b>	<b>582,891</b>	<b>829,393</b>	<b>696,887</b>	<b>715,397</b>	<b>-</b>	<b>-</b>	<b>715,397</b>	<b>595,397</b>	<b>120,000</b>	<b>5%</b>	<b>-</b>		
	<b>GRAND TOTAL</b>	<b>3,254,120</b>	<b>4,093,275</b>	<b>4,063,403</b>	<b>3,283,992</b>	<b>(200)</b>	<b>170,812</b>	<b>3,454,604</b>	<b>952,713</b>	<b>2,501,891</b>	<b>100%</b>			

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

<b>Reconciliation to Trial Balance</b>		STB	29020	-	
<u>Per Report above:</u>		STB	14930	2,501,891	
General	3,263,882	STB	15050	952,713	
WOT, BABC, & BACC	829,393			<b>3,454,604</b>	-
PROP	-	STB	16300	200	
<b>subtotal</b>	<b>4,093,275</b>	STB	21350	(170,812)	
				<b>3,283,992</b>	-

<u>Trial Balance Revenue Accounts</u>	
40100	Interest (226,616)
40101	Mem Contrib (2,022,354)
40102	Transfer (33,467)
40103	Assoc Contrib (196,261)
40104	Other (1,614,577)
47310	State Grant -
47320	Grant Retention -
<b>subtotal</b>	<b>(4,093,275)</b>
<b>Difference</b>	<b>-</b>

## BACWA Revenue Report as of June 30, 2025

Cost Center Code	Cost Center Description	Program Segment Description	Program Segment Value	Amended Budget	Current Period	FY25 - Year to Date	Unobligated
600	Bay Area Clean Water Agencies	BABC - AED and RPM Support	6200	(6,000.00)	(3,467.21)	(3,467.21)	2,532.79
		BACC - AED Support	6199	(39,522.00)	-	-	39,522.00
		BDO Affil/CS/Assoc Dues	6104	-	-	(40,782.00)	(40,782.00)
		BDO Affiliate/Associate Dues	6103	-	-	(45,775.00)	(45,775.00)
		BDO Assoc.&Affiliate Contr	6102	(195,780.00)	-	(109,704.00)	86,076.00
		BDO Fund Transfers	6141	(1,000.00)	-	-	1,000.00
		BDO Member Contributions	6101	(553,929.00)	-	(553,930.00)	(1.00)
		BDO Non-Member Contr AIR	6136	(7,582.00)	-	(7,582.00)	-
		BDO Non-Member Contr BAPPG	6135	(4,264.00)	-	(4,263.00)	1.00
		BDO Other Receipts	6105	-	-	-	-
		BDO Other Receipts (Misc)	6140	-	-	(2,732.00)	(2,732.00)
		BDO- Interest Income from LAIF	6142	(80,000.00)	(9,906.51)	(144,021.43)	(64,021.43)
		BDO-Alternative Investment Inc	6143	-	-	-	-
<b>600 Total</b>				<b>(888,077.00)</b>	<b>(13,373.72)</b>	<b>(912,256.64)</b>	<b>(24,179.64)</b>
602	Bay Area Biosolids Coalition	BDO Fund Transfers	6141	-	-	-	-
		BDO Member Contributions	6101	-	-	(177,000.00)	(177,000.00)
<b>602 Total</b>				-	-	<b>(177,000.00)</b>	<b>(177,000.00)</b>
605	Clean Bay Collaborative	BDO Fund Transfers	6141	-	-	-	-
		BDO Member Contributions	6101	(675,000.00)	-	(674,250.00)	750.00
		BDO Other Receipts	6105	(1,600,000.00)	-	(1,600,000.00)	-
		BDO- Interest Income from LAIF	6142	-	-	(77,375.12)	(77,375.12)
<b>605 Total</b>				<b>(2,275,000.00)</b>	-	<b>(2,351,625.12)</b>	<b>(76,625.12)</b>
606	Bay Area Chemical Consortium	BDO Member Contributions	6101	-	-	(79,033.65)	(79,033.65)
		BDO- Interest Income from LAIF	6142	-	-	(5,219.85)	(5,219.85)
<b>606 Total</b>				-	-	<b>(84,253.50)</b>	<b>(84,253.50)</b>
607	BACC Legal RSRV	BDO Fund Transfers	6141	-	-	(30,000.00)	(30,000.00)
<b>607 Total</b>				-	-	<b>(30,000.00)</b>	<b>(30,000.00)</b>
612	CASA Air Toxics	BDO Member Contributions	6101	(600,000.00)	-	(538,140.00)	61,860.00
<b>612 Total</b>				<b>(600,000.00)</b>	-	<b>(538,140.00)</b>	<b>61,860.00</b>
<b>Grand Total</b>				<b>(3,763,077.00)</b>	<b>(13,373.72)</b>	<b>(4,093,275.26)</b>	<b>(330,198.26)</b>

## BACWA Expense Detail Report for June 30, 2025

Cost Center Code	Program Segment Description	Program Segment Value	Balance Type	Current Period Activity	FY25 - Year to Date
600	AIR-Air Issues&Regulation Grp	6153	Actual	16,766.50	90,199.37
			Encumbrance	(16,766.50)	-
			Obligated	-	90,199.37
	AS-Assistant Executive Directo	6175	Actual	20,692.84	94,406.04
			Encumbrance	(20,692.84)	-
			Obligated	-	94,406.04
	AS-Audit Services	6180	Actual	5,672.00	5,672.00
			Encumbrance		
			Obligated	5,672.00	5,672.00
	AS-BACWA Admin Expense	6173	Actual	1,280.61	1,379.82
			Obligated	1,280.61	1,379.82
	AS-EBMUD Financial Services	6176	Actual	8,348.72	40,140.65
			Encumbrance	(9,367.67)	-
			Obligated	(1,018.95)	40,140.65
	AS-Executive Director	6174	Actual	37,371.66	224,229.96
			Encumbrance	(37,371.66)	-
			Obligated	-	224,229.96
	AS-Insurance	6177	Actual	-	8,465.67
			Obligated	-	8,465.67
	AS-Regulatory Program Manager	6179	Actual	24,170.85	154,768.62
			Encumbrance	(24,170.85)	-
			Obligated	-	154,768.62
	Administrative Support	6178	Actual	-	-
			Obligated	-	-
	Asset Management Committee	6213	Actual	-	599.72
			Obligated	-	599.72
	BACWA Value of Wastewater Communication	6211	Actual	1,827.50	25,112.50
			Encumbrance	(1,827.50)	2,925.48
			Obligated	-	28,037.98
	BC-BAPPG	6152	Actual	29,555.16	166,986.19
			Encumbrance	(29,192.39)	-
			Obligated	362.77	166,986.19
	BC-Collections System	6144	Actual	-	50,000.00
			Encumbrance	-	-
			Obligated	-	50,000.00
	BC-Laboratory Committee	6149	Actual	-	1,608.65
			Encumbrance	-	-
			Obligated	-	1,608.65
	BC-Manager's Roundtable	6154	Actual	-	-
			Obligated	-	-
	BC-Miscellaneous Committee Sup	6150	Actual	4,941.25	4,941.25
			Encumbrance	(4,941.25)	5,753.75
			Obligated	-	10,695.00
	BC-Permit Committee	6145	Actual	-	389.90
			Obligated	-	389.90
	BC-Pretreatment Committee	6151	Actual	-	-
			Obligated	-	-
	BC-Water Recycling Committee	6146	Actual	-	-
			Encumbrance	-	-
			Obligated	-	-
	Bruce Wolf Scholarship	6210	Actual	-	4,000.00
			Obligated	-	4,000.00
	CAR-BACWA File Storage	6165	Actual	-	720.00
			Obligated	-	720.00
	CAR-BACWA IT Software	6167	Actual	2,084.65	3,642.58
			Obligated	2,084.65	3,642.58
	CAR-BACWA IT Support	6166	Actual	-	-

Cost Center Code	Program Segment Description	Program Segment Value	Balance Type	Current Period Activity	FY25 - Year to Date
			Encumbrance	-	-
			Obligated	-	-
	CAR-BACWA Website Dev/Maint	6163	Actual	-	761.63
			Obligated	-	761.63
	CAR-BACWA Website Hosting	6164	Actual	-	281.46
			Obligated	-	281.46
	CAS-Arleen Navaret Award	6160	Actual	-	-
			Obligated	-	-
	CAS-BayCAN	6204	Actual	-	1,500.00
			Obligated	-	1,500.00
	CAS-Misc Collaborative Sup	6162	Actual	-	4,000.00
			Obligated	-	4,000.00
	CAS-PSSEP	6157	Actual	-	-
			Obligated	-	-
	CAS-Stanford ERC	6159	Actual	-	-
			Obligated	-	-
	GBS-Meeting Support-Annual	6170	Actual	-	13,351.33
			Obligated	-	13,351.33
	GBS-Meeting Support-Exec Bd	6169	Actual	121.26	3,405.82
			Obligated	121.26	3,405.82
	GBS-Meeting Support-Misc	6172	Actual	2,847.71	10,560.76
			Obligated	2,847.71	10,560.76
	GBS-Meeting Support-Pardee	6171	Actual	-	2,158.51
			Obligated	-	2,158.51
	LS-Executive Board Support	6156	Actual	-	127.50
			Encumbrance	-	-
			Obligated	-	127.50
	LS-Regulatory Support	6155	Actual	-	86,090.79
			Encumbrance	-	-
			Obligated	-	86,090.79
	O&M Committee	6148	Actual	-	412.80
			Obligated	-	412.80
	WQA-CE-Nature Based Solutions	6196	Actual	-	-
			Obligated	-	-
	Write-Off Doubtful Accounts	6208	Actual	-	200.00
			Obligated	-	200.00
<b>600 Total</b>			<b>Actual</b>	<b>155,680.71</b>	<b>1,000,113.52</b>
<b>600 Total</b>			<b>Encumbrance</b>	<b>(144,330.66)</b>	<b>8,679.23</b>
<b>600 Total</b>			<b>Obligated</b>	<b>11,350.05</b>	<b>1,008,792.75</b>
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	3,467.21	3,467.21
			Obligated	3,467.21	3,467.21
	BDO Contract Expenses	6186	Actual	-	-
			Obligated	-	-
	Collateral Development	6197	Actual	-	-
			Obligated	-	-
	Program Manager Expense	6202	Actual	17,105.35	120,023.24
			Encumbrance	(17,105.35)	-
			Obligated	-	120,023.24
	Technology Research & Development	6206	Actual	-	-
			Obligated	-	-
<b>602 Total</b>			<b>Actual</b>	<b>20,572.56</b>	<b>123,490.45</b>
<b>602 Total</b>			<b>Encumbrance</b>	<b>(17,105.35)</b>	<b>-</b>
<b>602 Total</b>			<b>Obligated</b>	<b>3,467.21</b>	<b>123,490.45</b>

Cost Center Code	Program Segment Description	Program Segment Value	Balance Type	Current Period Activity	FY25 - Year to Date
605	Recycled Water Evaluation	6198	Actual	-	-
			Encumbrance	-	-
			Obligated	-	-
	WQA - CEC Investigations	6201	Actual	-	-
			Encumbrance	-	-
			Obligated	-	-
	WQA-CE Addl Work Under Permit	6191	Actual	35,673.33	111,089.38
			Encumbrance	(25,673.33)	325,915.62
			Obligated	10,000.00	437,005.00
	WQA-CE Risk Reduction	6190	Actual	-	6,875.00
			Encumbrance	-	-
			Obligated	-	6,875.00
	WQA-CE Voluntary Nutr Contrib	6193	Actual	-	-
			Obligated	-	-
	WQA-CE-Nature Based Solutions	6196	Actual	-	47,037.63
			Encumbrance	-	-
			Obligated	-	47,037.63
	WQA-CE-Nutrient WS Permit Comm	6188	Actual	-	2,200,000.00
			Obligated	-	2,200,000.00
	WQA-CE-Technical Support	6181	Actual	-	-
			Encumbrance	-	-
			Obligated	-	-
	WQA-NMSReviewer	6205	Actual	-	1,400.00
			Encumbrance	-	-
			Obligated	-	1,400.00
<b>605 Total</b>			<b>Actual</b>	<b>35,673.33</b>	<b>2,366,402.01</b>
<b>605 Total</b>			<b>Encumbrance</b>	<b>(25,673.33)</b>	<b>325,915.62</b>
<b>605 Total</b>			<b>Obligated</b>	<b>10,000.00</b>	<b>2,692,317.63</b>
606	AS-BACWA Admin Expense	6173	Actual	-	-
			Obligated	-	-
	AS-Regulatory Program Manager	6179	Actual	-	-
			Obligated	-	-
	Administrative Support	6178	Actual	1,908.15	47,071.96
			Encumbrance	(889.20)	-
			Obligated	1,018.95	47,071.96
	BDO Fund Transfers	6141	Actual	-	30,000.00
			Obligated	-	30,000.00
	GBS-Meeting Support-Misc	6172	Actual	-	-
			Obligated	-	-
<b>606 Total</b>			<b>Actual</b>	<b>1,908.15</b>	<b>77,071.96</b>
<b>606 Total</b>			<b>Encumbrance</b>	<b>(889.20)</b>	<b>-</b>
<b>606 Total</b>			<b>Obligated</b>	<b>1,018.95</b>	<b>77,071.96</b>
610	Administrative Support	6178	Actual	-	-
			Obligated	-	-
	BC-BAPPG	6152	Actual	-	-
			Obligated	-	-
	BDO Contract Expenses	6186	Actual	-	25.00
			Obligated	-	25.00
<b>610 Total</b>			<b>Actual</b>	<b>-</b>	<b>25.00</b>
<b>610 Total</b>			<b>Encumbrance</b>	<b>-</b>	<b>-</b>
<b>610 Total</b>			<b>Obligated</b>	<b>-</b>	<b>25.00</b>
612	Passthrough to CASA for air toxics	6212	Actual	-	496,300.00
			Obligated	-	496,300.00
<b>612 Total</b>			<b>Actual</b>	<b>-</b>	<b>496,300.00</b>
<b>612 Total</b>			<b>Encumbrance</b>	<b>-</b>	<b>-</b>
<b>612 Total</b>			<b>Obligated</b>	<b>-</b>	<b>496,300.00</b>
<b>Grand Total Actual</b>				<b>213,834.75</b>	<b>4,063,402.94</b>
<b>Grand Total Encumbrance</b>				<b>(187,998.54)</b>	<b>334,594.85</b>
<b>Grand Total Obligated</b>				<b>25,836.21</b>	<b>4,397,997.79</b>

# RESOLUTION

**HONORING MICHAEL CONNOR FOR HIS DEDICATED SERVICE,  
VISION, AND GENEROUS CONTRIBUTIONS TO THE PEOPLE, SCIENCE, AND  
NATURAL ENVIRONMENT OF THE BAY AREA AND ITS CLEAN WATER COMMUNITY**



**W**HEREAS, throughout his career, Michael Connor was generous with his humanity, compassion, and irreverent humor, while sharing his invaluable knowledge, mentoring, and scientific and policy expertise with the next generation of Bay Area leaders and public servants; and

WHEREAS, as a result of Michael Connor’s vision and leadership, the waters of the San Francisco Bay and Delta Estuary and the health of its aquatic life and citizens will be greatly enhanced for generations to come; and

WHEREAS, Michael Connor received his B.S. in Biology from Stanford University in 1974 and a Ph.D. in Physical Oceanography from Woods Hole Oceanographic Institution and MIT in 1980; and

WHEREAS, prior to moving to California in 2002 he served in a range of research and regulatory capacities in New England, including at EPA Region 1, the Massachusetts Water Resources Authority, and New England Aquarium; and

WHEREAS, Michael Connor took on the leadership of the San Francisco Estuary Institute (SFEI) from 2002 through 2008, over which time he doubled the Institute’s capacity and increased its public visibility and impact; and

WHEREAS, he served as the General Manager of the East Bay Dischargers Authority (EBDA) from 2008 to 2018, a Joint Powers Agency that that efficiently and reliably manages the wastewater resources of one million East Bay residents and thousands of businesses to protect human and environmental health; and

WHEREAS Michael Connor served on the BACWA Board during his tenure at EBDA, and chaired the BACWA Board from 2013-2015, where he oversaw the broadening of BACWA’s scope and an increase in the level of service to its members; and

WHEREAS, in each of these roles Michael Connor demonstrated innovative thinking to explore novel solutions to challenging problems in science, policy, and management, and brought his decades of experience to show the interconnectedness of systems; and

WHEREAS, Michael Connor used his positions to mentor young scientists, engineers, and regulatory professionals throughout the clean water community, leaving the Bay Area environmental workforce the better for his involvement and understanding how people are the key to effective environmental stewardship;

NOW, THEREFORE, IT BE RESOLVED that Michael Connor is hereby honored for his distinguished service and visionary leadership with SFEI, BACWA, and the Bay Area clean water community.

PASSED AND ADOPTED THIS 15<sup>TH</sup> DAY OF AUGUST 2025.

\_\_\_\_\_  
Jackie Zipkin  
Executive Board Chair – BACWA

\_\_\_\_\_  
Warner Chabot  
Executive Director – SFEI

\_\_\_\_\_  
Ralph Johnson  
Commission Chair - EBDA





## BACWA CHAIR AUTHORIZATION REQUEST

AGENDA NO.: 4

MEETING DATE: August 15, 2025

**TITLE: Request for BACWA Chair Authorization for Contract with The Freshwater Trust for Water Quality Trading Kickoff & Preliminary Outreach for a Water Quality Trading Feasibility Assessment, not to exceed \$9,890**

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

### RECOMMENDED ACTION

Authorize contract with The Freshwater Trust to provide Water Quality Trading Kickoff & Preliminary Outreach for a Water Quality Trading Feasibility Assessment, not to exceed \$9,890.

### SUMMARY

The 2024 Nutrients Watershed Permit (Order R2-2024-0013, NPDES No. CA0038873) includes an aggregate Bay-wide total inorganic nitrogen (TIN) load limitation, that is allocated among all the dischargers. The Watershed Permit explicitly allows for nitrogen trading between agencies as a compliance strategy. The Watershed Permit also requires the development of a Regional Plan to Reduce TIN Discharges. This Regional Plan may include the proposal of a trading program (Provision 6.3.4.f).

After a competitive solicitation in 2024, BACWA selected HDR Consultants to perform the Regional Plan, an effort which began with the development of a Scoping Plan, due to the San Francisco Bay Regional Water Board by July 1, 2025. The HDR proposal included The Freshwater Trust (TFT) as a subconsultant to perform work associated with a trading program.

The Watershed Permit requires the submittal of information about each agency's compliance progress, to be measured against defined compliance milestones (Provision 6.3.3.1). In the April 1, 2026 milestone report, each agency is required to submit an Alternatives Analysis. To support agencies who may wish to buy TIN credits as part or all of their compliance pathway, BACWA plans to move forward with a trading feasibility assessment to supply agencies with added assurance that trading will be a feasible compliance pathway. BACWA requested that TFT develop a Scope of Work (SOW) for this feasibility assessment. To inform agencies in a timely manner prior to the 2026 compliance milestone reporting deadline, this feasibility assessment must wrap up by the end of 2025.

After the submittal and acceptance of the Regional Plan Scoping Plan on July 1, 2025, it is anticipated that the BACWA Board will consider approval of a contract with HDR to provide the full Regional Plan as described by the Scoping Plan at the August 15, 2025 BACWA Board Meeting. This contract is anticipated to include a task for TFT to perform the Water Quality Trading Feasibility Assessment. At the June 20, 2025 Board Meeting, upon reviewing the proposed TFT Scope of Work (SOW) the BACWA Board expressed concern that waiting until the August meeting would not provide sufficient time for the Feasibility Assessment to be completed by the end of the calendar year. The Board gave direction that BACWA should consider authorizing a smaller contract to get TFT started as soon as

feasible under the BACWA Chair Authorization limit.

In response to the BACWA Board's direction, TFT has split their proposed SOW into two parts, the first of which includes a kickoff meeting and initial interviews with some of BACWA's member agencies. This SOW#1 would be approved by the BACWA Chair in July, and SOW#2 for the remaining work would be brought to the BACWA Board as part of the August Regional Plan Contract with HDR.


### **FISCAL IMPACT**

The total contract amount of \$9,890 will be funded under the Additional Work Under Permit line item from the FY26 BACWA Budget approved April 18, 2025.

### **ALTERNATIVES**

1. Do not authorize contract. This alternative is not recommended, since TFT needs to start this work as soon as possible to develop information to support BACWA's members' decisions on whether to include trading as a potential compliance pathway.
2. Select another firm to complete the work. This alternative is not recommended, TFT was included in the HDR proposal as part of a competitive solicitation and is thus positioned to start this work as soon as possible.

*Attachments:* Contract with The Freshwater Trust for SOW#1

Approved:   
\_\_\_\_\_  
Jackie Zipkin, Chair,  
BACWA Executive Board

Date: July 9, 2025

Date: July 9, 2025

## BAY AREA CLEAN WATER AGENCIES

# CONSULTING AGREEMENT

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TO: Joe Whitworth, President and CEO      Joe@thefreshwatertrust.org  
The Freshwater Trust      (503) 222-9091  
PO Box 9205  
Portland, OR 97207

FROM: Lorien Fono, Executive Director      lfono@bacwa.org  
BACWA  
PO Box 24055, MS702  
Oakland, CA 94623

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RE: BACWA Agreement for FY26 with The Freshwater Trust to provide a Water Quality Trading Kickoff & Preliminary Outreach for a Water Quality Trading Feasibility Assessment, to the Bay Area Clean Water Agencies.

This Agreement covers professional services to be performed by The Freshwater Trust in order to develop the first phase of Water Quality Trading Kickoff & Preliminary Outreach for a Water Quality Trading Feasibility Assessment for BACWA. The work under this contract will be carried out under the supervision of Lorien Fono, BACWA Executive Director according to the attached Scope of Work #1. The total cost of professional services to be performed by The Freshwater Trust is not to exceed \$9,890. This contract will be funded by the BACWA Budget under the Additional Work Under Permit line item. The term of this contract shall expire on December 31, 2025.

This Agreement may be terminated by either party at any time for convenience with 30 day notice. In the event of termination by BACWA, BACWA shall pay The Freshwater Trust for professional and competent services rendered to the date of termination upon delivery of assigned work products to BACWA.

The Freshwater Trust shall submit invoices to the BACWA Assistant Executive Director via e-mail. Invoices shall indicate hours and direct expenses, if any, associated with each task. Invoices will be paid within thirty (30) days of receipt.

BACWA AED E-mail: Jennifer Dymant      [jdymant@bacwa.org](mailto:jdymant@bacwa.org)

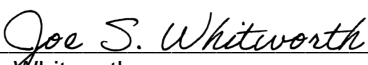
Attachment: Scope of Work #1, Water Quality Trading Kickoff & Preliminary Outreach

Approved:

By   
Jackie Zipkin  
Chair, BACWA Executive Board

07 / 09 / 2025  
Date \_\_\_\_\_

BACWA EIN: 94-3389334

By   
Joe Whitworth  
President and CEO, The Freshwater Trust

July 9, 2025  
Date \_\_\_\_\_

THE FRESHWATER TRUST EIN: 93-0843521



The Freshwater Trust protects and restores freshwater ecosystems. Using science, technology, and incentive-based solutions, we are changing the course of conservation on a timeline that matters.

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## Proposed Scope of Work #1

### Bay Area Clean Water Agencies

### Water Quality Trading Kickoff & Preliminary Outreach

*July 7, 2025*

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#### Background

The Bay Area Clean Water Agencies (BACWA) is a California joint powers agency comprised of the largest wastewater treatment agencies in the San Francisco Bay (the SF Bay). BACWA's members include the local clean water agencies that provide sanitary sewer services to nine counties across the San Francisco Bay Area. In accordance with the Clean Water Act and California state law, the San Francisco Bay Regional Water Quality Control Board (Regional Board) regulates the water quality of discharges from BACWA's members, and others. The Regional Board has issued a Nutrient Watershed Permit (Permit) to address nutrients in the San Francisco Bay that are believed to contribute to harmful algal blooms.

In July 2024, the Regional Board adopted the third iteration of the Permit. This Permit applies to each municipal wastewater utility that discharges to San Francisco Bay and its subembayments and will remain in effect through September 2029. Unlike the prior iterations, the current Permit includes enforceable numeric discharge limits for nitrogen in addition to other monitoring, investigation, and reporting requirements. The Permit establishes compliance schedules with interim and final effluent limits; the final effluent limit requires an aggregate 40% reduction of nutrient loading from 2022 levels within a 10-year period, while maintaining current performance in the interim. Compliance with the final nutrient load limit is determined in the aggregate, with the dischargers' individual mass load limits being used to measure compliance only if the aggregate limit is exceeded. The cost to achieve these load reductions will be significant—a 2018 report from BACWA estimated the regionwide cost at \$11 billion, escalated to 2023 dollars.

In 2016, the East Bay Municipal Utility District, a BACWA JPA signatory, retained the Freshwater Trust (TFT) to investigate the potential for a nutrient trading program for the San Francisco Bay. A water quality trading (WQT) program would facilitate the buying and selling of discharge allocations (i.e., credits) between the regulated clean water agencies in SF Bay (point-to-point source trading) and potentially the creation of credits from nonpoint source projects that reduce nutrient loading (nonpoint-to-point source trading). TFT submitted the final WQT report in 2017. Titled *Point-to-Point Source Water Quality Trading for Nutrients in the San Francisco Bay: Assessing the Viability & Mechanics of a Nutrient Credit Trading Program*, the report provided a summary of WQT basics, identified challenges and opportunities for WQT in SF Bay, proposed components of a conceptual WQT program, and explored the inclusion of nonpoint source reductions. However, the report identified numeric discharge limits as a necessary precondition, so a WQT program could not be pursued until such limits were adopted, which occurred in 2024.

## Objective

With the issuance of the 2024 Nutrient Watershed Permit, which includes compliance schedules with interim and final numeric effluent limits, BACWA would like to retain TFT to revisit the findings of the 2017 report, evaluate the feasibility of a WQT program, and define a number of conceptual program design options and considerations that would underpin the development and deployment of such a program in practice. The objective of this first Scope of Work (SOW#1) is to begin the preliminary work necessary to evaluate the feasibility and characteristics of a WQT program for the San Francisco Bay. To achieve this objective, TFT will host a kickoff meeting with BACWA staff and arrange for outreach to interested BACWA members to: provide information about WQT, document individual circumstances, gauge interest, identify concerns, answer questions, and generally build support for a WQT program.

This outreach will also help ensure that the final report, prepared as part of the second scope of work, is appropriately tailored to the context in SF Bay and addresses BACWA members' circumstances. Based in part on the input gained from the outreach efforts conducted as part of this SOW#1, as well as future outreach and investigations, TFT will prepare a final report pursuant to a future SOW (SOW# 2) expected to be authorized in August 2025, that summarizes the findings and defines options and considerations to inform the ultimate design of a WQT program that, if deployed, would facilitate trading among the regulated point sources in SF Bay.

## PROPOSAL

The Freshwater Trust proposes this SOW#1 comprised of the following tasks:

### Task 1 – Project Management & Kickoff Meeting

TFT will hold an initial meeting with BACWA following the execution of this contract to discuss project goals, assumptions, and expectations. Throughout the duration of this SOW, TFT will organize and manage the consulting team, oversee the project, and coordinate with BACWA staff. TFT, its partners, and BACWA staff will meet during project duration at a minimum once per month, including to review the SOW, budget, schedule, and deliverables. TFT shall prepare monthly invoices that cover:

- Work Completed during the month by work task
- Needs for additional information or review from BACWA or its members
- Any scope, schedule, or budget issues and changes

#### *Task 1 Deliverables & Deadlines:*

1. Arrange kickoff meeting with BACWA staff.  
*Kickoff within two weeks of contract execution (expected July 2025).*
2. Prepare and submit monthly invoices.  
*Task ongoing for duration of Scope of Work.*

*Task 1 Estimated Cost: \$3,295*

### Task 2 – Outreach to BACWA Members, Experts & Stakeholders

To build support for a conceptual WQT program, it will be necessary to engage in strategic and clear outreach to BACWA members and other core stakeholders. This effort will focus on meeting with groups

of BACWA members to provide them information about WQT as well as to better understand their individual circumstances, their interest in trading, and their questions and concerns. To make these outreach efforts more efficient, the BACWA members will be grouped into categories based on their circumstances, perceived interests, and other relevant factors and outreach will be conducted to the groups rather than individual BACWA members. The potential groups/categories of BACWA members may include: (i) potential credit buyers, (ii) potential credit sellers, (iii) interested members that lack a demonstrated interest in either buying or selling credits, (iv) members that have expressed skepticism about WQT, and (v) other categories as appropriate. These categories may also take into account the similarities of BACWA members (e.g., facility size, expected growth, etc.).

The insight gained from this outreach will enable TFT and BACWA to tailor the deliverables prepared as part of a subsequent SOW for BACWA members and lay the foundation for the eventual development of a WQT framework that, with regulatory approval, would facilitate a functional trading program among dischargers in SF Bay. As part of the outreach efforts, relevant TFT staff will participate in meetings with BACWA, its members, stakeholders and regulators, and will provide a final presentation on the results of this SOW to interested parties as directed by BACWA. As part of the outreach efforts, TFT will:

- Work with BACWA to develop outreach materials (e.g., presentations, one-page WQT summary, template questions for meetings) and coordinate communication among the project team and stakeholders
- Participate in up to 4 meetings with BACWA members, regulators, and/or other stakeholders, and document the results of this outreach (up to 10 meetings will eventually be held, including SOW #2)
- Support BACWA in its investigation and potential pursuit of WQT by participating, assisting, and engaging in outreach efforts and other meetings, as requested by BACWA, to the extent feasible

*Task 2 Deliverables & Deadlines:*

1. Provide outreach support and services as requested by BACWA, including but not limited to preparing outreach materials, and participating in stakeholder discussions and meetings.

*Task ongoing for duration of Scope of Work.*

2. Begin preparing a *draft* written summary of input received from BACWA members and other stakeholders during the outreach meetings.

*Summary to be included in the Final Report (prepared in future SOW #2).*

*Task 2 Estimated Cost: \$6,596*

## SCHEDULE

TFT shall begin performance following the execution of the contract, anticipated to occur in July 2025. TFT will complete all services no later than August 31, 2025.

	July	August
Task 1: Project Management & Kickoff		
Task 2: Outreach Support		

**Total Cost for SOW#1: \$9,890**

**Who to contact for next steps:**

The Freshwater Trust appreciates BACWA's interest and review. Please direct questions, comments, and proposed additions to:

Erik Ringelberg  
Regional Vice President, California  
[Erik@thefreshwatertrust.org](mailto:Erik@thefreshwatertrust.org)

Chris Thomas  
Senior Attorney & Policy Specialist  
[cthomas@thefreshwatertrust.org](mailto:cthomas@thefreshwatertrust.org)





## EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 5

MEETING DATE: August 15, 2025

**TITLE: Request for BACWA Executive Board Approval to Execute Amendment #1 to Agreement with HDR Engineering, Inc. for Compliance Support for 2024 Nutrient Watershed Permit not to exceed \$ 444,137.**

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

### RECOMMENDED ACTION

Authorize the execution of an amendment to the agreement with HDR Engineering, Inc. to support a Regional Planning Study as part of the Compliance Support for the 2024 Nutrient Watershed Permit compliance in an amount not to exceed \$ 444,137, for a new total authorized contract amount of \$788,238.

### SUMMARY

The 2024 Nutrient Watershed Permit was adopted by the San Francisco Regional Water Quality Control Board (Water Board) in July 2024 and became effective on October 1, 2024. In addition to load limitations, the Watershed Permit requires that individually or in collaboration, the major Dischargers conduct monitoring and reporting of flows and nutrient loads, reporting of milestones towards compliance with the final limits, and development of a Regional Plan that details efforts to come into compliance with the final effluent limitations and identifies alternatives to achieve lower limits, should they be required in future permits.

On October 9, 2024 BACWA issued a Request for Proposals (RFP) for consultant support for Watershed Permit compliance. The tasks included in the RFP were:

- Task 1 – Project management
- Task 2 – Group Annual Reporting
- Task 3 – Compliance milestone reporting
- Task 4 – Regional Plan Scoping Plan

BACWA received three proposals in response to the RFP. A selection committee made up of BACWA staff, a BACWA Executive Board member, and member agency staff ranked the proposal submitted by HDR Engineering the highest of the three based on the selection criteria provided in the RFP.

On December 6, 2024, BACWA approved an initial contract of \$344,101 to complete Tasks 1-4, to be paid as a lump sum. An optional Task 5 for a data dashboard is included in the contract, but will not be conducted without written notice from BACWA. The contract was approved with the understanding that Task 4, the Regional Plan Scoping Plan, would be used to develop a scope of work and level of effort for the Regional Plan itself, which is the focus of this Amendment #1. The Regional Plan is the subject of the new Task 6 in the attached Scope of Work, which includes and builds on the tasks from the original contract. In addition to the new Task 6, the level of effort for Project Management, Task 1, has been

increased to reflect additional work associated with supporting the Regional Plan.

The amended contract also includes work by the subconsultant The Freshwater Trust, to conduct the second part of a Nutrient Feasibility Analysis in Task 6.11. The first part of this effort was authorized by the BACWA Chair on July 9, 2025.

There were several elements of the new scope of work that included significant uncertainties, largely due to unknowns regarding the amount of information that will be provided by member agencies. These items include Compliance and Construction (Task 6.5), Financing Alternatives and Community Rate Impacts (6.8), and Strategies to Reduce Regional Costs (6.9). Future work to support a trading system following the feasibility assessment recommendations by TFT is also included in this category (Task 6.11). These tasks were therefore split into two phases, the first of which is included in this Amendment. The second phase of each of these tasks are noted in Table 2 of the Scope of Work as “TBD” and will be scoped out once the level of effort is better understood pending the results of the first phases. The Table below includes an estimate and range of level of effort for the second phase of each of these subtasks which may be brought to the BACWA Executive Board for a future contract amendment. The figures in this table are for informational purposes only and are not part of the current approval.

Table: Estimates and ranges of level of effort in second phases of tasks, currently labeled “TBD”

<b>Task</b>	<b>Description</b>	<b>Total HDR Labor Hours</b>	<b>Total HDR Labor (\$)</b>
6.5.2	Compliance and Construction Timelines (Implementation)	162 (66 - 212)	\$38,719 (\$17,383 – \$49,467)
6.8.2	Financing Alternatives and Community Rate Impacts (Financial Plan Iterative Approach and Affordability Analyses)	308 (124 - 475)	\$69,186 (\$31,130 - \$105,059)
6.9.2	Strategies to Reduce Regional Cost (Implementation of Approach)	38 (16 - 57)	\$8,771 (\$4,146 - \$12,954)
6.11.2	Nutrient Credit Trading (Future Nutrient Credit Trading)	46 (22 - 58)	\$13,471 (\$7,134 - \$16,659)
	Sum	554 (228 - 802)	<b>\$130,147</b> <b>(\$59,793 - \$184,139)</b>

A contract Management Group led by the BACWA Staff and composed of BACWA Executive Board members and member agency staff will oversee completion of the work and keep the Board apprised on progress.

## **FISCAL IMPACT**

The Fiscal Year 2026 BACWA Budget approved April 18, 2025, included a line item of \$250,000 for this contract. The BACWA 5-Year Plan anticipates spending \$900,000 over four fiscal years for Watershed Permit support.

## **ALTERNATIVES**

1. Do not complete this work: This alternative is not recommended since the Tasks herein are requirements of the 3<sup>rd</sup> Nutrient Watershed Permit and the BACWA members are relying on BACWA to complete them on their behalf.
2. Select another consultant to conduct the work: This alternative is not recommended since HDR Engineering Inc. was selected through a competitive process to complete the work.

Attachments:

Revised Scope of Work, including Subconsultant Scope of Work for The Freshwater Trust Amendment #1

Contract with HDR Engineering, Inc. including Scope of Work, Schedule and Fees

Approved: \_\_\_\_\_

Jackie Zipkin, Chair,  
BACWA Executive Board

Date: \_\_\_\_\_

# EXHIBIT A

## SCOPE OF WORK

### **Bay Area Clean Water Agencies (BACWA) Amendment 1 - Compliance Support for 2024 Nutrient Watershed Permit / Regional Planning Study**

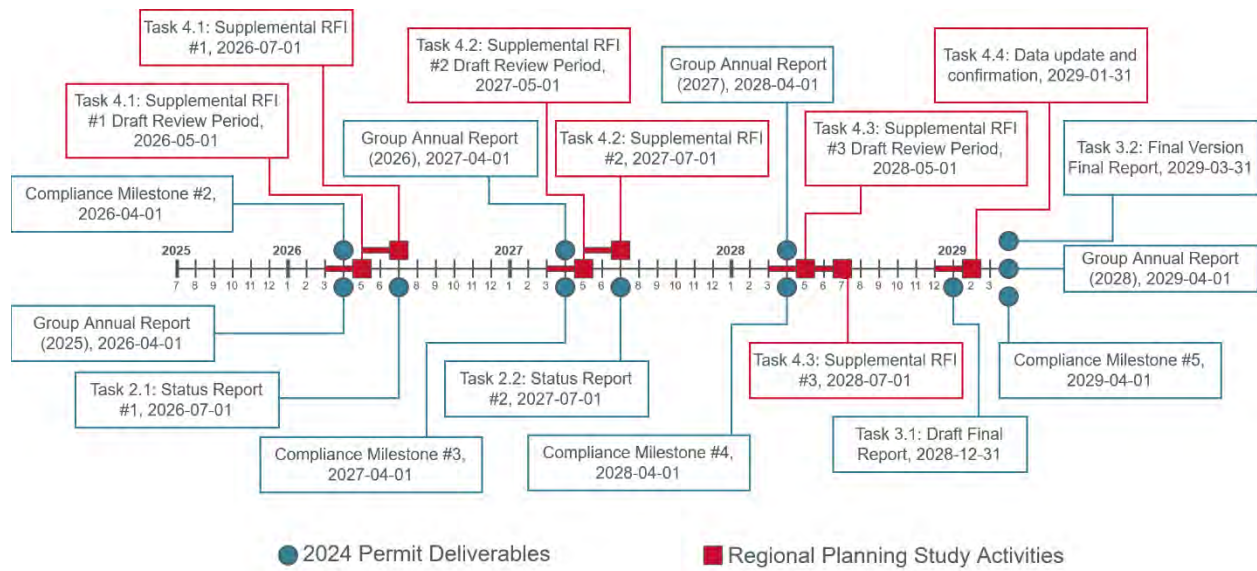
The following tasks describe the work needed to complete the Regional Planning Study as described in the Scoping Plan dated June 16, 2025 (<https://bacwa.org/wp-content/uploads/2025/06/BACWA-Scoping-Plan-for-Regional-Planning-Study-2025-06-16.pdf>) and submitted to the Regional Water Board on July 1, 2025. The Regional Planning Study is a key deliverable for the 2024 Nutrient Watershed Permit that will provide an analysis of the timeline, cost, and cross-media impacts associated with the required nutrient reduction projects. The study will also include an evaluation of beneficial projects that may require more than ten years to complete, and a preliminary investigation of the potential for nutrient credit trading.

This scope of work is an amendment to the lump sum contract between BACWA and HDR executed on December 10, 2024 (refer to Appendix A), which authorized \$344,101 for Tasks 1 to 4 and identified an optional Task 5 that could be conducted upon receiving written notice from BACWA.

In this amendment, the numbering for tasks 1 through 5 adheres with the numbering convention used in the original contract to alleviate confusion. The elements of the Regional Planning Study fall under Task 6. Information needed to complete the Regional Planning Study will be obtained from Dischargers through two types of Requests for Information (RFIs):

- The Compliance Schedule Milestone RFIs (Section 6.3.3 of the 2024 Permit) completed annually as part of the Group Annual Report.
- Supplemental RFIs independent of the compliance milestone reporting.

Using an RFI-based approach offers a means to distribute the burden of work on Dischargers throughout the year and each RFI can be tailored to different agency staff. The schedule of anticipated RFIs is summarized in Figure 1, with descriptions given in Table 1.



**Table 1 - Timeline for 2024 Permit Deliverables and Activities**

Table 1 - Key Due Dates for the Regional Planning Study (Bold) and Other Permit Requirements		
Deliverable	Description	Permit Due Date
<b>Scoping Plan</b>	<b>Contents, methods, and schedule for Regional Planning Study (<a href="#">Scoping Plan</a>).</b>	<b>2025-07-01</b>
Compliance Schedule Milestone #2 <sup>3</sup>	<i>Perform Alternatives Analysis</i> <sup>1</sup> Dischargers shall evaluate the compliance alternative(s) and which alternative or combination of alternatives will best achieve compliance with the final effluent limits in Table 4 of the 3 <sup>rd</sup> Nutrient Watershed Permit (R2-2025-0013).	2026-04-01
Group Annual Report (2025)	Data and trending analysis on flows and nutrient levels for influent, discharge, and recycled water for each Discharger and the compliance milestone summary.	2026-04-01
<b>Status Report</b>	<b>Update to Regional Water Board regarding tasks completed and preliminary findings</b>	<b>2026-07-01</b>
Compliance Schedule Milestone #3 <sup>3</sup>	<i>Submit Compliance Plan</i> <sup>1,2</sup> Dischargers shall describe proposed improvements and provide an implementation schedule for meeting the final effluent limits in Table 4 of the 3 <sup>rd</sup> Nutrient Watershed Permit (R2-2025-0013).	2027-04-01
Group Annual Report (2026)	Same as Group Annual Report (2025)	2027-04-01
<b>Status Report</b>	<b>Update to Regional Water Board regarding tasks completed and preliminary findings</b>	<b>2027-07-01</b>
Compliance Schedule Milestone #4 <sup>3</sup>	<i>Submit Design Progress Report</i> <sup>1,2</sup> Dischargers implementing a capital project as described in the 2024 Permit shall provide project details for each capital project to meet the final effluent limits in Table 4 of the 3 <sup>rd</sup> Nutrient Watershed Permit (R2-2025-0013).	2028-04-01
Group Annual Report (2027)	Same as Group Annual Report (2025)	2028-04-01
<b>Regional Planning Study Final Report</b>	<b>Results and findings of Regional Planning Study. Each Discharger will have the opportunity to review a draft of the report and provide comments prior to submission of the final report.</b>	<b>2029-03-31</b>
Compliance Schedule Milestone #5 <sup>3</sup>	<i>Submit Design Progress Report and Compliance Update</i> <sup>1,2</sup> Dischargers shall summarize their progress towards meeting the final effluent limits in Table 4 of the 3 <sup>rd</sup> Nutrient Watershed Permit (R2-2025-0013).	2029-04-01
Group Annual Report (2028)	Same as Group Annual Report (2025)	2029-04-01

1. See Table 5 in the 2024 Permit.

2. Compliance milestone reporting may be delayed for one year from the dates shown in this table if the Discharger meets certain conditions described in the 2024 Permit.

3. Early Actors shall instead provide annual status updates on project implementation.

The following provides more details regarding the information that will be requested in each RFI. HDR will provide the draft RFI to the BACWA Contract Management Group for review and feedback, followed by HDR providing the final version of the RFI to BACWA for distribution to BACWA members.

- **Compliance Schedule Milestone #2 (Perform Alternatives Analysis)**

- BACWA will distribute a draft RFI in December 2025
- BACWA will distribute a final RFI in January 2026
- BACWA will ask Dischargers to provide information by February 13, 2026
- Permit Due Date: April 1, 2026
- The RFI will request the following information:
  - Evaluation of alternatives and identification of which compliance pathway best meets final effluent limits.
  - If Discharger has already identified compliance pathway, provide status update on implementation.
  - If optimization is part of compliance plan, Discharger must submit schedule to complete optimization work no later than May 1, 2028.

- **Supplemental Information Request #1**

- BACWA will distribute a draft RFI April 1, 2026
- BACWA will distribute a final RFI May 1, 2026
- BACWA will ask Dischargers to provide information by July 1, 2026
- The first supplemental request will be made after the Group Annual Report is submitted to allow the analysis approach to be developed in more detail prior to asking Dischargers for additional information.
- The request will include the following:
  - More detailed information describing interest in nutrient credit trading.
  - Rate information and models so the analysis approach can be further developed based on what is available. An Excel template will be provided.
  - Information on Cross-media impacts.

- **Compliance Schedule Milestone #3 (Submit Compliance Plan)**

- BACWA will distribute a draft RFI in December 2026
- BACWA will distribute a final RFI in January 2027
- BACWA will ask Dischargers to provide information by February 12, 2027
- Permit Due Date: April 1, 2027 (may be delayed for one year if conditions of footnote [1] in Table 4 of the 2024 Permit are invoked).
- The RFI will request the following information:

- Description of proposed improvements and implementation schedule with major milestones for compliance pathway.
  - Schedule for design and construction of improvements.
  - If a multi-benefit solution is selected, Discharger must submit a governance plan.
- **Supplemental Information Request #2**
  - BACWA will distribute a draft RFI April 1, 2027
  - BACWA will distribute a final RFI May 1, 2027
  - BACWA will ask Dischargers to provide information by July 1, 2027
  - This request will focus on updating the information received in the first supplemental information request as well as filling any identified gaps.
- **Compliance Schedule Milestone #4 (Submit Design Progress Report):**
  - BACWA will distribute a draft RFI in December 2027
  - BACWA will distribute a final RFI in January 2028
  - BACWA will ask Dischargers to provide information by February 10, 2028
  - Permit Due Date: April 1, 2028 (may be delayed for one year if conditions of footnote [1] in Table 4 of the 2024 Permit are invoked).
  - The RFI will request the following information:
    - Details of capital projects, if applicable, including a description, estimated nutrient removal, evidence of progress to design stage, the percent completion of the design, an updated implementation schedule, estimated capital costs, a financial assessment, and a funding strategy.
- **Supplemental Information Request #3**
  - BACWA will distribute a draft RFI April 1, 2028
  - BACWA will distribute a final RFI May 1, 2028
  - BACWA will ask Dischargers to provide information by July 1, 2028
  - This request will focus on gathering the final planning information used to produce the Regional Planning Study.
    - Updated rate model information.
    - Construction timelines and associated TIN reductions related to projects in the following categories:
      - Projects completed prior to the first Nutrient Watershed Permit.
      - Projects completed in response to the first or second Nutrient Watershed Permit (Early Actors).
      - Projects completed in response to the 2024 Permit.

- Projects that are in-progress.
  - Projects that have been proposed.
  - Projects that are being considered but have not been proposed for implementation.
- Capital, operations, and maintenance costs associated with the projects described above. An Excel template will be included. The template will ask for a breakdown of costs by year, project, and category and will extend from the first year a Discharger had costs for nutrient related projects through 2059 (a 30-year planning horizon starting from the year the Final Report is due).
- Detailed descriptions of the projects described above.
- Estimated number and timing of projects requiring air permits.
- **Data Update and Confirmation Request:**
  - BACWA will distribute a request for review and confirmation in December 2028
  - BACWA will ask Dischargers to provide information by January 31, 2029
  - This request will provide the Dischargers with the opportunity to review and confirm the data used for the Regional Planning Study and to provide any needed updates.
- **Compliance Schedule Milestone #5 (Submit Design Progress Report and Compliance Update)**
  - BACWA will distribute a draft RFI in December 2028
  - BACWA will distribute a final RFI in January 2029
  - BACWA will ask Dischargers to provide information by February 9, 2029
  - Permit Due Date: April 1, 2029 (may be delayed for one year if conditions of footnote [1] in Table 4 of the 2024 Permit are invoked).
  - The RFI will request the following information:
    - Summary of progress toward meeting final effluent limits.
    - Status update regarding implementation of compliance pathway.
    - Status update on progress of capital projects, including the percent completion of design, the status of contract documents, and an updated implementation schedule

Except as noted, all deliverables under this amendment will be provided in electronic format and meetings will be held virtually.

## **Task 1 - Project Management and Quality Assurance/Quality Control (QA/QC)**

HDR will continue to provide project management services as specified in the original contract executed on December 10, 2024 (provided in Appendix A).

HDR will perform QA/QC review of Regional Planning Study deliverables before they are submitted to BACWA for review. Besides the level of effort included in the original contract, additional hours were added to this amendment to review additional deliverables included in this amendment. Specifically, upwards of 6 hours per year (24 hours total) were included for a Senior Technical Reviewer and the Project Manager, as well as 3 hours per year (12 hours total) for an administrator.

### ***Deliverables:***

- N/A

### ***Assumptions:***

- Invoices and other project management tasks are excluded from this amendment as they were included in the original contract.

## **Task 2 – Group Annual Reports (Included in the Original Contract; Refer to Appendix A)**

## **Task 3 – Compliance Milestone Reports (Included in the Original Contract; Refer to Appendix A)**

## **Task 4 – Regional Scoping Plan (Included in the Original Contract; Refer to Appendix A)**

## **Task 5 – Dashboard (Optional; Included in the Original Contract; Refer to Appendix A)**

## **Task 6 - Regional Study**

The regional study numbering adheres to the numbering convention at the subtask level from the Regional Scoping Plan (refer to Appendix B).

### **Subtask 6.1 - Project Management and Quality Assurance/Quality Control (QA/QC)**

The level of effort and details are provided in Task 1. The subtask is included here to maintain consistency in the numbering convention used in the Regional Scoping Plan (refer to Appendix B).

### **Subtask 6.2 - Regional Planning Study Status Reports**

HDR will provide two status reports consisting of a one- to two-page summary of the tasks completed and the preliminary findings for the Regional Planning Study. HDR's team will draft the status reports, and BACWA and the Dischargers will have the opportunity to review and provide

markups and comments prior to submission to the Regional Water Board. The status reports are due July 1, 2026, and July 1, 2027.

***Deliverables:***

- Two status reports. HDR to provide a draft and final status reports to BACWA.

***Assumptions:***

- HDR will provide the draft status reports by early June of 2026 and 2027, respectively.
- BACWA will be responsible for submitting the status reports to the Regional Water Board and sharing with Dischargers.

## **Subtask 6. 3 - Draft and Final Regional Planning Study Report**

HDR's team will produce draft and final versions of the Regional Planning Study Final Report. The Final Report will contain the information and analysis needed to satisfy the 2024 Permit's requirements for the Regional Planning Study and the additional tasks included in this scope of work. The Final Report is anticipated to consist of the components provided below (as stated in the Regional Scoping Plan: <https://bacwa.org/wp-content/uploads/2025/06/BACWA-Scoping-Plan-for-Regional-Planning-Study-2025-06-16.pdf>).

1. Background
2. Compliance and Construction Timelines
  - 2.1. Current Status of Nutrient Upgrades
  - 2.2. Need for Extended Compliance Timeline
3. Capital, Operations, and Maintenance Costs
4. Financing Alternatives and Community Rate Impacts
5. Strategies to Reduce Regional Cost
6. Cross-Media Impacts and Opportunities
  - 6.1. Energy and Chemicals
  - 6.2. Other Air Pollutants
  - 6.3. Biosolids
  - 6.4. Opportunities and Other Benefits
7. Nutrient Credit Trading
8. Member Information Sharing
9. Public Outreach and Industry Involvement
10. Appendix A: Detailed Project Descriptions based on information compiled from the RFIs
11. Appendix B: Agency signoffs
12. Other Potential Appendices: i) Scoping Plan, ii) key findings from the various workshops, and others.

BACWA and the Dischargers will have the opportunity to review the Draft Final Report and provide markups and comments prior to submission to the Regional Water Board. Furthermore, Dischargers will be required to sign off on the report. HDR will provide BACWA with an editable Microsoft Word document and final PDF file including all attachments and/or appendices by the Final Report due date of March 30, 2029.

The Final Report will also contain background information providing an overview of the 2014, 2019, and 2024 Permits, their requirements, and key findings from previous BACWA-led special studies. In addition, the report will contain a brief summary of the state of scientific information being developed through the Nutrient Management Strategy, and how it is informing policy and permitting decisions. For example, the anticipated discharge TIN levels associated with the various listed projects in the Regional Planning Study could be used as scenario(s) in the future modeling efforts by the Nutrient Management Strategy science team.

***Deliverables:***

- Agendas and summary of outcomes for the three virtual workshops
- Draft Report in Microsoft Word format
- Draft and Final Regional Planning Study Report in a PDF format.

***Assumptions:***

- HDR will provide the Draft Report to BACWA by November 30, 2028 as an editable Microsoft Word document.
- Up to 2 HDR team members will attend each virtual workshop (up to 3 workshops), anticipated to be up to 1 hour in length each.
- HDR will also attend an in-person meeting with the Water Board to review the Regional Planning Study Final Report, anticipated to last up to 2 hours in length at the Water Board in Oakland, CA. Up to 2 HDR team members will attend this meeting.
- HDR will be responsible for coordinating with Dischargers to obtain agency sign-offs.
- BACWA will be responsible for submitting the Regional Planning Study Final Report to the Regional Water Board and sharing the report with Dischargers.
- HDR's participation at in-person meetings to present the findings from the Regional Planning Study to BACWA members is included in Task 1 of the original contract executed on December 10, 2024 (provided in Appendix A)

## **Subtask Task 6.4 - Obtaining Information from Dischargers**

The level of effort associated with developing the various RFIs as noted in the introduction is captured in each respective task. Such tasks are included in both the original contract executed on December 10, 2024 (provided in Appendix A) and various subtasks in this amendment (e.g., RFI development associated with the financing alternatives effort (refer to Subtask 6.8)).

The level of effort in this task is limited to “office hours” associated with each final RFI, whereby HDR will meet with BACWA member agencies (up to 24 hours each is included for the project manager

and staff engineer over the project duration) to review questions/concerns associated with each final RFI.

***Deliverables:***

- Based on BACWA member feedback during office hours, RFIs would be refined to improve clarity (as needed).

***Assumptions:***

- The level of effort for producing each RFI is captured within each task (e.g., the hours for the financial alternative related RFI are provided in the corresponding task, Task 7).
- The level of effort for this task is limited to “office hours” associated with each RFI, whereby HDR will meet with BACWA member agencies (up to 24 hours each are included for the project manager and staff engineer over the project duration) to review questions/concerns associated with each RFI.

## **Subtask 6.5 - Compliance and Construction Timelines**

The Subtask is broken into further subtasks as there is uncertainty in the level of effort. The initial effort (Subtask 6.5.1) will develop the technical approach, and the latter effort (Subtask 6.5.2) will implement the technical approach.

### ***Subtask 6.5.1 – Develop the Technical Approach***

The technical approach will address these four items:

- a. Overall schedule
- b. Quantifying estimated load reductions
- c. Identifying opportunities to modify project schedules
- d. Impact of extended compliance timelines

Using information provided by the Dischargers in the Supplemental RFIs, HDR’s team will produce a construction phasing timeline that includes completed, in-progress, proposed, and conceptual capital improvement projects. The information needed to complete this task will be collected from the Dischargers through the RFIs detailed in the introduction section. The timelines will be updated annually. The information that is collected throughout the project will be subject to review and revision by the Dischargers prior to submission of the Final Report.

The construction phasing timeline will include:

- An analysis of the anticipated reductions in aggregate Total Inorganic Nitrogen (TIN) load both baywide and by subembayment.
- A comparison to the load reductions required by the 2024 Permit.

This task will also include an analysis of the possibility of schedule acceleration and/or delays due to external and internal factors (may include analysis of recently observed delays for nutrient-related capital improvement projects in the Bay Area if the information is made available). For example, projects will need permits from the Bay Area Air District (Air District), which has limited capacity to issue new permits. To mitigate this concern, the Regional Planning Study will include a list of

anticipated new permits so that the Air District can allocate resources appropriately. The Dischargers' ability to finance new capital improvements may also lead to delays.

This task also includes an analysis of the effects of extended compliance timelines, annual variability, and population growth on discharge loads and compliance. Furthermore, the synergy between extended compliance timelines and nutrient trading will be explored. For example, there could be a benefit to smaller Dischargers if extended timelines are approved for larger projects that go below the effluent TIN limit and thus have potential TIN credits available for trading. The level of effort associated with nutrient trading is captured in Task 6.11.

#### *Subtask 6.5.2 – Implement the Technical Approach developed in Subtask 6.5.1*

**Note: The contract does not include any fee for Subtask 6.5.2, and Subtask 6.5.2 is not included in the contract scope of work. The scope and fee for Subtask 6.5.2 will be determined during completion of Subtask 6.5.1 and will be authorized via a contract amendment.**

#### ***Deliverables:***

- The information captured in this task will be included as part of the Compliance Milestone Reports (see Task 3 of the original contract in Appendix A) and the Regional Planning Study Final Report (Task 6.3).
- Portions of Supplemental RFIs #1, #2, and #3.

## **Subtask 6.6 - Potential Projects for Additional Load Reductions**

Permit Provision 6.3.4.e requires the identification of nutrient reduction projects (with a focus on recycled water and nature-based solution projects) with the potential to reduce the baywide TIN load to below 22,000 kg/d and below 17,600 kg/d (50% and 60% reduction from 2022 TIN load). As part of the RFIs, the Dischargers will be asked what additional or enhanced projects they might consider to meet more stringent load limits. For example, agencies will be asked whether they would consider additional upgrades at their plant to enhance their TIN reduction, increase recycled water, and/or implement other load reduction efforts.

HDR's team will use the load projection information compiled from Subtask 6.5 to determine the magnitude of additional load reductions that would be required to meet 50% and 60% TIN load reductions. HDR's team will work with a subset of larger Dischargers ( $\geq 10$  MGD) to identify additional recycled water and nature-based opportunities to further reduce the regional TIN load.

The subconsultant Ian Wren will support this Subtask, as well the Draft and Final Report (Subtask 6.3) as follows:

Meeting Participation and Coordination: Attend up to 4 virtual meetings with HDR and BACWA stakeholders to coordinate analysis approaches, review preliminary findings, and present results. Participate in one workshop with Dischargers to identify additional recycled water and nature-based opportunities for regional TIN load reduction beyond the 40% requirement.

Quantitative Analysis and Load Reduction Estimates: Develop quantitative estimates of nutrient load reduction potential for nature-based solutions applicable to Bay Area wastewater treatment facilities, including constructed treatment wetlands, and hybrid green-gray infrastructure approaches. Analyze site-specific constraints and opportunities for individual Dischargers and

regional partnerships, on a provisional basis, providing load reduction estimates in kg TIN/day for projects that could contribute to achieving the 50% (22,000 kg N/d) and 60% (17,600 kg N/d) baywide reduction targets specified in Permit Provision 6.3.3.

Integration with Recycled Water and Trading Analysis: Evaluate how nature-based solutions can be integrated with expanded recycled water programs to maximize nutrient load reductions while providing co-benefits such as habitat enhancement, flood control, and carbon sequestration. Assess the role of nature-based solutions within potential nutrient credit trading frameworks, including analysis of credit generation potential and long-term sustainability of these systems for compliance purposes.

Report Development and Documentation: Draft technical sections for inclusion in the Regional Planning Study Final Report, including methodology, assumptions, site selection criteria, and recommendations for implementation pathways. Prepare summary materials and graphics illustrating the regional potential for nature-based solutions and their contribution to meeting permit requirements beyond 2035.

***Deliverables:***

- The information captured in this task will be included as part of the Regional Planning Study Final Report (Task 13).

***Assumptions:***

- The level of effort by subconsultant Ian Wren associated with supporting the Draft and Final Regional Planning Study Report is captured in this subtask.

## **Subtask 6.7 - Capital, Operations, and Maintenance Costs**

This Subtask will be instrumental in benchmarking the capital and O&M costs. Such information will be gathered as part of the supplemental RFIs as listed in the Introduction Section. The consultant team will aggregate the estimated capital, operations, and maintenance costs associated with nutrient reduction projects. While the 2024 Permit only requires analysis of proposed projects (as of the 2029 Regional Planning Study Report submission due date), HDR's team will aggregate the estimated costs for a wider variety of projects, including:

- Projects completed prior to the first Nutrient Watershed Permit.
- Projects completed in response to the first or second Nutrient Watershed Permit (Early Actors).
- Projects completed in response to the 2024 Permit.
- Projects that are in progress.
- Projects that have been proposed.
- Projects that are being considered but have not been proposed for implementation.

The operations and maintenance costs will include energy, chemicals, and labor (if available). The information needed to complete this task will be collected from the Dischargers through the RFIs detailed in Section 2.3.4 of the Regional Planning Study Scoping Plan dated June 16, 2025

(<https://bacwa.org/wp-content/uploads/2025/06/BACWA-Scoping-Plan-for-Regional-Planning-Study-2025-06-16.pdf>).

The request will include a template Excel workbook for Dischargers to complete as part of a supplemental RFI. The template will include annual estimates of costs for each project for categories of costs (i.e., capital, operations, and maintenance costs). Along with cost information, the classification of the costs (as per the American Association of Cost Engineers Recommended Practice No. 17R-97) will also be requested, which will inform the lower and upper bounds on the cost estimate. In addition to constructing a timeline of costs for each Discharger and for the region in aggregate, the life-cycle costs will be evaluated using a net present value method that accounts for the time value of money.

The results of this analysis will be presented in a way that is complementary to the construction and compliance timelines (see Subtask 6.5). A cost schedule will be created that coordinates with the construction and compliance timelines to clarify when projects will bid. The chart will be similar to a Gantt chart that depicts the cost schedule for each project.

***Deliverables:***

- The information captured in this task will be included as part of the Regional Planning Study Final Report (Subtask 6.3).

***Assumptions:***

- Costs will not be separated within projects to isolate costs limited to nutrient elements. For example, the cost of a new electrical upgrade would be included if required for nutrient reduction upgrades. These additional improvements will be listed to support an understanding of the co-benefits realized through nutrient reduction projects. This task will also include a discussion of potential adverse impacts at the plant and associated costs, such as staffing requirements, use of space within existing plant footprints, or significant new maintenance requirements.

## **Subtask 6.8 - Financing Alternatives and Community Rate Impacts**

This task will include a market assessment of financing options available to Dischargers and present options with their associated advantages and disadvantages. The development and implementation of the approach is split into two subtasks.

### ***Subtask 6.8.1 – Development of Approach and Initial Assessment of each Agency***

Each agency will be assessed for its progress in developing a financial plan. For each agency that has not already defined a financing strategy, a general financial plan will be produced based on industry standard approaches (WEF MOP No. 27). For Dischargers that are unable to provide the needed information, general industry standard revenues and expenses for each agency will be assumed.

A virtual workshop will be held with Discharger finance representatives to inform them on how to populate a predeveloped workbook that captures the status of their respective financial plan. The workshop will focus on the scope of financial information that Dischargers can provide, and to make sure HDR's team is sensitive to agency legal constraints related to rate projections. The approach for this task will be modified to adapt to legal barriers that could prevent specific types of financial analysis.

The workshop will also include a discussion with Discharger finance representatives about options for ratepayer affordability metrics. The results of Supplemental RFI #1 and the planned workshop will be used to develop the analytical approach.

#### *Subtask 6.8.2 – Financial Plan Iterative Approach and Affordability Analyses – Preliminary Scope*

**Note: The contract does not include any fee for Subtask 6.8.2, and Subtask 6.8.2 is not included in the contract scope of work. The fee will be determined during completion of Subtask 6.8.1 and will be authorized via a contract amendment. The preliminary scope below is included for reference.**

The level of effort associated with this subtask is dependent on how far along each agency is in their financial efforts for nutrient management. For example, the level of effort would be significantly different for this subtask if a majority of the Dischargers already have their financial plan in place versus just a handful. As such, the level of effort is intended to serve as a placeholder and it might need to be refined as information is gathered.

Besides the financial impacts element, HDR's team will estimate ratepayer impacts (e.g., additional dollars per year, percent increase per account, and affordability impacts on the lowest quintile of earners) based on Discharger-provided rate structures and anticipated costs for both future and on-going projects. The information needed to complete this task will be collected through Supplemental RFI #2 and/or #3, depending on the results of Subtask 6.8.1. HDR's team will evaluate the information provided by the Dischargers to confirm the comparison of rates and costs between Dischargers is valid and consistent.

#### ***Deliverables:***

- The information collected and analysis performed for this task will be included as part of the Regional Planning Study Final Report (Subtask 6.3).
- An agenda and summary of outcomes from the workshop will be provided by HDR.

#### ***Assumptions:***

- Up to 4 HDR team members will attend this virtual workshop, anticipated to be up to 2 hours in length.
- The level of effort in Subtask 6.8.2 is a placeholder as the Subtask 6.8.1 results will inform the extent of required work to implement.

## **Subtask 6.9 - Strategies to Reduce Regional Cost**

Coordinating the regional upgrades may have significant benefits for Dischargers and their ratepayers. This task will include an evaluation of potential opportunities to reduce regional costs (e.g., economies of scale, nutrient trading, strategic timing of funding applications, and the impact of construction timelines) and extended deadlines. This task includes one workshop for Dischargers to discuss specific strategies to reduce costs.

#### *Subtask 6.9.1 – Development of Approach*

The analytical approach for Subtask 6.9 will be developed using information obtained through Supplemental RFI #1, the planned workshop, and other tasks (e.g., Subtask 6.11 - Nutrient Credit

Trading). The nutrient trading element is relevant as it would inform the number of projects which would subsequently impact the number of available contractors. Furthermore, contractor feedback would be requested to inform the potential impacts of contractor shortages. Many agency-specific details will be needed to inform the approach (e.g., financial status/options, operational flexibility, willingness to coordinate with others).

#### *Subtask 6.9.2 – Implementation of Approach – Preliminary Scope*

**Note: The contract does not include any fee for Subtask 6.9.2, and Subtask 6.9.2 is not included in the contract scope of work. The fee will be determined during completion of Subtask 6.9.1 and will be authorized via a contract amendment. The preliminary scope below is included for reference.**

The analytical approach developed for Subtask 6.9.1 will be implemented using information obtained through Supplemental Information Request #2 and/or #3. Depending on the results of Subtask 6.9.1, this task is likely to include an analysis of the estimated sensitivity of costs to economic conditions, project completion schedules, and contractor availability. The conditions evaluated in the sensitivity analysis are likely to include the following:

- Interest rates and availability of favorable financing terms.
- Project completion schedules, including the impact of extending the maximum length of compliance schedules past ten years via a possible regional Basin Plan Amendment.

#### ***Deliverables:***

- An agenda and summary of outcomes from the workshop will be provided by HDR.

#### ***Assumptions:***

- Results from Subtasks 6.5, 6.7, 6.8, and 6.11 will be needed to complete this task. The process will likely be iterative, as the development and progress made on this task (including the workshop) could potentially inform the other analyses.
- Up to 4 HDR team members will attend this virtual workshop, anticipated to be up to 2 hours in length.

## **Subtask 6.10 - Cross-Media Impacts**

This task includes an evaluation of the cross-media impacts and opportunities associated with the nutrient reduction projects detailed in Subtask 6.7 (includes projects already implemented through planned projects). The cross-media impacts are focused on energy and chemical consumption, air pollutants, and biosolids.

Two workshops with Dischargers and a panel of experts will be held to assess the cross-media impacts of planned projects. The initial workshop will discuss metrics for all three subsections (energy/chemical, air emissions, and biosolids) that compare/contrast a handful of established nutrient management strategies based on industry accepted benchmarks as a means to inform the BACWA member agencies as they are finalizing their nutrient management plans. For example, Dischargers that transition from secondary treatment to conventional nutrient removal (e.g., Modified Ludzack-Ettinger process) should anticipate a reduction in biosolids yield on the order of 20 to 30 percent. This initial workshop will be held in early 2026 as several Dischargers will still be evaluating alternatives.

The second workshop will focus on a more detailed discussion that provides more project specific impacts as Dischargers have developed their compliance plans. The second workshop will be held in 2027.

Note that staff of the California Association of Sanitation Agencies (CASA) will serve as Senior Technical Advisors for each workshop. A general description of how each cross-media impact will be evaluated is provided below.

## **Energy and Chemicals**

A general assessment of the anticipated increase in energy and chemicals will be performed. Energy and chemical consumption are being used as surrogates for greenhouse gas emissions because the carbon intensity of the State's electrical grid is expected to change over the next decade.

## **Air Emissions**

An evaluation of the potential for increases (or decreases) in air pollutants will be performed. The emissions analysis will consider specific chemicals as well as broad groups of emissions. Because the data are generally limited, this analysis may be based on industry standard assumptions.

The air emissions section will also cover the various permits and the corresponding potential schedule implications associated with the various emissions.

## **Biosolids**

Biosolids production associated with biological growth is different for treatment facilities that provide nutrient removal compared to those that provide up to secondary treatment. For example, a treatment facility that increases its solids retention time (SRT) to enable ammonia/TIN load reduction will experience a reduction in biosolids yield (i.e., mass of biosolids produced per unit mass of organic matter removed). Furthermore, the biosolids produced in processes with longer SRTs have a lower energy density, which results in reduced biogas production. There are several other parameters of interest related to biosolids that will be included, such as the impact on the levels of contaminants of emerging concern. For this task, HDR's team will prepare a tabular summary of the regional impact of nutrient load reduction projects on biosolids operations. The following is a preliminary list of parameters that will be considered in the table:

- Biosolids yield
- Biogas production
- Impact on co-digestion
- Unit energy demand of biosolids processing
- Unit chemical demand of downstream biosolids handling
- Biosolids dewatering

## **Opportunities and Other Benefits**

Larger scale regional benefits will be addressed, such as the water supply benefits associated with recycled water projects; the benefits of investing in infrastructure renewal in ways that address other risks (eg., seismic risk, climate adaptation, etc.).

***Deliverables:***

- The information and analysis performed in this task will be included as part of the Regional Planning Study Final Report (Subtask 6.3).
- An agenda and summary of outcomes from each workshop will be provided by HDR.

***Assumptions:***

- Up to 4 HDR team members will attend each virtual workshop, anticipated to each be up to 2 hours in length.

## **Subtask 6.11 - Nutrient Credit Trading**

The subconsultant, The Freshwater Trust (TFT), will be leading this Subtask. This subtask is split into two phases: Phase 1 (Subtask 6.11.1) describes work that will be completed during the 2025 calendar year. The scope of work for Phase 2 (Subtask 6.11.2) will be informed by the findings from Phase 1 (Subtask 6.11.1). As such, the scope and level of effort for Phase 2 (Subtask 6.11.2) will be amended at a future date.

### ***Subtask 6.11.1 – Phase 1 Work by The Freshwater Trust***

TFT will provide an initial evaluation of the interest and feasibility of establishing a trading program in the Bay Area by performing outreach to Dischargers and other core stakeholders. The insight gained from the outreach will inform Phase 2 of the development of a potential water quality trading program. Appendix C contains two scopes of work proposed by TFT. The first (Proposed Scope of Work #1) was approved via a BACWA Chair authorization (allows for authorizations less than \$10,000 without approval from the Board) to enable the work to begin immediately following the June 2025 BACWA Board meeting. Proposed Scope of Work #1 is independent of this amendment. Proposed Scope of Work #2 describes the scope of work for TFT for Subtask 6.11.1.

HDR has allocated a level of effort to support TFT throughout this subtask, such as providing technical content and attending/contributing to planned meetings. TFT has identified upwards of 10 meetings for this Subtask, which HDR plans to attend and support.

### ***Subtask 6.11.2 – Phase 2 Future Nutrient Credit Trading – Preliminary Scope***

**Note: The contract does not include any fee for Subtask 6.11.2, and Subtask 6.11.2 is not included in the contract scope of work. The fee will be determined during completion of Subtask 6.11.1 and will be authorized via a contract amendment.**

***Deliverables:***

- The information and analysis performed in this task will be included as part of the Regional Planning Study Final Report (Subtask 6.3).
- The subconsultant's analysis and report will be included as an appendix to the Regional Planning Study Final Report (Subtask 6.3).
- An agenda and summary of outcomes from the workshop will be provided by HDR.

***Assumptions:***

- Up to 4 HDR team members will attend each virtual workshop, anticipated to each be up to 2 hours in length.

## **Subtask 6.12 - Member Information Sharing**

BACWA will facilitate the creation of working groups devoted to sharing information on innovative technologies, multi-benefit solutions, and pilot studies (e.g., Central San's MABR pilot). Such groups could improve communication amongst Dischargers and encourage collaboration and information sharing in a way that may foster multi-benefit solutions and innovative technologies. This task includes up to two workshops for Dischargers to discuss plans for multi-benefit projects and deploying innovative technologies.

***Deliverables:***

- The information and analysis performed in this task will be included as part of the Regional Planning Study Final Report (Subtask 6.3).
- An agenda and summary of outcomes from each workshop will be provided by HDR.

***Assumptions:***

- Up to 3 HDR team members will attend each virtual workshop (up to 2 workshops), anticipated to be up to 2 hours in length each.

## **Subtask 6.13 - Public Outreach and Industry Involvement**

This task includes the production of educational outreach materials related to nutrient reduction efforts. One goal is to educate the public, and another is to inform regional advocacy groups that may be able to influence and improve the availability of funding. BACWA and the consultant team will interface with the likes of Civic Edge to share technical information that can be translated to public outreach content.

Another part of this task is to improve the construction industry's awareness of the forthcoming projects. Due to the regional scale of the required upgrades, resource constraints in the consulting and construction industry may limit progress, delay compliance, and inflate costs. The hope is that industry resources will be relocated to the Bay Area in anticipation of the impending significant increase in workload.

It is anticipated that three webinars will be held that will explain the context and scale of the nutrient upgrades that are needed. The webinars will be advertised widely throughout the contracting industry.

***Deliverables:***

- Draft and Final Public outreach materials (e.g., brochure or fact sheet) in a PDF format suitable for sharing on a website or public agency meeting packet.
- A concise fact sheet with graphics included will be produced and distributed to Dischargers for use with governing bodies and/or ratepayers.
- An agenda and summary of outcomes from each workshop will be provided by HDR.

***Assumptions:***

- The outreach materials will be brief (up to 4 pages in length).
- Up to 3 HDR team members will attend each virtual webinar (up to 3 webinars), anticipated to be up to 1 hour in length each.

**Table 2 - Estimated Work Effort and Cost**  
**Bay Area Clean Water Agencies (BACWA)**  
**Regional Planning Study**

Task	Task Description	Engineer 5	Project Manager/ Engineer 4	Engineer 3	Engineer 1	Public Outreach	Accounting	Admin	Total HDR Labor Hours	Total HDR Labor (\$)	HDR Expenses (\$)	Sub Consultant Cost (\$)	Sub Consultant Mark up (\$)	Total Cost (\$)
Task 1 - Project Management and Quality Assurance/Quality Control (QA/QC)														
1.1	From Initial Contract	44	64	0	0	0	100	12	220	\$ 69,747	\$ 2,000		\$ -	\$ 71,747
1.2	For This Amendment	12	24					12	48	\$ 18,071			\$ -	\$ 18,071
Subtotal Task 1		56	88	0	0	0	100	24	268	\$ 87,818	\$ 2,000	\$ -	\$ -	\$ 89,818
Task 2 - Group Annual Reports														
2.1	Group Annual Reports	0	180	60	480	0	0	40	760	\$ 179,807	\$ -		\$ -	\$ 179,807
Subtotal Task 2		0	180	60	480	0	0	40	760	\$ 179,807	\$ -	\$ -	\$ -	\$ 179,807
Task 3 - Compliance Milestone Reports														
3.1	Compliance Milestone Reports		36		144			0	180	\$ 38,601	\$ -		\$ -	\$ 38,601
Subtotal Task 3		0	36	0	144	0	0	0	180	\$ 38,601	\$ -	\$ -	\$ -	\$ 38,601
Task 4 - Scoping Plan														
4.1	Scoping Plan	8	100	0	32	0	0	4	144	\$ 53,947	\$ -		\$ -	\$ 53,947
Subtotal Task 4		8	100	0	32	0	0	4	144	\$ 53,947	\$ -	\$ -	\$ -	\$ 53,947
Task 5 - Dashboard (Optional)														
5.1	Dashboard (Optional)	32	8	40	80	0	0	0	160	\$ 43,454	\$ -		\$ -	\$ 43,454
Subtotal Task 5		32	8	40	80	0	0	0	160	\$ 43,454	\$ -	\$ -	\$ -	\$ 43,454
Task 6 - Regional Plan														
6.1	PM and QA/QC (Hours Covered in Task 1.2)								0	\$ -			\$ -	\$ -
6.2	Status Reports	4	16		32			4	56	\$ 15,037	\$ -	\$ -	\$ -	\$ 15,037
6.3	Draft and Final Report	12	75		235			20	342	\$ 81,931	\$ 250	\$ -	\$ -	\$ 82,181
6.4	Obtaining Information from Dischargers		24		24				48	\$ 14,826	\$ -	\$ -	\$ -	\$ 14,826
6.5.1	Compliance and Construction Timelines (Approach Development )	8	16		60			2	86	\$ 21,371	\$ -	\$ -	\$ -	\$ 21,371
6.5.2	Compliance and Construction Timelines (Implementation)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0	\$ -	\$ -	\$ -	\$ -	\$ -
6.6	Potential Projects for Additional Load Reductions	10	20		40			10	80	\$ 21,845	\$ -	\$ 19,075	\$ 954	\$ 41,874
6.7	Capital, Operations, and Maintenance Costs		24		120			10	154	\$ 32,537	\$ -	\$ -	\$ -	\$ 32,537
6.8.1	Financing Alternatives and Community Rate Impacts (Approach Development and Initial Assessment of each Agency)	16	12	60	60			4	152	\$ 38,384	\$ -	\$ -	\$ -	\$ 38,384
6.8.2	Financing Alternatives and Community Rate Impacts (Financial Plan Iterative Approach and Affordability Analyses)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0	\$ -	\$ -	\$ -	\$ -	\$ -
6.9.1	Strategies to Reduce Regional Cost (Development of Approach)	4	3	16	24			1	48	\$ 11,369	\$ -	\$ -	\$ -	\$ 11,369
6.9.2	Strategies to Reduce Regional Cost (Implementation of Approach)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0	\$ -	\$ -	\$ -	\$ -	\$ -
6.10	Cross-Media Impacts		24		40			10	74	\$ 18,965	\$ -	\$ -	\$ -	\$ 18,965
6.11.1	Nutrient Credit Trading (On-Going Work by the Freshwater Trust)		16		24			2	42	\$ 11,526	\$ -	\$ 78,569	\$ 3,928	\$ 94,024
6.11.2	Nutrient Credit Trading (Future Nutrient Credit Trading)	TBD	TBD	TBD	TBD	TBD	TBD	TBD		\$ -	\$ -	\$ -	\$ -	\$ -
6.12	Member Information Sharing	8	18		52				78	\$ 20,625	\$ -	\$ -	\$ -	\$ 20,625
6.13	Public Outreach and Industry Involvement	4	27		43	43		12	129	\$ 34,874	\$ -	\$ -	\$ -	\$ 34,874
Subtotal Task 6		66	275	76	754	43	0	75	1,289	\$ 323,290	\$ 250	\$ 97,644	\$ 4,882	\$ 426,066
COLUMN TOTALS FOR INITIAL CONTRACT (WITHOUT OPTIONAL)		52	380	60	656	0	100	56	1,304	\$ 342,101	\$ 2,000	\$ -	\$ -	\$ 344,101
COLUMN TOTALS FOR OPTIONAL		32	8	40	80	0	0	0	160	\$ 43,454	\$ -	\$ -	\$ -	\$ 43,454
COLUMN TOTALS FOR THIS AMENDMENT		78	299	76	754	43	0	87	1,337	\$ 341,361	\$ 250	\$ 97,644	\$ 4,882	\$ 444,137
OVERALL TOTAL (INCLUDES OPTIONAL TASK 5)		162	687	176	1,490	43	100	143	2,801	\$ 726,916	\$ 2,250	\$ 97,644	\$ 4,882	\$ 831,692

**APPENDIX A - LUMP SUM CONTRACT BETWEEN  
BACWA AND HDR (DECEMBER 10, 2024; TASKS 1  
THROUGH 5)**

**APPENDIX B – REGIONAL SCOPING PLAN**  
**([HTTPS://BACWA.ORG/WP-  
CONTENT/UPLOADS/2025/06/BACWA-SCOPING-  
PLAN-FOR-REGIONAL-PLANNING-STUDY-2025-06-  
16.PDF](https://bacwa.org/wp-content/uploads/2025/06/BACWA-SCOPING-PLAN-FOR-REGIONAL-PLANNING-STUDY-2025-06-16.pdf))**

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# **APPENDIX C – SCOPE OF WORK FOR THE FRESHWATER TRUST**

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The Freshwater Trust protects and restores freshwater ecosystems. Using science, technology, and incentive-based solutions, we are changing the course of conservation on a timeline that matters.

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## ***Proposed Scope of Work #1***

### **Bay Area Clean Water Agencies Water Quality Trading Kickoff & Preliminary Outreach**

*July 7, 2025*

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#### **Background**

The Bay Area Clean Water Agencies (BACWA) is a California joint powers agency comprised of the largest wastewater treatment agencies in the San Francisco Bay (the SF Bay). BACWA's members include the local clean water agencies that provide sanitary sewer services to nine counties across the San Francisco Bay Area. In accordance with the Clean Water Act and California state law, the San Francisco Bay Regional Water Quality Control Board (Regional Board) regulates the water quality of discharges from BACWA's members, and others. The Regional Board has issued a Nutrient Watershed Permit (Permit) to address nutrients in the San Francisco Bay that are believed to contribute to harmful algal blooms.

In July 2024, the Regional Board adopted the third iteration of the Permit. This Permit applies to each municipal wastewater utility that discharges to San Francisco Bay and its subembayments and will remain in effect through September 2029. Unlike the prior iterations, the current Permit includes enforceable numeric discharge limits for nitrogen in addition to other monitoring, investigation, and reporting requirements. The Permit establishes compliance schedules with interim and final effluent limits; the final effluent limit requires an aggregate 40% reduction of nutrient loading from 2022 levels within a 10-year period, while maintaining current performance in the interim. Compliance with the final nutrient load limit is determined in the aggregate, with the dischargers' individual mass load limits being used to measure compliance only if the aggregate limit is exceeded. The cost to achieve these load reductions will be significant—a 2018 report from BACWA estimated the regionwide cost at \$11 billion, escalated to 2023 dollars.

In 2016, the East Bay Municipal Utility District, a BACWA JPA signatory, retained the Freshwater Trust (TFT) to investigate the potential for a nutrient trading program for the San Francisco Bay. A water quality trading (WQT) program would facilitate the buying and selling of discharge allocations (i.e., credits) between the regulated clean water agencies in SF Bay (point-to-point source trading) and potentially the creation of credits from nonpoint source projects that reduce nutrient loading (nonpoint-to-point source trading). TFT submitted the final WQT report in 2017. Titled *Point-to-Point Source Water Quality Trading for Nutrients in the San Francisco Bay: Assessing the Viability & Mechanics of a Nutrient Credit Trading Program*, the report provided a summary of WQT basics, identified challenges and opportunities for WQT in SF Bay, proposed components of a conceptual WQT program, and explored the inclusion of nonpoint source reductions. However, the report identified numeric discharge limits as a necessary precondition, so a WQT program could not be pursued until such limits were adopted, which occurred in 2024.

## Objective

With the issuance of the 2024 Nutrient Watershed Permit, which includes compliance schedules with interim and final numeric effluent limits, BACWA would like to retain TFT to revisit the findings of the 2017 report, evaluate the feasibility of a WQT program, and define a number of conceptual program design options and considerations that would underpin the development and deployment of such a program in practice. The objective of this first Scope of Work (SOW #1) is to begin the preliminary work necessary to evaluate the feasibility and characteristics of a WQT program for the San Francisco Bay. To achieve this objective, TFT will host a kickoff meeting with BACWA staff and arrange for outreach to interested BACWA members to: provide information about WQT, document individual circumstances, gauge interest, identify concerns, answer questions, and generally build support for a WQT program.

This outreach will also help ensure that the final report, prepared as part of the second scope of work, is appropriately tailored to the context in SF Bay and addresses BACWA members' circumstances. Based in part on the input gained from the outreach efforts conducted as part of this SOW #1, as well as future outreach and investigations, TFT will prepare a final report pursuant to a future SOW (SOW# 2) expected to be authorized in August 2025, that summarizes the findings and defines options and considerations to inform the ultimate design of a WQT program that, if deployed, would facilitate trading among the regulated point sources in SF Bay.

## PROPOSAL

The Freshwater Trust proposes this SOW #1 comprised of the following tasks:

### Task 1 – Project Management & Kickoff Meeting

TFT will hold an initial meeting with BACWA following the execution of this contract to discuss project goals, assumptions, and expectations. Throughout the duration of this SOW, TFT will organize and manage the consulting team, oversee the project, and coordinate with BACWA staff. TFT, its partners, and BACWA staff will meet during project duration at a minimum once per month, including to review the SOW, budget, schedule, and deliverables. TFT shall prepare monthly invoices that cover:

- Work Completed during the month by work task
- Needs for additional information or review from BACWA or its members
- Any scope, schedule, or budget issues and changes

#### *Task 1 Deliverables & Deadlines:*

1. Arrange kickoff meeting with BACWA staff.  
*Kickoff within two weeks of contract execution (expected July 2025).*
2. Prepare and submit monthly invoices.  
*Task ongoing for duration of Scope of Work.*

*Task 1 Estimated Cost: \$3,295*

### Task 2 – Outreach to BACWA Members, Experts & Stakeholders

To build support for a conceptual WQT program, it will be necessary to engage in strategic and clear outreach to BACWA members and other core stakeholders. This effort will focus on meeting with groups

of BACWA members to provide them information about WQT as well as to better understand their individual circumstances, their interest in trading, and their questions and concerns. To make these outreach efforts more efficient, the BACWA members will be grouped into categories based on their circumstances, perceived interests, and other relevant factors and outreach will be conducted to the groups rather than individual BACWA members. The potential groups/categories of BACWA members may include: (i) potential credit buyers, (ii) potential credit sellers, (iii) interested members that lack a demonstrated interest in either buying or selling credits, (iv) members that have expressed skepticism about WQT, and (v) other categories as appropriate. These categories may also take into account the similarities of BACWA members (e.g., facility size, expected growth, etc.).

The insight gained from this outreach will enable TFT and BACWA to tailor the deliverables prepared as part of a subsequent SOW for BACWA members and lay the foundation for the eventual development of a WQT framework that, with regulatory approval, would facilitate a functional trading program among dischargers in SF Bay. As part of the outreach efforts, relevant TFT staff will participate in meetings with BACWA, its members, stakeholders and regulators, and will provide a final presentation on the results of this SOW to interested parties as directed by BACWA. As part of the outreach efforts, TFT will:

- Work with BACWA to develop outreach materials (e.g., presentations, one-page WQT summary, template questions for meetings) and coordinate communication among the project team and stakeholders
- Participate in up to 4 meetings with BACWA members, regulators, and/or other stakeholders, and document the results of this outreach (up to 10 meetings will eventually be held, including SOW #2)
- Support BACWA in its investigation and potential pursuit of WQT by participating, assisting, and engaging in outreach efforts and other meetings, as requested by BACWA, to the extent feasible

***Task 2 Deliverables & Deadlines:***

1. Provide outreach support and services as requested by BACWA, including but not limited to preparing outreach materials, and participating in stakeholder discussions and meetings.

***Task ongoing for duration of Scope of Work.***

2. Begin preparing a *draft* written summary of input received from BACWA members and other stakeholders during the outreach meetings.

***Summary to be included in the Final Report (prepared in future SOW #2).***

***Task 2 Estimated Cost: \$6,596***

## **SCHEDULE**

TFT shall begin performance following the execution of the contract, anticipated to occur in July 2025. TFT will complete all services no later than August 31, 2025.

	July	August
Task 1: Project Management & Kickoff		
Task 2: Outreach Support		

**Total Cost for SOW #1: \$9,890**

**Who to contact for next steps:**

The Freshwater Trust appreciates BACWA's interest and review. Please direct questions, comments, and proposed additions to:

Erik Ringelberg  
Regional Vice President, California  
Erik@thefreshwatertrust.org

Chris Thomas  
Senior Attorney & Policy Specialist  
cthomas@thefreshwatertrust.org





The Freshwater Trust protects and restores freshwater ecosystems. Using science, technology, and incentive-based solutions, we are changing the course of conservation on a timeline that matters.

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## ***Proposed Scope of Work #2***

### **Bay Area Clean Water Agencies Water Quality Trading Feasibility Assessment**

*July 7, 2025*

---

#### **Background**

The Bay Area Clean Water Agencies (BACWA) is a California joint powers agency comprised of the largest wastewater treatment agencies in the San Francisco Bay (the SF Bay). BACWA's members include the local clean water agencies that provide sanitary sewer services to nine counties across the SF Bay area. In accordance with the Clean Water Act and California state law, the San Francisco Bay Regional Water Quality Control Board (Regional Board) regulates the water quality of discharges from BACWA's members, and others. The Regional Board has issued a Nutrient Watershed Permit (Permit) to address nutrients in the SF Bay that are believed to contribute to harmful algal blooms.

In July 2024, the Regional Board adopted the third iteration of the Permit. This Permit applies to each municipal wastewater utility that discharges to SF Bay and its subembayments and will remain in effect through September 2029. Unlike the prior iterations, the current Permit includes enforceable numeric discharge limits for nitrogen in addition to other monitoring, investigation, and reporting requirements. The Permit establishes compliance schedules with interim and final effluent limits; the final effluent limit requires an aggregate 40% reduction of nutrient loading from 2022 levels within a 10-year period, while maintaining current performance in the interim. Compliance with the final nutrient load limit is determined in the aggregate, with the dischargers' individual mass load limits being used to measure compliance only if the aggregate limit is exceeded. The cost to achieve these load reductions will be significant—a 2018 report from BACWA estimated the regionwide cost at \$11 billion, escalated to 2023 dollars.

In 2016, the East Bay Municipal Utility District, a BACWA JPA signatory, retained The Freshwater Trust (TFT) to investigate the potential for a nutrient trading program for the San Francisco Bay. A water quality trading (WQT) program would facilitate the buying and selling of discharge allocations (i.e., credits) between the regulated clean water agencies in the SF Bay (point-to-point source trading) and potentially the creation of credits from nonpoint source projects that reduce nutrient loading (nonpoint-to-point source trading). TFT submitted the final WQT report in 2017. Titled *Point-to-Point Source Water Quality Trading for Nutrients in the San Francisco Bay: Assessing the Viability & Mechanics of a Nutrient Credit Trading Program*, the report provided a summary of WQT basics, identified challenges and opportunities for WQT in the SF Bay, proposed components of a conceptual WQT program, and explored the inclusion of nonpoint source reductions. However, the report identified numeric discharge limits as a necessary precondition, so a WQT program could not be pursued until such limits were adopted, which occurred in 2024.

## Objective

With the issuance of the 2024 Nutrient Watershed Permit, which includes compliance schedules with interim and final numeric effluent limits, BACWA would like to retain TFT to revisit the findings of the 2017 report, evaluate the feasibility of a WQT program, and define a number of conceptual program design options and considerations that would underpin the development and deployment of such a program in practice. The objective of this second Scope of Work (SOW #2) is to identify the characteristics of a conceptual WQT program, which will inform the design of a future WQT program and identify the pathway for finalizing and deploying a WQT program as part of a future nutrient watershed permit.

To achieve this objective, TFT will build on the work completed as part of SOW #1, entered into in July 2025, by continuing to conduct outreach to interested BACWA members and complete the necessary investigations into the viability of WQT for the watershed. This outreach will also help ensure that the final report is appropriately tailored to the context in the Bay and addresses BACWA members' circumstances. Based on the input gained from the outreach efforts and other investigations, TFT will prepare a final report that summarizes the findings and defines options and considerations to inform the ultimate design of a WQT program that, if deployed, would facilitate trading among the regulated point sources in the SF Bay.

## PROPOSAL

The Freshwater Trust proposes this second SOW #2 comprised of the following tasks:

### Task 1 – Project Management

Throughout the duration of this SOW, TFT will organize and manage the consulting team, oversee the project, and coordinate with BACWA staff. TFT, its partners, and BACWA staff will meet during project duration at a minimum once per month to review the SOW, budget, schedule, and deliverables. TFT shall prepare monthly invoices that cover:

- Work Completed during the month, with a breakdown of TFT staff hours and any direct expenses for each work task
- Needs for additional information or review from BACWA or its members
- Any scope, schedule, or budget issues and changes

#### *Task 1 Deliverables & Deadlines:*

1. Arrange recurring meetings with BACWA staff.  
*Task ongoing for duration of Scope of Work.*
2. Prepare and submit monthly invoices.  
*Task ongoing for duration of Scope of Work.*

**Task 1 Estimated Cost: \$1,678**

### Task 2 – Outreach to BACWA Members, Experts & Stakeholders

To build support for a conceptual WQT program, it will be necessary to engage in strategic and clear outreach to BACWA members and other core stakeholders, an effort that commenced as part of SOW #1 and will continue under this SOW #2. This effort will focus on meeting with BACWA members to provide them information about WQT as well as to better understand their individual circumstances, their

interest in trading, and their questions and concerns. To make these outreach efforts more efficient, the BACWA members will be grouped into categories based on their circumstances, perceived interests, and other relevant factors and outreach will be conducted to the groups rather than individual BACWA members. The potential groups/categories of BACWA members may include: (i) potential credit buyers, (ii) potential credit sellers, (iii) interested members that lack a demonstrated interest in either buying or selling credits, (iv) members that have expressed skepticism about WQT, and (v) other categories as appropriate. These categories may also take into account the similarities of BACWA members (e.g., facility size, expected growth, etc.).

The insight gained from this outreach will enable TFT and BACWA to tailor the deliverables prepared as part of a subsequent SOW for BACWA members and lay the foundation for the eventual development of a WQT framework that, with regulatory approval, would facilitate a functional trading program among dischargers in SF Bay. As part of the outreach efforts, relevant TFT staff will participate in meetings with BACWA, its members, stakeholders and regulators, and will provide a final presentation on the results of this SOW to interested parties as directed by BACWA. As part of the outreach efforts, TFT will:

- Work with BACWA to develop outreach materials (e.g., presentations, one-page WQT summary, template questions for meetings) and coordinate communication among the project team and stakeholders
- Participate in up to 10 meetings (including those held as part of SOW #1) with BACWA members, regulators, and/or other stakeholders, and document the results of this outreach
- Support BACWA in its investigation and potential pursuit of WQT by participating, assisting, and engaging in outreach efforts and other meetings, as requested by BACWA, to the extent feasible
- Present the findings of this SOW to the Water Board at meeting coordinated by BACWA staff

***Task 2 Deliverables & Deadlines:***

1. Provide outreach support and services as requested by BACWA, including but not limited to preparing outreach materials, and participating in stakeholder discussions and meetings.

***Task ongoing for duration of Scope of Work.***

2. Prepare a written summary of input received from BACWA members and other stakeholders during the outreach meetings.

***Summary to be included in the Final Report due by December 31, 2025.***

***Task 2 Estimated Cost: \$15,026***

**Task 3 – Initial Technical Analysis & Data Gap Investigation**

TFT will coordinate with BACWA and its project partners, particularly HDR, Inc., to explore what existing tools, data, and partners could support the development of a robust trading framework that optimizes investment between facilities across the Bay. With the support of the project partners, TFT will gather data for a preliminary evaluation of the potential supply and demand for nutrient credits among BACWA members, with consideration of likely geographic constraints (i.e., subembayments). Additional input will be requested from San Francisco Estuary Institute, regarding ecological tools and approaches that could inform trading. It is expected that one or more areas of uncertainty will be defined. TFT will attempt to weigh or bound these areas, and define potential approaches to resolve these considerations.

TFT will strive to identify any potential data gaps and scientific analyses that would be necessary to resolve as a precondition to building a functional WQT program.

***Task 3 Deliverables & Deadlines:***

1. Prepare a synopsis of the technical findings, and any data gaps identified. This synopsis will be incorporated into the final report prepared as part of Task 4.

***Technical analysis to be completed by October 31, 2025.***

***Task 3 Estimated Cost: \$25,036***

**Task 4 – Evaluate Water Quality Trading Compliance Program for Nutrients**

Based on the findings of Tasks 2 and 3, and TFT’s 2017 report, TFT will analyze the potential options, roadblocks, and other considerations for deploying a WQT program to facilitate trading among the regulated point sources in the Bay. TFT will evaluate the possible program characteristics and designs that are anticipated to meet the specific stakeholder needs expressed in Task 3 and address the considerations necessary to make a program technically credible, legally durable, and socially acceptable for utilities, agencies, and stakeholders in the Bay. This will include an analysis of the programmatic market considerations (e.g., pricing, transaction structure, etc.) that must be addressed in order for a WQT program to operate effectively.

As part of this evaluation, TFT will research any considerations relevant to the preferences expressed by stakeholders and review existing precedents, regulatory directives, and other pertinent guidance to identify potential constraints and develop a proposed strategy to navigate such constraints. The proposed strategy will address the compliance schedules and other temporal considerations, the need for a transactional structure that balances flexibility and long-term certainty, potential mechanisms for credit price discovery, and the mechanics of a functional program. While this evaluation will be primarily focused on point source trading, TFT will include some discussion on the potential to expand a trading program to include nonpoint source activities. The results of this evaluation will be documented in a written report delivered to BACWA.

***Task 4 Deliverables & Deadlines:***

1. TFT will deliver a written report on the key points and considerations of a WQT program for nutrient compliance within the Bay. This report will include a proposed structure for a nutrient trading program that will facilitate trading among the dischargers in the Bay.

***Final report due by December 31, 2025.***

***Task 4 Estimated Cost: \$33,854***

**Task 5 – Propose Next Steps for Pursuing a Watershed-Based Compliance Program**

Based on the Task 4 deliverable and any input received from BACWA, TFT will develop a set of proposed next steps, tasks, deliverables, and timelines to pursue a WQT program. TFT will design this proposal to resolve any outstanding questions (e.g., funding and operational constraints) and build support for a WQT program among stakeholders and regulators in order to develop a proposed program structure. After incorporating input from interested parties and regulators, this structure, a WQT Framework, could then be incorporated into the next iteration of the Permit.

#### **Task 5 Deliverables & Deadlines:**

1. TFT will deliver a proposed SOW of work for developing and operating a WQT Program that, with regulatory approval, is intended to enable dischargers in the Bay to engage in nutrient credit trading.

*Final proposed scope of work due by December 31, 2025.*

**Task 5 Estimated Cost: \$2,976**

## **SCHEDULE**

TFT shall begin performance following the execution of the contract, anticipated to occur in August 2025. TFT will complete all services no later than December 31, 2025.

	August	September	October	November	December
Task 1: Project Management & Kickoff					
Task 2: Outreach Support					
Task 3: Initial Technical Analysis					
Task 4: Evaluate WQT Program					
Task 5: Propose Next Steps					

**Total Estimated Cost: \$78,569.00**

#### **Who to contact for next steps:**

The Freshwater Trust appreciates BACWA's interest and review. Please direct questions, comments, and proposed additions to:

Erik Ringelberg  
Regional Vice President, California  
Erik@thefreshwatertrust.org

Chris Thomas  
Senior Attorney & Policy Specialist  
cthomas@thefreshwatertrust.org



**AMENDMENT NO. 1  
TO AGREEMENT BETWEEN  
BAY AREA CLEAN WATER AGENCIES AND  
HDR Engineering)  
FOR  
Compliance Support for 2024 Nutrient Watershed Permit**

This Amendment No. 1 is made this 15<sup>th</sup> day of October, 2023, in the City of Orinda, County of Contra Costa, State of California, to that certain agreement of December 6, by and between HDR Engineering and Bay Area Clean Water Agencies, (BACWA) (the “Agreement”) in consideration of the covenants hereinafter set forth.

1. BACWA and HDR Engineering agree to an increase of \$444,137, to a total amount of \$788,238.
2. The Scope of Work will be as described in the attached Scope of Work.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By \_\_\_\_\_ Date  
Jackie Zipkin, BACWA Chair

HDR Engineering

By \_\_\_\_\_ Date

## **BAY AREA CLEAN WATER AGENCIES PROFESSIONAL SERVICES CONTRACT**

This PROFESSIONAL SERVICES CONTRACT, effective December 6, 2024, is between Bay Area Clean Water Agencies (“BACWA”), a joint powers agency which exists as a public entity separate and apart from its Member Agencies, created January 4, 1984 by a Joint Powers Agreement between Central Contra Costa Sanitary District, East Bay Dischargers Association, East Bay Municipal Utility District, the City and County of San Francisco and the City of San Jose, with a mailing address of P.O. Box 24055, MS 702, Oakland, CA 94623, and HDR Engineering Inc. (“Consultant”), a corporation doing business at 2121 N. California Blvd., Walnut Creek, CA 94596 for professional services as described in any Exhibit A attached hereto.

In consideration of the mutual covenants, stipulations and agreements, the parties agree as follows:

### **Description and Standard of Services to be Performed**

1. Consultant will perform the Services as described by and in accordance with Exhibit A in accordance with the Professional Standard, as set forth in Section 3 below. The work is to be completed in accordance with the Schedule shown in Exhibit B
2. Consultant shall not contract with or otherwise use any subconsultants, subcontractors or other nonemployee persons or entities (“Subconsultants”) to perform the Services, other than those specified in their Proposal dated November 6, 2024, without the prior written approval of BACWA. If Consultant and BACWA agree that Subconsultants shall be used, Consultant shall ensure Subconsultants’ compliance with all the terms and conditions of this agreement.
3. Consultant will exercise that degree of care in performing the Services in accordance with that prevailing among firms of comparable standing in the State of California (“Professional Standard”). Consultant will promptly correct or re-perform those Services not meeting the Professional Standard without additional compensation.
4. Consultant warrants that it is fully licensed, registered and otherwise fully authorized to perform the Services in the State of California to the extent applicable law requires such licensure, registration or authorization.
5. BACWA’s review, approval, acceptance, use, or payment for all or any part of the Services hereunder will not alter the Consultant’s obligations or BACWA’s rights hereunder, and will not excuse or diminish Consultant’s responsibility for performing all Services consistent with this Contract.

### **Payment for Services**

6. BACWA will pay Consultant a lump sum amount of \$344,101 arrived at based on the Tasks 1 through 4, identified staff and estimated levels of effort as shown in the detailed Fee Proposal shown in Exhibit C. Consultant will not exceed the maximum amount payable without obtaining prior written approval from BACWA. Any additional work will be negotiated based on the schedule of hourly rates and expenses shown in Exhibit D.
7. If BACWA provides written notice to proceed for Optional Task 5, BACWA will pay Consultant an additional lump sum amount of \$43,454 arrived at based on the identified staff and estimated levels of effort as shown in the detailed Fee Proposal shown in Exhibit C. Consultant will not exceed the maximum amount payable without obtaining prior written approval from BACWA. Any additional work will be negotiated based on the schedule of hourly rates and expenses shown in Exhibit D.

8. Consultant shall submit invoices monthly. Invoices shall include the percent of each task completed in the Fee Proposal Summary shown in Exhibit E and the associated fee based on the Total Cost for each task along with a brief description of the work performed.
9. Payments under this Contract will be due thirty (30) days after BACWA's receipt of invoices. BACWA may withhold from any progress or final payment any damages, backcharges or claims incurred or anticipated by BACWA to the extent caused by breach of this Contract by Consultant.

### **Document Ownership and Retention**

9. Consultant will maintain all financial records relating to this Contract in accordance with generally accepted accounting principles and for at least three years following termination of this Contract. Consultant will grant BACWA and its representatives access upon request to all such records and all other books, documents, papers, drawings, and writings of Consultant that refer or relate to this Contract.
10. All drawings, specifications, reports, programs, manuals, and other work product of Consultant that result from this Contract ("Work Product") will be considered the exclusive property of BACWA. Any modification or reuse of the Work Product for purposes other than those intended by this Contract shall be at BACWA's sole risk and without liability to Consultant. Consultant agrees that it will not use, disclose, communicate, publish or otherwise make available to third parties any products, analyses, data, compilations, studies, proposals, technical or business information, and any other information related to the Services provided to BACWA without BACWA's prior written approval.

### **Indemnification**

11. To the fullest extent allowed by law, Consultant will indemnify, hold harmless, reimburse and defend BACWA, its Member Agencies, and each of their officers, directors, employees and agents from, for and against any and all claims, demands, damages, losses, expenses, liabilities and penalties, including but not limited to reasonable attorneys' and expert witnesses' fees, arising out of or relating to the Services but only to the extent caused by the negligent or other wrongful acts or omissions of Consultant or any person or entity for whose acts or omissions any of them are responsible, or by the failure of any such party to perform as required by this Contract. In no event shall the cost to defend charged to Consultant exceed Consultant's proportionate percentage of fault.

### **Insurance**

12. Consultant will purchase and maintain, at Consultant's expense, the following types of insurance, covering Consultant, its employees and agents:
  - a. Workers' Compensation Insurance as required by law, subject to a waiver of subrogation in favor of BACWA;
  - b. Employers Liability Insurance with a per accident value at \$1,000,000, Policy Limit of \$1,000,000 and Each Employee of \$1,000,000, subject to a waiver of subrogation in favor of BACWA.
  - c. Comprehensive General Liability Insurance covering personal injury and property damage with a combined single limit, or the equivalent, of not less than \$1,000,000.00 each occurrence, \$2,000,000.00 general aggregate, and naming BACWA as an additional insured.
  - d. Business Automobile Liability Insurance with combined single limit coverage of not less than \$1,000,000.00 aggregate for each claim, incident, or occurrence; and naming BACWA as an additional insured.

### **Assignment**

13. Consultant will not assign or transfer any of its interest in this Contract, in whole or in part, without the prior written consent of BACWA. BACWA may assign this Contract and any rights relating to this Contract (including but not limited to its right to assert claims and defenses against Consultant) at BACWA's discretion.

### **Independent Contractor**

14. Consultant will perform the Services as an independent contractor. Although Consultant will perform its Services for the benefit of BACWA, and although BACWA reserves the right to determine the schedule for the Services and to evaluate the quality of the completed performance, BACWA does not control the means or methods of Consultant's performance. Consultant is solely responsible for determining the appropriate means and methods of performing the Services, and Consultant's liability will not be diminished by any review, approval, acceptance, use or payment for the same by BACWA or any other party.

### **Termination of Contract; Suspension of Services**

15. This contract shall automatically terminate on December 31, 2029. Either party may also terminate this Contract in whole or in part at any time for its convenience. For a termination for convenience, the termination will be effective thirty (30) days following receipt of a written notice of termination by one party from the other. BACWA may terminate this Contract in whole or in part for cause, in which event the termination will be effective ten (10) days after Consultant's receipt of BACWA's written notice and Consultant's failure during that period to cure the default.

### **Dispute Resolution**

16. Consultant will give prompt written notice to BACWA of any claim, dispute or other matter in question, but in no event will Consultant give such notice later than ten (10) days after Consultant's becoming aware of the event or circumstance giving rise to the claim, dispute or matter in question.
17. All claims, disputes and other matters in question between BACWA and Consultant arising out of or relating to this Contract will be subject to alternative dispute resolution. If both parties agree to arbitration it will be conducted in accordance with the Commercial Arbitration Rules of the American Arbitration Association then in effect. Notice of the demand for arbitration will be filed in writing with the other party to this Contract and with the American Arbitration Association. Any arbitration arising out of or relating to this Contract will include, by consolidation, joinder or joint filing, any other person or entity not a party to this Contract that is substantially involved in a common issue of law or fact and whose involvement in the consolidated arbitration is necessary to achieve a final resolution of a matter in controversy therein. This agreement to arbitrate will be specifically enforceable by any court with jurisdiction thereof.
18. A demand for dispute resolution by either party will be made within a reasonable time after the claim, dispute, or other matter in question has arisen, and in no event will it be made after the date when institution of court litigation based on such claim, dispute or other matter in question would be barred by the applicable period of limitations.
19. The failure of either party to enforce any provision of this Contract will not constitute a waiver by that party of that or any other provision of this Contract.

### Severability

20. BACWA and Consultant agree that if any term or provision of this Contract is determined to be illegal, in conflict with any law, void or otherwise unenforceable, and if the essential terms and provisions of this Contract remain unaffected, then the validity of the remaining terms and provisions will not be affected and the offending provision will be given the fullest meaning and effect allowed by law.

### Survival

21. All rights and obligations set out in this Contract and arising hereunder will survive the termination of this Contract (i) as to the parties' rights and obligations that arose prior to such termination and (ii) as is necessary to give effect to rights and obligations that arise after such termination but derive from a breach or performance failure that occurred prior to the termination.

This Contract constitutes the entire, legally binding contract between the parties regarding its subject matter. No waiver, consent, modification or change of terms of this Contract is binding unless in writing and signed by both parties.

The following documents are incorporated into and made a part of this Contract. Any conflicts between these documents and this Contract will be resolved in favor of this Contract.

Exhibit A – Scope of Work

Exhibit B – Schedule

Exhibit C – Basis for Fees

**CONSULTANT:**

HDR Engineering, Inc.

2121 N. California Blvd.

*Street Address*

Walnut Creek, CA 94596

*City, State, Zip Code*

47-0680568

*Tax Identification No.*

*Consultant Signature*

*Date*

*Name, Title*

*BACWA Signature*

*Date*

Jackie Zipkin, BACWA Executive Board Chair

---

*Name, Title*



**TITLE: Approval for \$35,000 contribution to support CASA efforts for coastal nutrient modeling.**

☐ RECEIPT      ☐ DISCUSSION      ☐ RESOLUTION      ☒ APPROVAL

### **RECOMMENDED ACTION**

Approve a \$35,000 contribution to support CASA contract with HDR for Engineering Services to Support Nutrient Management in California's Central Coast Region

### **SUMMARY**

The Southern California Coastal Water Research Project (SCCWRP) has worked with academic collaborators to develop, the ROMS-BEC, a paired hydrodynamic and biogeochemical model. This numerical model is intended to help regulators, water resources managers, and scientists investigate and accurately understand the influence of land-based inputs, including POTW discharges, on biogeochemical and biological ocean processes that affect ocean acidification and hypoxia. SCCWRP initially ran model scenarios looking at POTW and other discharges to the Southern California Bight. With funding from the Ocean Protection Council, they are now conducting modeling runs up the Central Coast to north of the Golden Gate.

The California Association of Sanitation Agencies has been coordinating the POTW response SCCWRP's modeling work in the Southern California Bight and the Central Coast. They have contracted with HDR for engineering support to both inform current and future nutrient loads by POTWs to the Ocean, as well as to conduct an independent review of ROMS-BEC model parameters and run model scenarios. CASA previously raised funds from Southern California Dischargers to support the engineering review of work in the Southern California Bight, including cost estimates for nutrient reductions, work that is almost complete and has been well-received by regulators. CASA is seeking financial contributions by Central Coast dischargers to the new Central Coast modeling review effort. CASA and SFPUC have requested that BACWA provide a contribution on behalf of our coastal discharger members. A contribution would provide BACWA a seat at the table when reviewing requests for information and in scoping and reviewing work on future ROMS-BEC modeling simulations along the Central and North Coasts for regulatory agencies' scientific teams to consider. BACWA will also be positioned to ensure that the coastal modeling work is interfacing with the Bay modeling work led by SFEI.

It should be noted that BACWA's CBC fees paid by all members, including coastal dischargers, have been used to support nutrient efforts in the Bay. Contributing collectively to this coastal effort, rather than requesting contributions from individual coastal agencies, may be viewed as fairness within that context.

### **FISCAL IMPACT**

This work would be funded from the General Technical Support line item in the FY26 BACWA Budget approved on April 18, 2025.

## ALTERNATIVES

1. Do not make the contribution. This is not recommended because BACWA's coastal dischargers would otherwise need to fund the work themselves, constituting a "double-payment" as they already fund in-Bay nutrient work through CBC fees.

Attachments: HDR Scope of Work

Approved: \_\_\_\_\_  
Jackie Zipkin, Chair,  
BACWA Executive Board

Date:



June 6, 2025

Mr. Jared Voskuhl  
Director of Regulatory Affairs  
California Association of Sanitation Agencies (CASA)  
925 L Street, Suite 200  
Sacramento, CA 95814

**RE: Engineering Services Proposal to Support Nutrient Management in California's Central Coast Region**

Dear Mr. Voskuhl:

HDR is pleased to present this proposal to provide consulting services related to nutrient management from California's Central Coast Region to the California/Oregon Border. The nutrient management will be focused on nitrogen species, with particular attention to wastewater treatment plants with coastal discharges. Specifically, HDR will support the ongoing efforts by informing stakeholders on key aspects of a strategy, creating and compiling a request for information (RFI) that will focus on the existing treatment facilities/performance, and issuing a nutrient trending report for coastal dischargers similar to what HDR is in the process of submitting on behalf of the California Association of Sanitation Agencies for the Southern California Bight. This nutrient trending report will also include the unit energy demands to treat wastewater (if data is available) and the extent of flows/loads diverted from coastal discharge by recycled water.

Our proposed scope of work and budget is provided below.

## **Scope of Work**

### **Task 1 – Project Management**

HDR will manage the scope of work, schedule, and resources for the project. HDR will coordinate with CASA's project lead as appropriate.

**HDR Responsibilities:**

- Management of the project, including project coordination, project schedule, and coordination of quality assurance/quality control (QA/QC) activities.
- Prepare regular invoices (invoices will be prepared quarterly).
- Regular communication with CASA's project lead.

Assumptions:

- Project management duration is up to 12 months in 2025 and 2026.

## **Task 2 – Nutrient Management Support**

This technical task is focused on various subtasks as described in the subsections that follow.

### **Subtask 2.1 – Nutrient Modeling Efforts**

This effort is focused on two fundamental pillars: i) HDR to produce a functional ROMS-BEC model as a tool to review the model and ii) develop a list of parameters that the modeling team at Southern California Coastal Water Research Program (SCCWRP) should consider for enhancing the model. The initial effort is focused on obtaining the necessary files from the SCCWRP to perform model simulations. Once the HDR model is constructed, the HDR team will focus on the following initial parameters:

- Model run-time for an individual day
- Required computing time
- Compare/contrast SCCWRP against HDR outputs. If the differences are significant, HDR will engage with SCCWRP to determine next steps.

Once the HDR and SCCWRP outputs are deemed “close enough”, the HDR team will review the parameters and identify modeling parameters that need to be refined, modify, and/or added/removed from the model. Furthermore, the HDR team will include a list of scenarios to be considered on future modeling simulations (up to 12 in total). It is anticipated that the simulations will consider duration, simulations that consider planned upgrades that are included in the Southern California Bight Report, etc.

Deliverables:

- Brief technical memorandum (up to 2 pages) that describes the steps associated with producing the model on HDR CPU's. It will include screen captures of input/output results and model duration.
- Technical memorandum (up to 10 pages) that compares/contrasts the modeling outputs from HDR and SCCWRP modeling runs, a list of which variables were modified to reach consensus between the two outputs, a list of which variables SCCWRP should consider on modeling runs, and a list of future modeling scenarios to consider by SCCWRP (includes modeling duration).

Assumptions:

- A portion of this work has already been performed by HDR.

### **Subtask 2.2 – Fact Finding for Coastal Dischargers**

This subtask is included as a means to develop baseline information with respect to existing facilities, annual energy/chemical demands, recycled water volumes (if additional information

beyond GeoTracker is required), and historical plant performance data for liquid stream unit processes from raw influent through discharge on data that is available (for example: flow, nutrient speciation, carbonaceous biochemical oxygen demand [cBOD], total suspended solids [TSS], temperature, alkalinity). The historical plant performance data will be used in conjunction with publicly available California Integrated Water Quality System (CIWQS) data for Subtask 2.2 (specifically influent/effluent data).

HDR will use the previously developed template from the Southern California Bight RFI efforts to capture the aforementioned desired items. The RFI will be disseminated by CASA to the coastal dischargers from the Central Coast to the California/Oregon border (up to 16 member agencies).

The coastal dischargers will populate the RFI and return it directly to HDR. HDR will subsequently compile the findings into a master workbook that facilitates the means to share information about individual dischargers, as well as groupings (e.g., geographic region) identified by CASA.

Besides the coastal dischargers, CASA staff will compile data from riverine dischargers for the Central and Northern Coasts and share this information with HDR. This information will be incorporate into the overall nitrogen loads to the Pacific Ocean.

**Deliverables:**

- Final RFI shared electronically with CASA via email.
- Compiled RFI responses in a Master Workbook, plus up to six tables/plots that capture facilities, cost (energy/chemicals), and a comparison against industry textbook values (for perspective) shared electronically with CASA via email.

**Assumptions:**

- CASA will disseminate the final RFI to the coastal dischargers of interest.
- Up to 16 coastal dischargers.
- CASA will compile and share with HDR the riverine dischargers to the Central and Northern Coasts of California.
- HDR will compile the RFI's and provide the master workbook to HDR.
- HDR will lead up to three virtual meetings in the event that the various ocean dischargers have any questions related to populating the RFI (each meeting will last up to one hour in length). Up to three HDR team members will attend each meeting.

### **Subtask 2.3 – Nutrient Trending Report**

A key feature of the Bay Area nutrient management strategy has been reviewing influent, discharge, and more recently recycled water flows and loads annually. Such a report provides a perspective on nutrient removal across the plant, discharge contributions to nutrient loads, and the role of recycled water.

The data to perform this subtask will be included as part of the RFI in Subtask 2.2 (emphasis on influent, discharge, and recycled water data). The “year” will align with the State of California “water year” dates (October 1 through September 30). The parameters of interest will be daily average flow and, at a minimum, monthly composite concentration values for various nutrient parameters. In the event that such information is not available, HDR will rely on industry accepted assumptions in lieu of actual data.

HDR will compile such findings and produce a report similar to the report provided to the Southern California Bight Coastal Dischargers. It will include the following key sections:

1. Introduction
2. Background
3. Methods
4. Results:
  - Influent
  - Discharge
  - Recycled Water
5. Summary and Discussion
6. Appendices: individual write-up per coastal discharger (requires agency review and final sign-off via email). NOTE: CASA will facilitate receiving agency sign-offs.

HDR will provide a draft and final report for review by CASA. HDR will submit a draft report via email. CASA and the dischargers will have up to three weeks to review the draft report. HDR will lead a virtual review meeting of the draft report with a duration of up to one hour. HDR will submit the final report two weeks after the review meeting.

**Deliverables:**

- HDR will deliver the draft and final report to CASA in PDF format via email.
- HDR will issue both the final report, as well as a comment and response log, with responses to all comments prepared by CASA.

**Assumptions:**

- CASA will compile all comments from the draft report in a Microsoft Excel workbook and share this with HDR via email.
- CASA will obtain agency approvals for their appendix.
- HDR will work directly with each coastal discharger on the draft/final appendix specific to their facility. Each facility will sign off on their appendix via email (facilitated by CASA).
- CASA and the coastal dischargers will have up to three weeks to review the draft report.

## Subtask 2.4 – Attend Meetings on CASA’s Behalf

HDR has allocated budget for attending meetings on CASA’s behalf that translates to upwards of \$8,500. An example meeting could be presenting on the California Statewide coastal dischargers at SCCWRP Commission’s Technical Advisory Group (CTAG) meetings. These funds would be used as needed with guidance from CASA to attend on their behalf.

## Compensation

We propose to perform the scope of work described for a lump sum amount of \$117,449 for Tasks 1 and 2.

Task 1 – Project Management:	\$10,320
<u>Task 2 – Analysis:</u>	<u>\$107,129</u>
Total	\$117,449

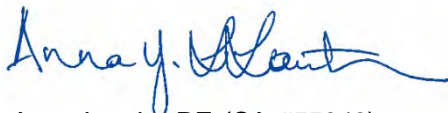
The work will be billed on a lump sum basis.

## Schedule

HDR assumes the work described for Tasks 1 and 2 will be performed over six-months from mid-June 2025 through mid-June 2026. Note that completion of Subtask 2.3 is dependent on the nutrient data being collected and available.

Thank you for the opportunity to present this proposal. We very much value our ongoing relationship with CASA and we look forward to supporting you into the future. Please let us know if you have any questions or require additional information.

Sincerely,  
HDR ENGINEERING, INC.



Anan Lantin, PE (CA #55043)  
Vice President



Michael W. Falk, PhD, PE (CA #C-77787)  
Senior Project Manager

MWF:pk/25-0420772



## BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 7

MEETING DATE: August 15, 2020

**TITLE: Approval of \$60,000 donation to the National Biosolids Collaborative at University of Arizona on behalf of BABC and the City of Santa Rosa.**

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

### RECOMMENDED ACTION

Approve a \$60,000 donation to the National Biosolids Collaborative at the University of Arizona on crop uptake of PFAS from land-applied biosolids.

### SUMMARY

University of Arizona initiated the National Collaborative PFAS Project (National Collaborative) to better understand the incidence and mobility of PFAS from biosolids in diverse environments across the country. Specifically, the study asks, “Does land application of biosolids result in significantly increased human exposure to PFAS?” Phase I sought to evaluate exposure risk by measuring PFAS in soils and groundwater. The National Collaborative is currently seeking donations for Phase II, to evaluate the indirect route of exposure to PFAS from the ingestion of foodstuffs from crops grown on land application plots. At each project site, plant samples of roots, stems and leaves will be collected as well as edible crop produce.

The Bay Area Biosolids Coalition (BABC) was previously a Project of Special Benefit of BACWA and beginning in FY26, is now a BACWA committee. Before joining BACWA, BABC built up a reserve of funds over time that were earmarked for research, and are being held by BACWA for this purpose. BABC is requesting that \$50,000 from the BABC fund be used to support the national collaborative. The City of Santa Rosa would like to donate an additional \$10K to the National Collaborative by using BACWA as a pass-through.

### FISCAL IMPACT

This contribution will be funded via the BABC fund reserve that was earmarked for biosolids research purposes when BABC joined BACWA as a committee. The fund currently contains \$293,689. The City of Santa Rosa will be invoiced for \$10,000 to contribute to the fund.

### ALTERNATIVES

1. Do not provide funding for this project. This is not a recommended alternative because this research is needed to support the sustainability of land applications for biosolids. Additionally, BABC was assured by BACWA that their reserve fund could be used for

research purposed at the discretion of the committee after they joined BACWA.

*Attachments:*

1. *National Collaborative Pledge form*

Approved: \_\_\_\_\_  
Jackie Zipkin, Chair,  
BACWA Executive Board

Date: \_\_\_\_\_



**PFAS Research Fund for WEST  
Gift Commitment Invoice**

This document serves as an invoice for your pledged donation to the National Collaborative PFAS Project. Thank you!

DESCRIPTION	AMOUNT
Charitable gift to support the research on PFAS being conducted by Dr. Ian Pepper and his team at the University of Arizona WEST Center, due 90 days upon receipt of invoice (October 31, 2025).	\$60,000
TOTAL	\$60,000

Please make your check payable to the **UAF/PFAS Research Fund for WEST** and return the bottom portion of this letter with your check to the following address:

COLLEGE OF AGRICULTURE, LIFE AND ENVIRONMENTAL SCIENCES  
PHILANTHROPY AND ALUMNI ENGAGEMENT  
FORBES BUILDING ROOM 325  
THE UNIVERSITY OF ARIZONA  
PO BOX 210036  
TUCSON, AZ 85775-2101

For an online pay option or for additional information, please contact Nick Pierson at [nperson@arizona.edu](mailto:nperson@arizona.edu) or 520-621-9018.

*Remit bottom portion with payment*



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



Designation:	PFAS Research Fund for WEST
Amount:	\$60,000

*Your gift to the UA Foundation qualifies as a tax-deductible donation.*



## EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 8

MEETING DATE: August 15, 2025

**TITLE: Request for BACWA Executive Board Approval for Contract with San Francisco Estuary Institute (SFEI) for Subsistence Fishing Consumption Survey Pilot Implementation, in an amount not to exceed \$50,000**

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

### RECOMMENDED ACTION

Authorize contract with San Francisco Estuary Institute (SFEI) for pilot implementation of a subsistence fishing consumption survey, in an amount not to exceed \$50,000.

### SUMMARY

The Mercury and PCBs Watershed Permit (NPDES Permit CA0038849) was most recently reissued as [Order R2-2022-0038](#) with an effective date of February 1, 2023. The Mercury and PCBs Watershed Permit requires that permittees implement or participate in programs to reduce mercury and PCBs-related risks to humans from the consumption of San Francisco Bay and Sacramento-San Joaquin River Delta fish. BACWA completes the risk reduction activities required by the Mercury and PCBs Watershed Permit tasks on behalf of its member agencies.

In previous permit terms, BACWA has fulfilled its permit obligations by funding public outreach via community-based organizations. BACWA provided \$50,000 of funding during each of the two previous permit terms (2012 - 2017 and 2017 - 2022). For this permit term, risk reduction work must be implemented by the permit expiration date of January 31, 2028.

In 2017, the State Water Board defined a new beneficial use to protect subsistence fishers (SUB). The Regional Water Board would like to designate a subsistence fishing beneficial use for San Francisco Bay, if it is necessary. Designation of tribal and subsistence fishing beneficial uses was identified as the highest-ranking project in the Regional Water Board's [2024 Triennial Review](#) adopted in May 2025. To determine whether it is necessary, the Regional Water Board will need to collect additional information about Bay fish consumption.

In 2024, SFEI worked with Regional Water Board staff and other stakeholders to craft a three-phase workplan to generate this information. The first phase was development of a [draft fish consumption survey questionnaire](#). The second phase is pilot-testing of the survey. In FY25, BACWA provided \$6,875 to Richmond Shoreline Alliance to complete a portion of this pilot testing. The attached contract would authorize SFEI to continue implementation of the survey pilot testing, building on the work already completed by Richmond Shoreline Alliance. SFEI plans to use the results of the pilot testing completed by Richmond Shoreline Alliance to make modifications to the survey instrument to improve response rates and expand access to a larger pool of potential survey respondents. SFEI's work will be led by Anthony Khalil (Senior Community Engagement Specialist) and Jay Davis (Senior Scientist).

Regional Water Board staff have indicated that this work fulfills the Mercury and PCBs Watershed Permit risk reduction requirement because it would support development of water quality objectives to protect subsistence fishing, if deemed necessary. It would also generate information to inform future risk reduction activities, including public outreach. The process of developing and administering the survey would allow SFEI to make connections with fishing communities around the Bay that will help facilitate future risk reduction communications, and is an investment in SFEI's capacity for public outreach.

Regional Water Board staff from the Planning Division are providing programmatic oversight of the work, and will also participate in survey response collection and related data interpretation tasks. BACWA staff will provide fiscal oversight of the work completed by SFEI.

### **FISCAL IMPACT**

The total contract amount of \$50,000 would be spent over two fiscal years (FY26 and FY27). The FY26 Annual Budget included \$12,500 for risk reduction, which likely be exceeded. The FY27 Budget will reflect an up-to-date estimate of the remaining expenses associated with this project.

### **ALTERNATIVES**

1. Do not authorize contract. This alternative is not recommended, since the work is needed to fulfill a regulatory compliance responsibility of BACWA members, and will also assist the Regional Water Board in development of subsistence fishing information.
2. Select another organization to complete the work. This alternative is not recommended, as Regional Water Board staff have already determined that SFEI is qualified to complete the work

*Attachments:* Contract with San Francisco Estuary Institute

Approved: \_\_\_\_\_  
Jackie Zipkin, Chair,  
BACWA Executive Board

Date: August 15, 2025

Date: 08/08/2025

## BAY AREA CLEAN WATER AGENCIES

# CONSULTING AGREEMENT

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TO:	Anthony Khalil Senior Community Engagement Specialist San Francisco Estuary Institute 4911 Central Ave. Richmond, CA 94804	anthonyk@sfei.org (510) 746-7332
FROM:	Lorien Fono, Executive Director BACWA PO Box 24055, MS702 Oakland, CA 94623	lfono@bacwa.org (510) 684-2993

---

RE: BACWA Agreement for Subsistence Fishing Consumption Survey Pilot Implementation

This Agreement covers services to be performed by the San Francisco Estuary Institute to implement a pilot project to better understand consumption of fish by San Francisco Bay Area subsistence fishers. This work is described in the attached Scope of Work (Exhibit A) and will be performed under the direction of Mary Cousins, BACWA's Regulatory Program Manager. Programmatic oversight will be provided by the San Francisco Bay Regional Quality Control Board. The total cost of professional services to be performed by San Francisco Estuary Institute is not to exceed \$50,000.

This Agreement may be terminated by either party at any time for convenience with 30 day's notice. In the event of termination by BACWA, BACWA shall pay San Francisco Estuary Institute for professional and competent services rendered to the date of termination upon delivery of assigned work products to BACWA. The term of this agreement shall extend through June 30, 2027.

San Francisco Estuary Institute shall submit invoices to the BACWA Assistant Executive Director via e-mail. Invoices will be paid within thirty (30) days of receipt.

BACWA Assistant Executive Director E-mail: Jennifer Dyment [jdymment@bacwa.org](mailto:jdymment@bacwa.org)

Approved:

By \_\_\_\_\_  
Jacqueline Zipkin  
Chair, BACWA Executive Board

By \_\_\_\_\_  
Warner Chabot  
Executive Director,  
San Francisco Estuary Institute

Date \_\_\_\_\_

Date \_\_\_\_\_

BACWA EIN: 94-3389334

EIN: 94-2951373

## EXHIBIT A – SCOPE OF WORK

### Subsistence Fishing Consumption Survey Pilot Implementation

#### PROJECT BACKGROUND, GOALS, AND ORGANIZATION

In 2017, the State Water Board defined a new beneficial use to protect subsistence fishers (SUB). The Regional Water Board would like to designate a subsistence fishing beneficial use for San Francisco Bay, if it is necessary. Designation of tribal and subsistence fishing beneficial uses was identified as the highest-ranking project in the Regional Water Board's 2024 Triennial Review adopted in May 2025. To determine whether it is necessary, the Regional Water Board will need to collect additional information about Bay fish consumption.

Bay Area Clean Water Agencies is seeking to support subsistence fishing consumption survey interviews and data collection building from previous efforts conducted in 2024-25. From February to March 2025, the San Francisco Bay Regional Water Board (Water Board) collaborated with six participants from the Richmond Shoreline Alliance to pilot test and validate the subsistence fisher consumption questionnaire developed by SFEI ([Trinh and Davis 2024](#)). The participants conducted 28 surveys with anglers primarily in Richmond and San Francisco (Candlestick Point State Park).

This proposal would support SFEI activities to further refine the subsistence fisher consumption survey, conduct a larger pilot implementation of the survey in targeted areas around the Bay, and perform preliminary data analysis of survey results. SFEI would perform this work in partnership with Water Board staff.

The roles of the organizations involved in the project would be as follows:

**BACWA:** provide funding for SFEI labor and expenses, and fiscal oversight

**SFEI:** perform the project tasks in partnership with the Water Board

**Water Board:** perform the project tasks in partnership with SFEI, provide programmatic oversight.

BACWA is not funding any Water Board project tasks.

#### TASKS

##### Task 1 Planning and Assessment

This task will focus on assessing existing consumption survey questions, study areas, and interview methodologies. Revisions to survey and methodologies will be piloted in the field during the administering of surveys to anglers in Task 2 of this project. SFEI and the Water Board will collaboratively assess existing consumption survey questions, study areas, and interview methodologies.

**1.1** Synthesize and analyze existing respondent data and lessons learned from the March 2025 pilot test

**1.2** Further refine consumption survey questions and standard operating procedures

**1.3** Identify gaps in data collection and develop strategies to address them

A. Support the Water Board to identify gaps and implement changes

B. Conduct general outreach and promotion of project

**1.4** Determine pilot study area boundaries, sampling locations, and sampling frequency

A. Further develop previous Water Board pilot study area range and locations

B. Refine the Water Board pilot survey from March 2025 and integrate previous study area sites from the 2000 SF Bay Seafood Consumption Study

Task 1 includes direct expenses for the entire project, including travel, lodging, and equipment costs.

## Task 2 Consumption Survey Administration and Data Analysis

This task will involve conducting survey interviews, collecting and entering data, and performing data analysis. SFEI staff will conduct 75 surveys. The Water Board intends to collect up to 125 surveys and, therefore, requests funding for up to 200 total gift cards through this contract. Water Board staff funding is not requested with this contract, so the number of surveys collected by the Water Board is not dictated by this contract.

Each interviewer will receive a \$25 gift card as compensation, requiring a total funding allocation of up to \$5000 from BACWA for 200 gift cards. SFEI will retain chain-of-custody records for gift cards given to survey participants and provide them upon request to BACWA.

**2.1** Coordinate the schedule for data collection events and key milestones

**2.2** Conduct consumption survey interviews and coordinate with project team

A. SFEI will conduct (75) surveys

B. Water Board will conduct a maximum of (125) surveys

**2.3** Support data entry and management of survey data collected by the Water Board

**2.4** Conduct preliminary data analysis and prepare a summary PowerPoint presentation

## Task 3 Project Management

Coordination, contracting, and preparing quarterly invoices and progress reports.

### SCHEDULE

- Task 1: September 2025 - May 2026
- Task 2: September 2025 - December 2026
- Task 3: September 2025 - December 2026

### DELIVERABLES

- Document including recommended edits of the 2024-2025 survey questions
- Document including a list of recommended pilot surveying locations
- Draft PowerPoint summary of the study and the findings (November 2026)
- Survey datasets made available electronically (December 2026)
- Final PowerPoint summary of the study and the findings (December 2026)

### BUDGET

Task	Description	SFEI Budget (Labor & Expenses)	Direct Expenses Budget	Total Task Budget
1	Planning	\$13,000	\$2,000	\$15,000
2	Consumption Survey Interviews and Data Collection	\$25,000	\$5,000	\$30,000
3	Project Management	\$5,000	\$0	\$5,000
<b>TOTAL</b>		<b>\$43,000</b>	<b>\$7,000</b>	<b>\$50,000</b>



## BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 9

MEETING DATE: August 15, 2025

**TITLE: Request for BACWA 3rd Watershed Permit funding commitment - first installment of \$1,100,000**

☐ RECEIPT      ☐ DISCUSSION      ☐ RESOLUTION      ☒ APPROVAL

### RECOMMENDED ACTION

Authorize first installment of payment in the amount of \$1,100,000 to San Francisco Estuary Institute (SFEI) to comply with the provisions of the 3rd Watershed Permit for FY26.

### SUMMARY

The Watershed Permit for Nutrients from Municipal Wastewater Dischargers to San Francisco Bay, NPDES Permit No. CA 0038873 adopted July 10, 2024, 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 permit year basis and began October 1, 2024. 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.

The current requested authorization of \$1,100,000 to SFEI will meet first half the obligation for the second 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 FY23.

### FISCAL IMPACT

This and other payments to fund the scientific studies are collected from the BACWA membership through a Nutrient Surcharge that is included on the annual due's invoice sent to the BACWA members, as well as a drawdown of BACWA reserves, as authorized by BACWA's Executive Board. This payment was included in BACWA's FY26 Budget, approved on April 18, 2025.

### ALTERNATIVES

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

Attachments: SFEI Invoice.

Approved: \_\_\_\_\_

Jackie Zipkin, Chair,  
BACWA Executive Board

Date: August 15, 2025

**Invoice**

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

August 7, 2025  
Project No: 1092.26  
Invoice No: 1092261

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

Project 1092.26 SF Bay Nutrient Strategy Support FY2026  
Attn:Lorien Fono

**Professional Services from July 01, 2025 to June 30, 2026**

<b>Fee</b>	<b>\$1,100,000.00</b>
<b>Total this Invoice</b>	<b>\$1,100,000.00</b>



## AGENDA

BACWA Communication Steering Committee

Wastewater Video Script Review

Thursday August 14

10:00 am – 11:00 am

1. Introductions
2. Review schedule and touchpoints for input
  - a. 8/14 - Script feedback
  - b. Week of 9/22 - Style Frames and Voice Casting
  - c. Week of 10/16 - Draft 1 feedback
  - d. Week of 11/4 - Draft 2 feedback
  - e. Video complete by end of November
3. Smaller sub group for video input
4. Feedback on script
5. Thoughts on voice casting
  - a. Overall tone/ vibe
    - i. smart/ intelligent/ informative
    - ii. approachable voice or more scientific/ clinical
  - b. Any preferences around gender, age, or accent?
  - c. Are there any example voiceovers you like?
6. Ideas for promotion of the completed video
7. Adjourn

Work Products: sharing with NMS Steering Committee				
Work Product		Link	Feedback/Technical Review By	Notes
1	Moored Sensor Program Semi-Annual Update: Oct. 2024-Apr. 2025	<a href="#">Link</a>	NA	Comments and questions are welcome. Please direct to Ari (ariellac@sfei.org)
2	Trend Synthesis Report: chl, GPP, DO	<a href="#">Link</a>	8/29/25	Please direct feedback to Dave (davids@sfei.org)
3	LSB Factors Influencing High-Biomass/Low-DO Report	<a href="#">Link</a>	8/22/25	Please direct feedback to Martin (martinv@sfei.org), Dave (davids@sfei.org), Ari (ariellac@sfei.org)
4	Expanded Dissolved Oxygen Monitoring in the Lower South Bay (DO/miniDOT Evaluation)	<a href="#">Link</a>	8/15/25	Please direct feedback to Ari (ariellac@sfei.org)
5	Investigating chl-HAB Indicators (Submitted Manuscript)	<a href="#">Link</a>	8/7/25	Prior version shared with NMS-SC in Fall 2024. Substantial additional work and refinements since then, submitted to a journal for review. Feedback can be directed to Dan (dank@sfei.org)
6	Tools for improved HAB Classification: (eDNA) Classification Method Improvements	<a href="#">Link</a>	NA	Comments/questions/discussion welcome. Please direct to Dave (davids@sfei.org)
7	Updated 18S HAB Data: HAB Re-classified Dataset & Toxins Datasets	NA	NA	See #6, #8, and #12
8	HAB Synthesis Technical Report	<a href="#">Link</a>	8/22/25	Please direct feedback to Dave (davids@sfei.org)
9	Monitoring Program Integration and Optimization Report	<a href="#">Link</a>	NA	Funded by WQIF BayInsight.
10	2022 HAB Event Interpretation Manuscript: Grazers & Community Analysis	<a href="#">Link</a>		Report/Manuscript with analysis lead by USGS, leveraging NMS/SFEI phyto/HAB sequencing data. Coauthors: Dan, Ari, Dave Comments/questions/discussion welcome. Please direct to Dave (davids@sfei.org)
11	Updated POTW Webtool	<a href="#">Link</a>	NA	Incorporated nutrient load data from SFB POTWs through September 2024. Comments/questions/discussion welcome. Please direct Dan (dank@sfei.org) & Dave (davids@sfei.org)
12	HAB Monitoring Program Development: Progress Update	<a href="#">Link</a>	NA	Major work activities during 2024/2025, related to HAB monitoring program development; one component of high level synthesis. Comments/questions/discussion welcome. Please direct to Dave (davids@sfei.org)
13	Turbidity/Suspended Sediment Monitoring Report	<a href="#">Link</a>	NA	RMP-funded project: win-win, study leveraged NMS mooring network, and NMS benefitted from additional turbidity data. Please direct questions/comments to Martin (martinv@sfei.org) and Ari (ariellac@sfei.org)
14	Analysis / Synthesis of 2022 HAB event [available 8/29/2025]	<a href="#">Link</a>	NA	



August 8, 2025

Congresswoman Zoe Lofgren  
Chair, California Democratic Congressional Delegation  
1401 Longworth House Office Building  
Washington, DC 20515

U.S. Senator Alex Padilla  
331 Hart Senate Office Building  
Washington, DC 20510

Congressman Ken Calvert  
Dean, California Republican Delegation  
2205 Rayburn Building  
Washington, DC 20515

U.S. Senator Adam Schiff  
112 Hart Senate Office Building  
Washington, DC 20510

**RE: Urging Federal Protection and Investment in the San Francisco Bay Program**

Dear Chair Lofgren, Dean Calvert, Senator Padilla, Senator Schiff, and Members of the Bay Area Congressional Delegation,

We write as a coalition of organizations and partners, including water agencies, refineries, and groups working to protect and manage the San Francisco Bay ecosystem. We deeply appreciate your proactive advocacy for the EPA San Francisco Bay Program throughout the Fiscal Year 2026 appropriations process and write to encourage your continued leadership as the process moves forward.

**Recognizing Your Leadership and Current Status**

We commend the Bay Area delegation's early and sustained advocacy for San Francisco Bay Program funding, including your request for increased funding to \$75 million prior to the release of the Administration's budget proposal. Your collaborative efforts have already yielded important results in the appropriations process.

The contrasting outcomes in the House and Senate appropriations committees underscore both the challenges we face and the effectiveness of focused effort:

- House Interior Appropriations: Reduced funding to \$24 million—a significant cut from current levels but notably higher than the Administration's proposed \$12.9 million
- Senate Interior Appropriations: Maintained level funding at \$54.5 million, rejecting the Administration's proposed cuts entirely

These results demonstrate that sustained congressional effort can effectively counter disproportionate budget reductions, and we urge continued support for the Senate's approach as the appropriations process continues.

### **Proposed Cuts Create Regional Disparity**

While we appreciate the House committee's rejection of the most severe cuts, the disparity between regional EPA programs remains concerning. The Administration's budget proposal and subsequent House action continue to disproportionately target West Coast programs:

- **Chesapeake Bay Program:** Maintained at \$92 million (no reduction)
- **Great Lakes Restoration Initiative:** Maintained at \$368 million (no reduction)
- **Long Island Sound:** Maintained at \$40 million (no reduction)
- **Gulf of America:** Maintained at \$25.5 million (no reduction)
- **San Francisco Bay:** House proposal of \$24 million represents 56% cut from current \$54.5 million
- **Puget Sound:** Facing similar disproportionate reductions

The Senate committee's action demonstrates recognition that San Francisco Bay merits funding parity with other nationally significant estuarine systems.

### **Timing of Cuts Particularly Damaging**

The San Francisco Bay Program was historically underfunded at approximately \$5 million annually for many years. Only in FY 2024 was funding increased to reflect the true scope of challenges facing this critical ecosystem. Cutting the program just as it reaches appropriate funding levels would halt momentum on essential restoration and protection efforts that are finally beginning to address decades of deferred environmental needs.

### **Economic and Environmental Significance**

San Francisco Bay is the West Coast's largest estuary and serves as the economic heart of Northern California. The Bay Area generates over \$800 billion in annual economic activity. San Francisco Bay is also the hub for California's Central Valley agricultural system, which produces 25% of the nation's food supply. Water quality in the Bay directly affects:

- Municipal water supplies for 7 million residents
- Agricultural irrigation for the Central Valley
- Commercial and recreational fisheries
- Port operations supporting international trade
- Coastal resilience to protect critical economic infrastructure from flooding

### **Critical Programs at Risk**

The proposed cuts would eliminate or severely reduce programs that serve multiple stakeholder interests:

- Wetlands monitoring and restoration that protects communities from flooding
- Water quality monitoring that ensures safe drinking water and agricultural use
- Habitat restoration supporting commercial and recreational fisheries
- Pollution reduction efforts benefiting public health
- Nutrient reduction efforts to prevent economically and environmentally devastating algal blooms
- Research addressing emerging contaminants like PFAS and legacy pollutants

## Alignment with Administration Priorities

Maintaining San Francisco Bay Program funding aligns with the Administration's core priorities:

- **Economic Growth and Job Creation:** Bay restoration projects directly support construction jobs, marine industries, and the agricultural sector. Every dollar invested in ecosystem restoration generates an estimated \$7-10 in economic benefits through flood protection, fisheries enhancement, and infrastructure resilience.
- **American Energy Independence:** The program works closely with Bay Area refineries to reduce regulatory uncertainty while maintaining environmental protection. Collaborative approaches reduce compliance costs and support domestic energy production capabilities.
- **Infrastructure Investment:** Bay restoration projects strengthen critical infrastructure including ports, airports, and transportation corridors that support international trade and national competitiveness.
- **Regulatory Efficiency:** The program brings together federal, state, and local agencies with private sector stakeholders to streamline permitting and reduce bureaucratic delays for priority projects.

## Request for Action

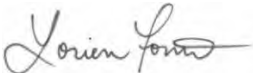
Your early advocacy has already demonstrated that sustained congressional engagement can counter disproportionate budget cuts, with the Senate committee's action providing a strong foundation for maintaining critical program funding. As the appropriations process continues, we respectfully request that you:

1. **Support the Senate Appropriations Committee approach** by advocating for San Francisco Bay Program funding at \$54.5 million in any final FY 2026 appropriations bill or continuing resolution
2. **Continue coordination with West Coast colleagues** to address regional disparities in the conference committee process and maintain engagement with appropriations leadership

Whether through a conferenced appropriations bill or continuing resolution, preserving the \$54.5 million funding level remains achievable with continued delegation leadership. Your advocacy efforts have already prevented the most severe funding cuts, and continued leadership through the final appropriations process will ensure this vital program can continue serving regional and national interests.

We appreciate your demonstrated commitment to environmental and economic issues affecting the Bay Area and look forward to continuing our collaboration through the remainder of the appropriations process.

Sincerely,



Lorien Fono, Executive Director  
Bay Area Clean Water Agencies



Kevin Buchan  
Senior Manager  
Bay Area Regulatory Affairs  
Western States Petroleum Association



Laura Tam  
Chief Executive Officer  
Bay Planning Coalition



Jon Rosenfield, Ph.D.  
Science Director  
San Francisco Baykeeper



Adrien Covert  
Senior Vice President, Public Policy  
Bay Area Council



Reid Bogert  
Program Director  
San Mateo Countywide Water Pollution Prevention  
Program



Amy Hutzel  
Executive Officer, State Coastal Conservancy and  
San Francisco Bay Restoration Authority



Dave Halsing, Executive Project Manager  
South Bay Salt Pond Restoration Project



Lawrence J. Goldzband  
Executive Director  
San Francisco Bay Conservation and  
Development Commission

cc: Honorable Jared Huffman (CA-2); Honorable Mike Thompson (CA-5); Honorable John Garamendi (CA-8);  
Honorable Nancy Pelosi (CA-11); Honorable Lateefah Simon (CA-12); Honorable Eric Swalwell (CA-14);  
Honorable Kevin Mullin (CA-15); Honorable Sam Liccardo (CA-16); Honorable Ro Khanna (CA-17)

**From:** [Seng Saechao](#)  
**Cc:** [Meredith Bauer](#); [Viet Tran](#); [Pamela Leong](#); [Kristine Roselius](#); [Fred Tanaka](#); [Stephanie Osaze](#); [Justine Buenaflor](#); [Michelle Beteta](#); [Seng Saechao](#)  
**Subject:** Re: Webinar: Bay Area Air District Engineering Program Manager  
**Date:** Thursday, July 31, 2025 3:12:56 PM

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Dear Colleagues,

Thank you for your interest in the Bay Area Air District's upcoming webinar on the **Engineering Program Manager Pilot Program**.

**Due to staffing updates and holiday schedules, we will be rescheduling the webinar to take place on Wednesday, August 20, 2025, from 1:30 PM to 2:30 PM.** We apologize for the change and hope you can accommodate the new date. For those who are unable to attend live, a recording will be made available after the session.

If you have not already done so, please register in advance using the link below. After registering, you will receive a confirmation email with the Zoom link and a calendar invitation:

[Webinar Registration - Zoom](#)

#### **Updated Webinar Details**

**Date:** Wednesday, August 20, 2025

**Time:** 1:30 PM – 2:30 PM

**Format:** Zoom Webinar (registration required)

#### **Agenda**

**1:30 PM – 1:35 PM** – Call to Order

**1:35 PM – 1:50 PM** – Overview of Engineering Program Manager Pilot Program

**1:50 PM – 2:30 PM** – Questions & Answers (Q&A)

Participants will be able to submit questions during the session via the Zoom Q&A feature. A recording of the webinar will be shared with all registrants following the event.

If you need assistance with registration, please don't hesitate to reach out to me at [ssaechao@baaqmd.gov](mailto:ssaechao@baaqmd.gov).

We appreciate your understanding and look forward to your participation.

Warm regards,

**Seng Saechao** (she/her)

**Temporary Executive Assistant I to**

**Dr. Meredith Bauer, DEO of Engineering & Compliance**

Bay Area Air District

375 Beale St., Suite 600, San Francisco, CA 94105

# Bay Area Air District Engineering Program Manager Pilot Program - BACWA Feedback

7/8/2025

## Bay Area Clean Water Agencies (BACWA)

Category	Comment / Question
<b>Potential Considerations to Enhance Effectiveness</b>	Enhance Applicant Communication - Timely responses, even brief status updates, are critical to improving the applicant experience and avoiding unnecessary delays. Enhancing the permitting portal to enable automatic notifications to applicants/communications with Engineering Program Manager would help keep applicants informed and improve overall transparency.
	Review Pilot Program Progress - The Engineering Program Manager engaging with the BACWA/Air District Implementation Workshop (and other sectors that work with the Engineering Program Manager) and report on progress would be insightful to gauge overall success, concerns, lessons learned, etc. Perhaps the Engineering Program Manager can present at a BACWA AIR Committee Meeting on the permitting process and how we can avoid common permitting pitfalls. Before the end of the program, the Engineering Program Manager can help create recommendations for permit process improvements, including rule changes, if needed.
	Improve Application Prioritization - Improve the application prioritization process by considering factors such as project urgency (e.g., construction start dates) and project complexity. When possible, forecast incoming permit applications from regulated entities to better allocate resources and manage workload.
	Improve Workflow Transparency - Enhancing the permitting portal/the Engineering Program Manager's status on a permit to include a clear workflow with estimated timelines for each milestone would support better tracking and improve coordination for both applicants and staff.
	Review Decision-Making Structure - Delegating appropriate decision-making authority on permit issues/questions to the Engineering Program Manager could enhance responsiveness and reduce delays.
	Increase Consistency in Permit Conditions - We advocate for more standardized permit conditions, especially for routine evaluations to streamline permitting processes. If consistency can also be achieved by the Engineering Program Manager, that would be good.
	Clarify Application of Requirements - Providing clearer internal and external guidance on how requirements are interpreted and applied would reduce confusion and promote more efficient permit reviews and coordination with the Engineering Program Manager.
<b>Concerns about Pilot Program/Engineering Program Manager Position</b>	Creates a Pay-to-Play System - This proposal may introduce a model where additional fees grant preferential access to regulatory staff, effectively creating a pay-to-play model. Applicants who can afford the fees move to the front of the line, while others risk indefinite delays. This could quickly become the new norm, pressuring all applicants to opt in just to "keep pace," regardless of need or complexity. This would raise the cost of compliance across the board, without any guarantee of improved regulatory outcomes. Submitting a complete and timely permit application should be sufficient to receive fair and efficient service. We are weary of potentially (or appearing to) shift the burden of internal staff capacity or inefficiencies onto permit applicants, particularly ratepayer-funded public utilities like wastewater treatment plants. It may be most appropriate if the Air District appropriately resources and manages its regulatory obligations and sets fees accordingly and equitably for all.
	Unclear Definition of "Complex" Applications - The Engineering Program Manager is intended to address "complex" applications, citing examples such as inter-related units, unknown emission factors, non-standard operations, and project changes. However, wastewater treatment plants generally do not fall into this category. These facilities typically have few and well-understood air emission sources, straightforward regulatory requirements, and standardized control technologies.
	Recommend Improving Inter-agency Coordination - Much of what the Air District defines as complexity could be addressed through stronger coordination with the Regional Water Board. The regulatory responsibilities of both agencies often intersect, particularly in areas like biosolids management, energy recovery, and air emissions. The Air District may want to consider prioritizing improving communication and alignment with the Regional Water Board. This would provide greater insight into the drivers, timelines, and constraints behind the projects wastewater treatment plants are pursuing (e.g., nutrient removal upgrades). Improved coordination could reduce delays and eliminate perceived complexity, ultimately achieving the Pilot Program's goals without imposing additional costs.

Category	Comment / Question
<b>Questions about Engineering Program Manager Position</b>	How does the Air District intend to have the Engineering Program Manager work hand in hand with the Air Permitting Engineer?
	Who does the Engineering Program Manager report to?
	Is there any more information regarding how the Engineering Program Manager will be engaged on projects?
<b>Questions about Participation and Selection</b>	Will customers need to reach out to the Engineering Program Manager directly to engage them in the process?
	How will the Engineering Program Manager get assigned and will the customer know there application has been
	How will customers know when to engage with the Engineering Program Manager?
	Is the Air Permitting Engineer still intended to be the primary point of contact?
	How does the Air District define a complex project?
	Is there a guideline that can be developed to assist customers to know what to expect?
<b>Questions Regarding Permit Assistance</b>	How will the Engineering Program Manager support projects when there is a volume of overdue permits?
	Should customers reach out to the Engineering Program Manager if they have an overdue permit?
	How would a customer engage the Engineering Program Manager for pre-application support?
<b>Questions Regarding Permit Assistance</b>	What level of involvement is available for pre-application support?
	Is the intent that the Engineering Program Manager will be "Assigned" to the project?
	Should customers include the Engineering Program Manager in regular project check-in meetings with the design team as the required or supplemental permit documents are being developed?
	How does the Engineering Program Manager interact with the Air Permit Engineer in this process?
	What level of Autonomy does the Engineering Program Manager have?
<b>Questions Regarding Funding and Pilot Program</b>	Do final decision(s), review(s) and approval(s) still fall under the discretion of the Air Permit Engineer and/or Air District Management?
	Is there information available regarding what costs customers are expected to see in the immediate and long term for supporting the program?
	How will the Air District determine whether the Pilot Phase/Program is a success?



**B A C W A**  
**BAY AREA**  
**CLEAN WATER**  
**AGENCIES**

## BACWA Special Seminar - DRAFT

September 4, 2025, 9:30 AM – 4:00 PM

Historic Klamath Ferry, Pier 9, San Francisco

1. Breakfast 9:30-10am
2. Roll Call and Introductions – 10:10 am
3. Public Comment -10:10am
4. Discussion Items – See below

Topic	Goal	Time
<b>A. Agency Updates</b>	<ul style="list-style-type: none"><li>• Roundtable from BACWA and Water Board</li><li>• Update on R2 Staffing changes</li></ul>	10:15-10:30am
<b>B. Joint PFAS Strategy</b>	<ul style="list-style-type: none"><li>• Planning science to inform regulation, legislation, and enforcement</li><li>• Shaping media and public outreach narrative</li></ul>	10:30-11:00am
<b>C. Basin Plan Amendment for Compliance Schedule Policy</b>	<ul style="list-style-type: none"><li>• Review of draft BPA language</li><li>• Update on process and information needs from the Water Board</li><li>• Outlook on CEQA support</li></ul>	11:00am - 12:30pm
<b>Lunch</b>		12:30 – 1:30pm
<b>D. Science to inform long-term policy on nutrients</b>	<ul style="list-style-type: none"><li>• Hear from representatives of other watersheds on how to adaptively manage nutrient science/regulations</li></ul>	1:30-3:00pm
<b>E. NMS Science Update</b>	<ul style="list-style-type: none"><li>• <i>Tentative topic:</i> 2022 HAB event synthesis</li></ul>	3:00-3:50pm
<b>F. Future meetings</b>	<ul style="list-style-type: none"><li>• Next joint BACWA/R2 meeting</li><li>• Pardee October 9-10</li><li>• Engagement on compliance schedule amendment</li></ul>	3:50-4:00pm

## 5. Adjournment

**PRELIMINARY PROGRAM**  
**BACWA ANNUAL TECHNICAL SEMINAR**  
**Thursday October 9 - Friday October 10, 2025**  
**Pardee Meeting Facility**

<u>Day</u>	<u>Time</u>	<u>Theme</u>	<u>Topic</u>	<u>Desired Outcomes</u>
Thursday	9:30 AM	Welcome and Introductions	Light breakfast	
	10:00 AM		Review Agenda	
	10:15 AM	Financial Review	Budgeting	<ul style="list-style-type: none"> <li>• Understanding of budget status</li> <li>• Discuss nutrient surcharge formula formula for FY26</li> <li>• Review Updated 5-year Plan</li> <li>• Input on future level of reserves given anticipated cash flow</li> </ul>
	11:00 AM	Operational	Review of Policies and Procedures	<ul style="list-style-type: none"> <li>• Confirm existing policies</li> <li>• identify need for updates or new policies</li> </ul>
	12:00 PM		LUNCH BREAK	
	1:00 PM	Regulatory	Key Regulatory Issues	<ul style="list-style-type: none"> <li>• Receive update on what's on the regulatory horizon</li> <li>• Discuss how to deploy resources to respond to important regulatory initiatives</li> <li>• BACWA PFAS strategy</li> </ul>
	3pm	Nutrients	Regulatory Update	<ul style="list-style-type: none"> <li>• Discuss Compliance Schedule amendment proposal and agree on next steps and contingency planning</li> </ul>
	4:00 PM		Adjourn for the day	

<u>Day</u>	<u>Time</u>	<u>Theme</u>	<u>Topic</u>	<u>Desired Outcomes</u>
Friday	8:30 AM		Breakfast	
	9:00 AM	Nutrients	Nutrient Science Update	Presentation from SFEI - tbd
	10:45 AM	BREAK		
	11:00 AM	Nutrients	Continued -tbd	Ideas: Ocean Impacts and work on the Socal Bight/Central Coast Long term regulatory strategies Funding from the EPA SF Bay Program Office - strategies
	12:00 PM	LUNCH BREAK		
	1:00 AM	Strategic Planning	Strategic Planning	<ul style="list-style-type: none"> <li>• Review Strategic Plan</li> <li>• Agree on top priorities or new initiatives for fiscal year</li> </ul>
	2:00P	Adjornment		

**BACWA Committee Leaders - Succession Plan**

Committee	Current Leadership (FY26)	Vice Chair	Notes
Air Issues & Regulations (AIR)	Nohemy Revilla, SFPUC Jason Nettleton, San Jose		
Asset Management	Rebecca Overacre, EBMUD Khae Bohan, Central San		Actively searching for new leadership
Bay Area Pollution Prevention Group (BAPPG)	Autumn Ross, SFPUC Robert Wilson, Santa Rosa	Joe Neugebauer, West County Wastewater	
Biosolids / BABC	Ryan Batjiaka, SFPUC Nora Cibrian, San Jose Rebecca Overacre, EBMUD Joe Neugebauer, West County Wastewater		
Collection Systems	Tyree Jackson, City of Oakland Dana Lawson, Central San		Tracy Heidersbach (EBMUD) will be replacing Tyree Jackson (Oakland)
Laboratory	Brittany Rossi Worthen, Petaluma	Payal Sarkar, San Jose	
O&M Infoshare	Yanming Zhang, City of Livermore Ben Carver, FSSD		
Permit	Blake Brown, Central San	Chris Dembiczak, EBMUD	Kristy Fournier is shadowing Chris as Vice Chair.
Pretreatment	Casey Fitzgerald, San Jose Adam Kern, EBMUD		
Recycled Water	Stefanie Olson, DSRSD Sarah Reynolds, EBMUD		

Changes to Committee Leadership will be reported annually and intra-year by Executive Director to Executive Board

**Committee Request for Board Action: None**

51 attendees participated virtually from 22 member agencies and the Regional Water Board.

**Updates on Committee Activity and Announcements**

- **PFAS:** SFEI recently published a [scientific paper](#) about high levels of PFOS in SF Bay fish; the story was also picked up by local media (e.g., [KQED](#)). On the legislative front, [SB 682](#), a ban on non-essential uses of PFAS, was passed by the CA Senate and is now heading to the assembly. BACWA has signed onto a [letter of support](#).
- **BACWA Updates:** Content from the [BACWA Annual Members Meeting](#), including the pollution prevention panel, is now available on the BACWA website. The communications steering committee has created and shared [Algal Bloom / Nutrients Social Media Posts](#). To join that group, contact [Lorien Fono](#).
- **Steering Committee Update on Fall Campaign:** The Steering Committee is soliciting ideas for the fall 2025 campaign; if your agency has content (video, graphics) to share, please share!

**Wastewater Treatment Plants and Public Engagement** - Five agencies shared their experiences connecting with the public through in-person experiences, including tours and public art.

**Fairfield-Suisun Sewer District.** Krystle Catamura shared information about the [FSSD Education Program](#), which is implemented through a partnership with Solano County RCD that is partially grant-funded. The program includes a classroom pre-lesson, treatment plant tour, and post-lesson. It includes a mock community meeting, which has been popular, as well as planting native plants and content related to sea level rise adaptation. The program reached 300 fifth-graders this year, and FSSD hopes to continue growing the program.

**EBMUD.** Zoe Lake is a tour guide for EBMUD's wastewater plant tours. The District conducted 64 tours in the last year, including [monthly plant tours](#) for the general public that have been extremely popular. Tour availability is limited by staff resources, so there is often a waitlist. Tour guides use microphones and receivers; there are also informational kiosks around the plant. EBMUD's education department helps reimburse schools for the cost of transportation.

**West County Wastewater District.** Joe Neugebauer shared that his agency is continuing to ramp up tours after going on hiatus during COVID. WCWD coordinates classroom tours through word of mouth. They had to stop offering transportation due to insurance issues, so schools are now responsible for transportation to the plant. The program includes a classroom pre-lesson (video). The tour also includes a wipes demonstration and information about sea level rise adaptation.

**SFPUC.** Blair Randall shared information about the SFPUC's public art program. Per City ordinance, 2% of all aboveground construction project costs must be used to support public art. SFPUC has been working to better align these expenditures with their mission. Recently completed projects include the [Southeast Community Center](#), [New Headworks Facility](#), and a series of temporary murals along the exterior construction fencing at Southeast Plant. Blair recommended that agencies include public art from the very beginning of capital project planning, because public outreach and commissioning artwork is time-intensive (but rewarding!).

**NapaSan.** Steph Turnipseed shared information about her agency's public outreach efforts, which include parades, community events, annual open houses, and career fairs. They offer [plant tours](#) every 3<sup>rd</sup> Thursday for the general public, school tours, and [bike tours](#) along the river. To keep middle schoolers engaged, they make the tour and presentation interactive.

Additional information about plant tours is stored in this community-edited [Google Sheet](#).

**Next BAPPG General Meeting: Wednesday, August 6, 10am – 12pm Virtual**

**Committee Request for Board Action:** None

63 attendees from 21 agencies participated remotely and in-person at the Regional Water Board's offices in downtown Oakland.

**Committee Leadership Transition**

The committee recognized the service of outgoing co-chair Michael Dunning (Union Sanitary District), and welcomed incoming co-chair Adam Kern (EBMUD).

**State Water Board Presentation on Pretreatment Compliance Audits** - [Link to slides](#)

Olivia Magaña (State Water Board) provided tips for pretreatment programs to be prepared for a successful pretreatment compliance audit (PCA) -- or to improve their programs even if they do not receive an audit. The State Water Board is currently prioritizing PCAs for facilities with water recycling programs, particularly potable reuse. The PCA includes electronic file review and in-person components. The PCA often involves a visit to specific industrial users (IUs) to see agency staff carry out IU inspections. The presentation stressed the importance of the following pretreatment program elements:

- Periodically reviewing documents such as the Sewer Use Ordinance, multijurisdictional agreements, enforcement response plans, and local limits to ensure they are kept up-to-date. When updating local limits, provide the Regional Water Board with a copy of relevant calculations in spreadsheet format.
- Maintaining a **Fact Sheet** for each IU permit that explains the logic behind permit terms like federal categorizations, effluent limits, and monitoring requirements. Some agencies keep a historical record as part of the Fact Sheet, while others focus on current conditions. Either approach is workable. Several agencies (Santa Rosa, San Jose, Petaluma) reported out that they use Fact Sheets.
- Developing **relationships with IUs** and ensuring adequate IU staff training on pretreatment topics.
- Responding to PCA findings in a timely manner. Substantial modifications may require regulatory authority approval.

**USEPA Updates** - [Link to slides](#)

Amelia Whitson (USEPA Region 9) shared federal pretreatment announcements, including the following:

- Electronic Reporting rules go into effect in December 2025 and could apply to 2025 Annual Reports due in 2026. Additional information is needed from the Water Boards regarding implementation in California (the state may request an extension). The first year will require effort to input all annual report information into an electronic database, but subsequent years should require less effort.
- Combatting PFAS contamination continues to be a high priority for EPA. No schedule update is available for the [influent study of POTWs](#), which EPA staff previously piloted with a few agencies. [Effluent Limitation Guidelines](#) for PFAS are under study or development for a few industries.
- There is a need for greater interaction between recycled water and pretreatment programs as potable reuse projects are developed. Many drinking water agencies are unaware of pretreatment programs!

**Agency Information-Sharing**

- Bay Area pretreatment program information is being compiled in this [shared document](#). Committee members should update the information for their specific agency.
- Agencies that accept hauled waste recently convened to discuss best practices. To join the group, contact [Martin St. George](#) (Santa Rosa) or [Paula Hansen](#) (EBMUD).
- Casey Fitzgerald (San José) shared information about his agency's pretreatment program, which includes about 200 IUs and 900 dental practices. He shared some current efforts for pretreatment program staff, such as considering the potential for streamlining the dental program, supporting development of a direct potable reuse program with Valley Water, fine-tuning the training program for pretreatment staff, and developing outreach materials (such as a newsletter) for IUs.

## Pretreatment Committee

Report to BACWA Board

Committee meeting on June 4, 2025

Executive Board Meeting Date: August 15, 2025

Committee Chairs: Casey Fitzgerald (San José),  
Adam Kern (EBMUD)

### Updates from [NACWA Pretreatment Conference](#)

Attendees reported that there are many new technologies available for collection system monitoring to support pretreatment program activities.

### BACWA Updates

- No PFAS regulations are yet in effect for San Francisco Bay, wastewater effluent, or biosolids. Most PFAS in Bay Area wastewater is likely derived from residential sources, and BACWA is supporting source control efforts and scientific research on this pathway. Pretreatment programs should continue to be alert to potential industrial sources of PFAS.
- Resources from BACWA's Annual Members Meeting are now available on the [BACWA website](#).
- BACWA has changed its member fee structure for affiliates. Agencies located out of the San Francisco Bay Area can now join all BACWA committees for one fixed membership fee (rather than paying committee-by-committee).
- The State Water Board has developed a [pre-inspection questionnaire](#) for sanitary sewer system agencies that reminds operators to be aware of "known industrial discharges." Pretreatment programs and sanitary sewer system operators will need to collaborate to meet this compliance expectation.

**Committee Request for Board Action:** None

37 attendees participated remotely, from 18 member agencies and the Regional Water Board.

**Modifications to NPDES Permits in Region 2 to Remove Receiving Water Limitations**

Robert Schlipf and Bill Johnson from the Regional Water Board's Wastewater Control and Enforcement Division joined the meeting to describe their efforts to update NPDES permits in Region 2 to reflect the March 2025 [Supreme Court ruling](#) in *City and County of San Francisco v. USEPA*. The first Tentative Order to be released for public comment with the new language is the [San Jose/Santa Clara NPDES Tentative Order](#), which is scheduled for the August 13<sup>th</sup> Regional Water Board meeting. Section 4.3.3.9 of the Tentative Order Fact Sheet contains a detailed reasonable potential analysis to justify removal of receiving water limitations, especially the limits that were based on narrative objectives in the [Basin Plan Chapter 3](#) (e.g., "suspended material in concentrations that cause nuisance"; "bottom deposits or aquatic growths"; "coloration that causes nuisance"). Going forward, similar language will need to be included in all Region 2 permits as they are reissued. Regional Water Board staff may request additional information about local ordinances (e.g., sewer use ordinance prohibitions on radiological material) to inform the Fact Sheet language specific to each permittee. The Tentative Order also contains edits so that provisions prohibiting nuisances caused by wastewater treatment (Attachment G, Section 1.9) or biosolids treatment and storage (Section 5.3.4.2) are narrowed to implement state law only.

**[Nutrients Watershed Permit](#)**

- **Interim Effluent Limits** are now in effect for the 2025 Dry Season. Agencies do not need to report the average dry season load in monthly SMRs; this will be included at the end of the year in the annual SMR (see [August 2024 Board Report](#)). Agencies should make a note of operational issues related to nutrient loads in the cover letter of monthly SMRs, as indicated by Footnote 1 of Table E-4 of the Permit.
- **Reporting Mass Loads (kg/day) to CIWQS.** Some dischargers use an averaging period for daily flow values (e.g., midnight to midnight) that differs from the averaging period for 24-hour composites (e.g., noon to noon, or 8 am to 8 am). To calculate mass loads for nutrients (kg/day), dischargers should use the same averaging period for both flow and concentration (e.g., noon to noon), as indicated in Section 8.1.2 of Attachment G. This could mean that the daily flow value reported to CIWQS would be different from the flow value used to calculate mass loads. Dischargers who modify their convention for calculating mass loads should include a note in the cover letter of their monthly SMR.
- **Basin Plan Amendment.** Regional Water Board staff are planning to work on a Basin Plan Amendment that would provide more than 10 years for compliance schedules for specific types of nutrient removal projects. In response to [May 13<sup>th</sup>](#) and [May 30<sup>th</sup>](#) letters from Regional Water Board staff, BACWA plans to compile additional information about "early actors" that may need more time in next year's Group Annual Report.

**Effluent Characterization Study and Report**

This provision in NPDES Permits (typically Provision 6.3.2) requires that agencies identify and respond if concentrations of pollutants "significantly increase over past performance." Attendees shared tips on how to fulfill this requirement, such as keeping all priority pollutant data from recent years in a spreadsheet that also contains the applicable water quality objectives. With this approach, any new results that are abnormally high (e.g., a detection of a constituent that is normally ND) or that exceed the water quality objective can be immediately flagged for quality review and other follow-up actions.

**Next Meeting: Tuesday, August 19th, Virtual**

**Committee Request for Board Action:** None

40 attendees participated remotely, including representatives from 16 member agencies, the Regional Water Board, and consulting firms.

**East Bay Municipal Utility District (EBMUD) Recycled Water Strategic Plan Update**

Reena Thomas (EBMUD) presented on the District's 2024 [Recycled Water Strategic Plan Update](#). [Link to Presentation Slides](#) The purpose of the Strategic Plan Update was to consider future opportunities for potable and non-potable reuse, and to incorporate new information about the District's existing non-potable reuse projects, which currently serve a demand of about 7.4 MGD. The 2024 Strategic Plan found that demand and deliveries of non-potable recycled water have declined over time, and that the District will need to add potable reuse to its recycled water program if it plans to meet its long-term water supply goal of providing 20 MGD of recycled water. In the near term, the District plans to develop an outreach, education, and messaging plan for a potential future potable reuse project, and to invest in expansions of two existing non-potable recycled water projects: the [San Ramon Valley Recycled Water Program](#) and [East Bayshore Recycled Water Project](#).

**Funding Updates**

Sachi Itagaki (Kennedy Jenks) reported that recycled water funding opportunities are more uncertain than in recent times. The [WIFIA](#) program (for large projects) and California [IBank](#) remain available for loan financing. Also, State Water Board recycled water facilities planning grants are still able to provide a match for projects up to \$300,000 ([link to draft Intended Use Plan](#) for FY2026).

**Discussion on Permitting Considerations for Trucked Recycled Water**

Luis Anaya Vasquez (Regional Water Board) led a discussion about permitting considerations for trucked recycled water programs per the [2016 Statewide General Order](#). Specifically, the committee discussed whether it would be appropriate for a trucked recycled water provider to obtain permit coverage to deliver water across the jurisdictions of multiple recycled water programs, or whether permit coverage should be through individual agencies (see [BACWA Truck Fill Guide](#) or [Map](#) for agencies with truck fill programs). Attendees shared concerns about program oversight, liability, and operations, particularly with respect to cross-connection control and site inspections. BACWA members with relevant experience setting up trucked recycled water programs can [contact Luis](#) to share more details.

**BACWA Updates**

- Presentations from the April 2025 Nutrient Removal Workshop are posted on the [BACWA Recycled Water Library Archives](#) or [WaterReuse NorCal Chapter](#) site.
- BACWA plans to conduct a Regional Planning Study that will compile information about member agency plans for nutrient removal projects to comply with the [Nutrients Watershed Permit](#), including recycled water projects. [See Scoping Plan](#) (HDR, 2025). BACWA's [Group Annual Report for 2023-2024](#), Appendix B, includes preliminary information about agency compliance plans. At least seven BACWA member agencies are considering nutrient removal alternatives involving recycled water.
- CASA is leading an effort to quantify coastal nutrient loads and recycled water diversions from municipal wastewater agencies in Southern California and the Central Coast.

**Legislative and Regulatory Updates**

- [Onsite Non-potable Reuse regulation rulemaking](#) is ongoing, and the State Water Board plans to release a revised draft of the regulations for a 15-day comment period in early August 2025.
- The State Water Board revised the [Cross-Connection Control Policy Handbook](#) in June 2025 and issued an updated [FAQ](#). To address the requirement for education and outreach to staff, customers, and the community, California Urban Water Agencies (CUWA) has developed [public outreach materials](#) for their members' use.

**Next Meeting:** October 21, 2025



## Executive Director's Report to the Board

### June-July 2025

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## PRACTICE GOOD GOVERNANCE (STRATEGY PLAN GOAL 5)

### EXECUTIVE BOARD MEETING AND SUPPORT

- Worked with BACWA staff to plan and manage 6/20 Executive Board meeting
- Conducted the Executive Board meeting agenda review with the BACWA Chair
- Hosted 6/20 Executive Board meeting and developed meeting notes
- Continued to track all action items to completion
- Planned and attended joint meeting with BACWA/R2

### FINANCE:

- Reviewed the monthly BACWA financial reports
- Reviewed and approved invoices
- Developed contracts for consultant support for FY26
- Reviewed principal invoices and drafted cover letter for FY26

### COMMITTEES:

- Supported transition of BABC to BACWA committee
- Attended BABC meeting (6/9)
- Worked with members to understand range of positions on proposed BA Air District Project Manager Pilot
- Attended Permits committee (6/10)
- Hosted remote managers roundtable (6/23)

### ADMINISTRATION:

- Developed updated Class of Membership Policy and presented to Board for approval
- Planned for and conducted the monthly BACWA staff meeting to prepare for the Board Meeting and to coordinate and prioritize activities.
- 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.
- Developed and responded to numerous emails and phone calls as part of the conduct of BACWA business on a day-to-day basis.

## EXEMPLIFY SERVICE AND RESPONSIVENESS TO MEMBERS AND PUBLIC (STRATEGIC PLAN GOAL 4)

### COMMUNICATIONS

- Kicked off scripting Wastewater 101 video with Civic Edge
- Discussed potential collaboration with SFEI for museum exhibits, and visited Exploratorium with SFEI staff
- Worked with RPM in the preparation of the monthly BACWA Bulletin.

### PROJECTS OF SPECIAL BENEFIT:

#### BABC (BAY AREA BIOSOLIDS COALITION)

- Participated in meeting
- Addressed financial questions to support transition to BACWA Committee
- Worked with BABC on contribution to National Collaborative at University of Arizona

#### BACC (BAY AREA CHEMICAL CONSORTIUM)

- Reviewed members final invoicing info

#### BACWWE (BAY AREA COALITION FOR WATER/WASTEWATER EDUCATION)

- Worked with Exec Committee to finalize RFP
- Reached out to BACWA members to update contacts

## FOSTER COLLABORATION AND RELATIONSHIP BUILDING WITH REGULATORS AND OTHER STAKEHOLDERS (STRATEGIC PLAN GOAL 2)

### COLLABORATIONS:

- Attended monthly CASA SLC meetings
- Attended monthly CASA ACE meetings
- Attended monthly CASA RWG Biosolids Committee meetings
- Checked in with EPA on SF Bay Program Office funding for nutrient management
- Attended CASA Partnering for Impact meeting (6/3)
- Attended CASA Annual Conference (7/30-8/1)
- Worked with SFEI to develop SOW for fish consumption survey to satisfy Hg/PCB permit risk reduction requirements
- Met with R2 Planning Manager to discuss collaborative goals

### REGULATORY:

- Planned and attended Implementation Workgroup meeting with BA Air District (7/14)
- Attended CASA Air Toxics meetings
- Participated in CASA Pooled Emissions SC meeting
- Met with R2 EO and NPDES Chief to plan 6/13 joint meeting
- Met with R2 EO on misc topics

### **ASC (AQUATIC SCIENCE CENTER)**

- Reviewed materials sent via email by ASC ED
- Attended Executive Committee meeting on communications and development
- Attended Executive Committee meeting on potential litigation
- Participated in SFEI/ASC Board meeting (6/27)

## **ADVOCATE FOR REGULATION BASED ON SCIENCE (STRATEGIC PLAN GOAL 1)**

### **NUTRIENTS:**

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

- Participated in Colorado NWRI Nutrient Panel meetings
- Attended monthly NMS PSC meetings
- Met with NMS Science Manager on programmatic issues
- Distributed program overview magazines
- Met with HDR and CMG to discuss regional plan scope of work
- Met with Water Board to discuss integration of regional plan with compliance schedule basin plan amendment
- Proposed updated science management questions
- Met with member agencies and consultants to discuss nutrient permitting and permit compliance

### **RMP:**

- Reviewed RMP materials

### **CALIFORNIA WATER MONITORING COUNCIL**

- Met with new program director to discuss POTW interests

## **PURSUE REGIONAL, MULTI-BENEFIT SOLUTIONS TO ENVIRONMENTAL CHALLENGES (STRATEGIC PLAN GOAL 3)**

### **MULTIBENEFIT PROGRAM ADVOCACY**

- Discussed NBS communications approaches with SFEI staff
- Planned and participated in OneWater Planning meetings (6/27)

### **REGIONAL SOLUTIONS**

- Attended facility tour for BACWA members at Linda County on innovative technology piloting (6/9)
- Met with TFT to discuss nutrient SOW, developed CAR to launch effort



## Board Calendar

September, December 2025 & January 2026

DATE	AGENDA ITEMS
<i>Sept 19, 2025</i> <i>Central San</i>	<b>Approvals &amp; Authorizations:</b> <ul style="list-style-type: none"><li>•</li><li>•</li></ul> <b>Policy / Strategic Discussion:</b> <ul style="list-style-type: none"><li>• BACWA Committee Update</li></ul> <b>Operational:</b> <ul style="list-style-type: none"><li>• Plan for Pardee</li><li>•</li></ul>
<i>October 9 &amp; 10</i> <i>Pardee Technical Seminar</i>	
<i>December 12, 2025</i> <i>EBMUD Downtown</i>	<b>Approvals &amp; Authorizations:</b> <ul style="list-style-type: none"><li>• FY25 Financial Audit</li><li>• Approve Annual Report</li></ul> <b>Policy / Strategic Discussion:</b> <ul style="list-style-type: none"><li>• BACWA Committee Update</li><li>• Source Control Presentation</li></ul> <b>Operational:</b> <ul style="list-style-type: none"><li>•</li><li>•</li></ul>
<i>January 9, 2026</i> <i>SFPUC</i>	<b>Approvals &amp; Authorizations:</b> <ul style="list-style-type: none"><li>• 2nd NMS payment approval</li><li>•</li></ul> <b>Policy / Strategic Discussion:</b> <ul style="list-style-type: none"><li>• BAWCA Committee Update</li><li>• Freshwater Trust Presentation</li></ul> <b>Operational:</b> <ul style="list-style-type: none"><li>• FY27 Budget Schedule</li></ul>



## BACWA ACTION ITEMS

Number	Subject	Task	Responsibility	Deadline	Status
<b>Action Items from June 20 2025 BACWA Executive Board Meeting</b>			<b>resp.</b>	<b>deadline</b>	<b>status</b>
2025.6.44	Debrief from 6/13 meeting with R2	BACWA ED & BACWA Chair to schedule a meeting with RWB staff next week	ED	8/8/2025	complete
2025.6.45	TFT Nutrient Trading feasibility study SOW	BACWA ED to bring a BAR to the August BACWA Board Meeting	ED	8/8/2025	complete
2025.6.46	Request for BACWA contribution to Coastal Nutrient Modeling Support	BACWA ED will work with Jared Voskuhl to get this item approved at the August BACWA Board Meeting	ED	8/8/2025	complete
2025.6.47	BACWA NMS science advisor contract	BACWA ED to review how to contract with vendors outside of the US rules.	ED	8/8/2025	complete
2025.6.48	Logistics and invitations for Pardee Technical Seminar Oct 9 & 10, 2025	BACWA ED will send out a survey to ask who will be attending and provide a draft agenda at the August BACWA Board meeting.	ED	8/8/2025	complete
2025.6.49	BACWA Representative and leadership succession	BACWA ED to provide updated slide at August BACWA Board meeting.	ED	8/8/2025	complete
<b>Action Items Remaining from Previous BACWA Executive Board Meetings</b>					
2025.4.41	NMS Update: Project priorities for FY25 and 5-yr plan	Obtain more information regarding monitoring of phytoplankton communities in the Bay.	ED	8/1/2025	complete
2025.4.43	Possible Action Item: AI Information Session	Investigate hosting an AI Infoshare meeting	ED	8/1/2025	complete

FY25: 49 of 49 Action items are complete  
 FY24: 43 of 43 Action Items are complete  
 FY23: 58 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

June 2025

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**BACWA BULLETIN:** Completed and circulated June Bulletin.

**NUTRIENTS:** Worked with consultant team and contract management group on finalizing the Scoping Plan for Regional Planning Study; prepared for and participated in meeting with Executive Board and Regional Water Board staff to discuss draft Scoping Plan; discussed draft scope of work for water quality trading feasibility study with Freshwater Trust; attend tour of nutrient removal technologies at Linda County Water District; met with Regional Water Board staff to discuss Basin Plan Amendment; reviewed elements of Nutrient Management Strategy science plan.

### **COMMITTEE SUPPORT:**

**Asset Management** – Finalized and circulated notes from May workshop.

**BAPPG** – Prepared for and participated in June in-person committee meeting; prepared and circulated meeting notes; prepared for meeting with sustainable pest management staff at CA Department of Pesticide Regulation (DPR); participated in June pesticides subcommittee meeting with DPR Surface Water division staff and provided follow-up information; reviewed and circulated updates about PFAS source control legislation (SB 682).

**Collection Systems** – Assisted with hosting duties for Summit Partners SSS-WDR webinar; circulated information from webinar to committee members; participated in meeting with State Water Board staff to discuss SSS-WDR implementation.

**Laboratory** – Participated in June committee meeting; prepared and circulated meeting notes; investigated updated CIWQS data upload tools.

**Permits** – Prepared regulatory updates for June committee meeting; prepared and circulated meeting notes; coordinated with Regional Water Board regarding reporting of nutrient mass loads; reviewed Tentative Order NPDES permits and coordinated with member agencies regarding new chronic toxicity monitoring requirements.

**Pretreatment** – Participated in June committee meeting; prepared and circulated meeting notes.

**Recycled Water** – Prepared draft agenda for July committee meeting.

**ADMINISTRATIVE:** Website and email list administration.

### **BACWA MEETINGS ATTENDED:**

BAPPG and BAPPG Steering Committee (6/4)  
Pretreatment Committee (6/4)  
Laboratory Committee (6/10)  
Permits Committee (6/10)  
Executive Board – Regional Water Board  
Special Meeting (6/13)

### **EXTERNAL EVENTS ATTENDED:**

CASA SSS-WDR Data Review Group with State Board (6/2)  
Tour of Linda County Nutrient Removal pilot projects (6/9)  
BayCAN (6/25)  
Beneficial Baylands Decision Support System Workgroup (6/25)  
CASA Regulatory Workgroup (6/26)  
Transforming Urban Water initiative (TRUW) (6/30)



## Regulatory Program Manager's Report to the Executive Board

July 2025

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**BACWA BULLETIN:** Completed and circulated July Bulletin.

**CASA Conference:** Attended CASA Annual Conference in San Diego.

**CCEEB Conference:** Represented wastewater agency perspectives on water quality regulations at the 2025 Summer Issues Seminar hosted by the California Council for Environmental and Economic Balance (CCEEB), near Lake Tahoe.

**NUTRIENTS:** Worked with consultant teams and contract management group on the scope of work for The Freshwater Trust's water quality trading feasibility study; reviewed draft reports from Nutrient Management Strategy science team; coordinated with HDR regarding erratum for Appendix B of the Group Annual Report; coordinated with HDR and contract management group to review draft scope of work for Regional Planning Study.

### COMMITTEE SUPPORT:

**Asset Management** – Coordinated with co-chairs regarding August meeting.

**BAPPG** – Coordinated with pesticides regulatory support consultants regarding flea and tick outreach; Participated in meeting with sustainable pest management staff at CA Department of Pesticide Regulation (DPR) to discuss funding opportunities; participated in July pesticides subcommittee meeting; coordinated with Civic Edge on possible social media and behavior change training session; coordinated with steering committee members regarding FOG fall campaign with Sagent; assisted with preparations for August committee meeting.

**Collection Systems** – Planned for August committee meeting; participated in SSS-WDR Data Review Group meeting with State Water Board.

**Laboratory** – Assisted with planning for August committee meeting; coordinated with State Water Board regarding CIWQS PET Tool.

**Permits** – Responded to member questions about chronic toxicity monitoring; prepared for August committee meeting.

**Pretreatment** – Reviewed new Region 2 Environmental Screening Levels.

**Recycled Water** – Planned and participated in July committee meeting; prepared meeting notes.

**ADMINISTRATIVE:** Website and email list administration.

### BACWA MEETINGS ATTENDED:

BAPPG Steering Committee (7/2)  
Recycled Water Committee (7/15)  
BAPPG Pesticides Committee (7/24)

### EXTERNAL EVENTS ATTENDED:

Eurofins PFAS Webinars (7/1, 7/29)  
CCEEB Summer Seminar (7/16-17)  
CASA SSS-WDR Data Review Group with State Water Board (7/28)