



B A C W A
BAY AREA
CLEAN WATER
AGENCIES

Executive Board Meeting
AGENDA
 Fri, June 19, 2020 9:00 AM - 1:00 PM (PDT)
<https://global.gotomeeting.com/join/343910989>
 You can also dial in using your phone.
 United States: +1 (224) 501-3412
 Access Code: 343-910-989

<u>Agenda Item</u>	<u>Time</u>	<u>Pages</u>
ROLL CALL, INTRODUCTIONS, AND TELECONFERENCE ETIQUETTE	9:00 AM	
PUBLIC COMMENT	9:03 AM	
CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER	9:04 AM	
CONSENT CALENDAR	9:05 AM	
1 May 15, 2020 BACWA Executive Board Meeting Minutes		3-8
2 June 4, 2020 Special BACWA Joint Meeting with RWB Minutes		9-10
3 April 2020 Treasurer's Reports		11-21
APPROVALS AND AUTHORIZATIONS	9:06 AM	
4 <u>Approval</u> : FY21 Staff Consulting Amendments/Agreements		22-30
5 <u>Approval</u> : Amendment #2 for LWA RPM Support FY21		31-37
6 <u>Approval</u> : Approval of Contract with Carollo Engineers for FY21 AIR Committee Support		38-45
7 <u>Approval</u> : TDC Environmental, LLC FY21 Consulting Agreement Amendment for BAPPG Support		46-53
8 <u>Approval</u> : Stephanie Hughes FY21 Consulting Agreement Amendment for BAPPG Support		54-57
9 <u>Approval</u> : Support for ReNUWIt		58-59
10 <u>Approval</u> : FY21 Agreement for BACWA Support of BABC		60-62
11 <u>Approval</u> : FY21 Agreement for Carollo Support of BABC		63-70
12 <u>Approval</u> : Resolution to Designate Signatory for BACWA JPA		71
13 <u>Approval</u> : Amendment to BACWA Contracting Policy and Procedure		72-77
14 <u>Approval</u> : Resolution recognizing Leah Walker's contributions to the POTW community		78
POLICY/STRATEGIC	10:00 AM	
15 <u>Discussion</u> : Nutrients		
a. Regulatory		
i. Regional Water Board Watershed Permit 3.0 vision		79-82
ii. Nutrient Trading - Freshwater Trust Presentation		
b. Technical Work		
i. May 21 Dissolved Oxygen in LSB Workshop Debrief		83-84
ii. OPC Ocean Acidification/Hypoxia Staff Report		85-90
c. Governance Structure		
i. NTW Meeting May 29, 2020		91-93
ii. April 23 Planning Subcommittee Meeting # 47		94-96
iii. NMS Assessment Framework Meeting June 8, 2020		97-99
BREAK	10:45 AM	
16 <u>Discussion</u> : SARS-CoV-2 Sampling in Wastewater	Lab Committee Survey ; and Article on WBE	100-101
17 <u>Discussion</u> : CEC White Paper - Final Draft		102-122
18 <u>Discussion</u> : PFAS - Update on State Water Board Order, and R2 ESL	R2 ESL Document	123-124
19 <u>Discussion</u> : Update on Chlorine Residual Basin Plan Amendment		
20 <u>Discussion</u> : Potential Exfiltration Regional Study		
21 <u>Discussion</u> : Sea Level Rise/Climate change planning requirements		
22 <u>Discussion</u> : SWB Toxicity Provisions update		125-127
OPERATIONAL	11:45 AM	
23 <u>Discussion</u> : Status of reserves and phasing for FY21		

24	<u>Discussion:</u> Succession Planning FY21		128-129
25	<u>Discussion:</u> Meeting Calendar for FY21		130-131
26	<u>Discussion:</u> RPM Recruitment		132-133
27	<u>Discussion:</u> BayCAN membership		134-137
REPORTS		12:15 PM	
28	Committee Reports		138-146
29	Member Highlights		
30	Executive Director Report		147-148
31	Regulatory Program Manager Report		149
32	Other BACWA Representative Reports		150
	<ul style="list-style-type: none"> a. RMP Technical Committee b. RMP Steering Committee c. Summit Partners d. ASC/SFEI e. Nutrient Governance Steering Committee <ul style="list-style-type: none"> e.i Nutrient Planning Subgroup e.ii NMS Technical Workgroup f. SWRCB Nutrient SAG g. NACWA Taskforce on Dental Amalgam h. BAIRWMP i. NACWA Emerging Contaminants j. CASA State Legislative Committee k. CASA Regulatory Workgroup l. ReNUWIt m. ReNUWIt One Water n. RMP Microplastics Liaison o. Bay Area Regional Reliability Project p. WaterReuse Working Group q. San Francisco Estuary Partnership r. CPSC Policy Education Advisory Committee s. California Ocean Protection Council t. Countywide Water Reuse Master Plan u. CHARG - Coastal Hazards Adaption Resiliency Group 	Mary Lou Esparza, Yuyun Shang, Samantha Engelage Karin North; Robert Wilson; Eric Dunlavey Lorien Fono; Lori Schectel Lorien Fono; Eileen White Eric Dunlavey; Eileen White; Lori Schectel Eric Dunlavey Eric Dunlavey Lorien Fono Tim Potter Cheryl Munoz; Linda Hu; Lorien Fono Karin North; Melody LaBella Lori Schectel Lorien Fono Jackie Zipkin; Karin North Jackie Zipkin, Eric Hansen Artem Dyachenko Eileen White Cheryl Munoz Eileen White; Lorien Fono Colleen Henry Lorien Fono Karin North, Pedro Hernandez Jackie Zipkin	
33 SUGGESTIONS FOR FUTURE AGENDA ITEMS		12:27 PM	
NEXT MEETING		12:28 PM	
The next regular meeting of the Board is scheduled for July 17, 2020 from 9:00 am to 12:30 pm via videoconference.			
ADJOURNMENT		12:30 PM	



Executive Board Meeting Minutes

May 15, 2020

ROLL CALL AND INTRODUCTIONS

Executive Board Representatives: Lori Schectel (Central Contra Costa Sanitary District); Amit Mutsuddy (San Jose); Eileen White (East Bay Municipal Utility District); Jacqueline Zipkin (East Bay Dischargers Authority); Jennie Pang (SFPUC).

Other Attendees:

<u>Name</u>	<u>Agency/Company</u>
Amanda Roa	Delta Diablo
Tom Hall	EOA
Greg Baatrup	FFSD
Teresa Herrera	Silicon Valley
Azalea Mitch	City of San Mateo
Karin North	City of Palo Alto
Angela Andrews	West County Wastewater District
Randy Schmidt	Central San
Colleen Henry	Central San
Ramana Chinnakotla	City of Sunnyvale
Mike Falk	HDR
Hoang Banh	City of Oakland
Mary Cousins	Woodard and Curran
Aaron Winer	West County Wastewater District
Chris Sommers	EOA
Eric Dunlavey	City of San Jose
Lorien Fono	BACWA
Jennifer Dymont	BACWA
Alina Constantinescu	LWA / BACWA

9:03 start

Teleconference Etiquette and procedures - reviewed by Lori Schectel

PUBLIC COMMENT

None.

CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER –Ramana Chinnakotla from City of Sunnyvale & Chris Sommers EOA would like to speak by 10am on item 9 .

CONSENT CALENDAR

1. April 17, 2019, BACWA Executive Board Meeting Minutes – The approved minutes will be posted on the BACWA website.

2. March 2019 Treasurer's Reports and Financial Summary – A Financial Summary Report, along with Treasurer's Reports for March 2019, were included in the Packet. A copy of the FY18 Budget as of March 31, 2019, (75% of the fiscal year) was included. It, along with the Summary, provides the Board with a concise overview of the Fund Balances and the current status of the Annual Budget and points out any variances in the budget to date.

Consent Calendar items 1 and 2: A motion to approve was made by Jackie Zipkin and seconded by Amit Mutsuddy. The motion was approved unanimously.

APPROVALS AND AUTHORIZATIONS

9:06 AM

3 Approval: Amendment #1 for LWA RPM Support FY20 - ED explained that this extends existing RPM contract to the end of FY20 June 30, 2020. New contract for FY21 will be brought before Board at the next month. Amit asked for timeline on hiring a permanent RPM. ED will start the process this after the June meeting.

Item 3. A motion to approve was made by Eileen White and seconded by Amit Mutsuddy. The motion was approved unanimously.

4 Approval: Legal & IT Support Amendments FY20 – ED noted error on agenda, these amendments are for FY21. Contracts are: Cayuga for information systems support, Downy Brand for regulatory legal support, and Day Carter Murphy for executive board legal support.

Item 4. A motion to approve was made by Amit Mutsuddy and seconded by Eileen White. The motion was approved unanimously.

5 Authorization: EDAR for FY20 Downey Brand Contract - ED explained that this was a correction to an invoicing error from earlier this FY. EBMUD recommended that we increase amount and combine to single PO. No fiscal impact.

6 Approval: BACWA Chair and Vice-Chair for FY21- ED and Board members thanked Lori Schectel or her leadership and guidance for the past 2+ years. Asked for Boards nomination for new board chair. Lori Schectel nominated Amit Mutsuddy. Amit Mutsuddy accepted and looks forward to position.

Item 6. A motion to approve was made by Lori Schectel and seconded by Eileen White. The motion was approved unanimously.

Lori Schectel asked for Vice Chair Nomination. Amit Mutsuddy nominated Eileen White. Lori Schectel seconded.

A motion to approve was made by Amit Mutsuddy and seconded by Lori Schectel. The motion was approved unanimously.

POLICY/STRATEGIC

7 Discussion: COVID-19 Response - ED introduced the following topics

a. Round table discussion on agency issues

There was a roundtable discussion where participants responded to the following questions:

Has your agency been impacted by infections or quarantines among staff?

Is your agency doing virus testing for employees?

How is your agency approaching potentially returning to work?

Is PPE availability an ongoing issue?

How are the financial impacts of this crisis evolving at your agency?

b. RWB reporting requests – BACWA engagement with Regional Water Board.

Discussion to date is revolving around keeping pretreatment program requirements to the federal-mandated minimums. Pretreatment Committee will be discussing that the issue. Joint BACWA-Regional Water Board meetings to resume in June, where further COVID-related concerns can be discussed.

c. Study of COVID-19 in wastewater – EBMUD is partnering with a number of universities across the country, but funding & lab capacity remain the major challenges. The vision is to introduce the testing in bay area, increase local testing capacity, and then expand across country in order to get a leading indicator of SARS-CoV-2 infections. ED mentioned CASA is working on spreadsheet of testing providers.

d. Wipes and flushables – ED shared that Regional Water Board understands wipes-related SSOs are an increased challenge to collection systems during shelter-in-place orders. Central San had successful public messaging effort that was recognized by the Water Board. CA bill regarding wipes manufacturing labels is being proposed.

8 Discussion: Nutrients

a. Regulatory

i. NBS Study and RW Evaluation RFI – [Link to RFI](#) - Mike Falk, HDR: information request for nature-based and recycled water will be combined in one RFI and give agencies 5 weeks to reply. Mike also shared that there will be a Nutrient webinar on June 4 11:00am PST. He will send out agenda and URL link.

ii. **Nutrient Trading next steps** [Link to Freshwater Trust White Paper](#) – ED shared that paper is forthcoming and meeting in early June anticipated. Load caps in the 3rd Watershed Permit may result in trading environment. General discussion about complexities of trading.

b. Technical Work

i. **May 5 Dissolved Oxygen in LSB Workshop Debrief** – ED announced that SFEI to hold two workshops on DO in Lower South Bay. The expert group is being asked to balance the Virginian Province Approach against a multiple lines of evidence approach to assess whether the LSB is impaired for nutrients.

ii. **Cloern review of Nutrient Status of Bay** [Link to article](#)
Synthesis article was partially funded by the NMS.

c. Governance Structure

i. April 23 Planning Subcommittee Meeting # 45.5

Meeting summary in packet.

ii. May 6 Planning Subcommittee Meeting # 46

Meeting summary in packet. It was noted there will be a Nutrient Technical Workgroup meeting on 5/29.

9. Discussion: Sunnyvale/Mountain View Exfiltration suits - BayKeeper filed lawsuit against Mountain View and Sunnyvale alleging high levels of fecal matter in creeks. City of Sunnyvale is working on a response. BACWA is evaluating and considering an exfiltration study; goal could be to develop a toolbox, in collaboration with stakeholders, that would benefit many Bay Area agencies and potentially shield them from similar suits. Chris Sommers from EOA explained proposed exfiltration study in southern California/ San Diego and reviewed a conceptual draft proposal for a Bay Area study. Group discussion on legal, confidentiality and scope aspects of study followed. ED will include this item in agenda for special meeting with Water Board in early June to inform next steps.

10. Discussion: Debrief April 23/24 RMP Emerging Contaminants Workgroup meeting [link to meeting packet](#) – Eric Dunlavey (San Jose) noted that there has been significant discussion regarding using persistence to classify contaminants in the moderate concern tier. Proposed studies – predictive toxicology, year three stormwater study, expanding PFAS monitoring in Bay.

11 Discussion: Update on Chlorine Residual Basin Plan Amendment – ED noted that there is a notification for an upcoming CEQA scoping meeting in packet. There will also be a meeting with interested lab committee members to discuss establishment of chlorine ML with Regional Water Board staff. BACWA stakeholders will hold a pre-meeting strategy call on May 19.

12 Informational: BAAQMD SLCP Rule Development update – ED mentioned that BAAQMD is temporarily suspending all rule development, but still gathering information to inform Regulation 13 on Short Lived Climate Pollutants.

13 Informational: Regulatory Issues matrix update – Updated matrix is in the packet, with usual updates and a new entry: PFAS.

14 Informational: ELAP Adoption 5/5 – BACWA RPM reported on the SWRCB hearing where TNI-based regulations were adopted. Tentative effective date is October 2020 followed by a 3-year implementation period. Christine Sotelo (ELAP) to attend Lab Committee meeting in June. RPM will send out Lab invite to BACWA Permits and slides from hearing if received.

OPERATIONAL

15 Discussion: Status of reserves and phasing for FY21 – ED noted the higher SFEI \$2.8million payment for FY21 (Watershed Permit studies), to be made in two payments: Potentially \$1mill payment in early calendar year and \$1.8 million later in calendar year.

16 Discussion: ASC and designation of JPA signatory designee – ED worked to understand which of the Board member agencies has least restrictive restrictions and compared contracting policies in spreadsheet. Central San is the easiest for BACWA to adopt as designated signatory. ED will continue working with our attorney to understand what we need to adopt and propose a resolution and updated contracting policy at the next Board meeting. Discussion on resolution approach vs. re-opening JPA followed.

17 Discussion: Succession Plan for FY21 – ED: People that have moved agencies or positions represent BACWA. Cheryl Munoz (now with City of Hayward) and Florence Weddington will be BACWA representatives to the IRWMP.

REPORTS

18 Committee Reports

19 Member Highlights –Central San Lori Schectel: 9 states are Suing EPA over relaxing of enforcement during COVID. City of San Jose Amit Mutsuddy: operating budget released; expected cuts are significant with more information to be made available over the coming months.

20 Executive Director Report –ED Report in packet.

21 Regulatory Program Manager Report – RPM Report in packet.

22 Other BACWA Representative Reports - Karin North - Lorian to forward ReNUWIt invite for May 19th, 2020. Leah Walker (City of Petaluma) is retiring. BACWA to provide resolution recognizing her contributions at June Board meeting.

a. RMP Technical Committee Mary Lou Esparza, Yuyun Shang, Samantha Engelage

- b. RMP Steering Committee Karin North; Leah Walker; Eric Dunlavey
- c. Summit Partners Lorien Fono; Lori Schectel
- d. ASC/SFEI Lorien Fono; Eileen White
- e. Nutrient Governance Steering Committee Eric Dunlavey; Eileen White; Lori Schectel
- e.i Nutrient Planning Subgroup Eric Dunlavey
- e.ii NMS Technical Workgroup Eric Dunlavey
- f. SWRCB Nutrient SAG Lorien Fono
- g. NACWA Taskforce on Dental Amalgam Tim Potter
- h. BAIRWMP Cheryl Munoz; Linda Hu; Lorien Fono
- i. NACWA Emerging Contaminants Karin North; Melody LaBella
- j. CASA State Legislative Committee Lori Schectel
- k. CASA Regulatory Workgroup Lorien Fono
- l. ReNUWIt Jackie Zipkin; Karin North
- m. ReNUWIt One Water Jackie Zipkin, Eric Hansen
- n. RMP Microplastics Liaison Artem Dyachenko
- o. Bay Area Regional Reliability Project Eileen White
- p. WateReuse Working Group Cheryl Munoz
- q. San Francisco Estuary Partnership Eileen White; Lorien Fono
- r. CPSC Policy Education Advisory Committee Colleen Henry
- s. California Ocean Protection Council Lorien Fono
- t. Countywide Water Reuse Master Plan Karin North, Pedro Hernandez
- u. CHARG - Coastal Hazards Adaptation Resiliency Group Jackie Zipkin

23 SUGGESTIONS FOR FUTURE AGENDA ITEMS – Action Item - ED organizing joint meeting with Regional Water Board and will circulate agenda.

NEXT MEETING

The next regular meeting of the Board is scheduled for June 19, 2020 from 9:00 am to 12:30 pm at SFPUC, 13th Floor, Hetch Hetchy Room, 525 Golden Gate Ave, San Francisco, CA, or videoconference.

ADJOURNMENT

12:44 PM



Special Executive Board Meeting Minutes Joint meeting with Regional Water Board staff

June 4, 2020

ROLL CALL AND INTRODUCTIONS

Executive Board Representatives: Lori Schectel (Central Contra Costa Sanitary District); Amit Mutsuddy (San Jose); Eileen White (East Bay Municipal Utility District); Jacqueline Zipkin (East Bay Dischargers Authority); Jennie Pang (SFPUC).

Other Attendees:

<u>Name</u>	<u>Agency/Company</u>
Lorien Fono	BACWA
Alina Constantinescu	LWA/ BACWA
Eric Dunlavey	City of San Jose
Bill Johnson	Regional Water Board
Robert Schlipf	Regional Water Board
Tom Mumley	Regional Water Board
James Parrish	Regional Water Board
Richard Looker	Regional Water Board

PUBLIC COMMENT – None.

OTHER BUSINESS – Bill Johnson noted that he would like some information on what agencies are doing (if anything) to plan for climate change and sea level rise. The State Water Board was planning to send 13267 letters requesting this type of information, but it appears that their effort is on hold for now. Bill's request is not intended to be as extensive as a 13267 order; he would just like to get an understanding of on-going efforts. It was agreed that BACWA Board will discuss and report back with a proposed approach/level of effort for collecting this type of information at a future joint meeting.

AGENDA ITEMS

Agenda Item 1 – Discussion: COVID-19 Response

Representatives from BACWA agencies briefly described how their agencies adapted to the COVID-19 public health crisis. Staggered shifts, face coverings and health checks (for staff and visitors alike), working from home when possible, reducing sampling and inspections at commercial businesses were common themes. Regional Water Board staff also shared their agency's modified operations such as working from home and reducing field inspections. They also noted that 5% of staff may be re-assigned to the State Department of Public Health to perform contact tracing, if needed. Regional Water Board noted that they are planning

procedures for re-starting inspections and asked for feedback. Agencies noted that they can accommodate inspections but would like advanced notice to make sure procedures are in place to safely welcome visitors on site.

Agenda Item 2 – Nutrients

The group reviewed a 4-page document provided ahead of time by Regional Water Board staff which outlined a regulatory vision for the third Nutrient Watershed Permit. The vision lays out a sustained monitoring and modeling program, as well as load caps (mentioned in the second permit's fact sheet) implemented using antidegradation as a rationale. It also would require regional planning for further nutrient load reductions (with possible trading within subembayments), and corrective action plans by individual agencies, should the science indicate the Bay is impaired by nutrients in the future.

Regional Water Board staff noted that they would hope the science questions around what constitutes impairment will be answered in the current permit term. Staff indicated that, if circumstances warrant it (like delays around COVID-19), it is possible to extend the term of the current permit in order to complete the science studies.

Agenda Item 3 – PFAs

State Water Board is expected to require that all POTWs >1MGD conduct quarterly monitoring of influent, effluent, and biosolids for 1 year, starting with the 4th quarter of 2020. Regional Water Board staff reached out to State Water Board to ask that Region 2 conduct our own PFAS study through the RMP where we monitor representative POTWs and synthesis of the results (source identification, treatment efficiency, etc.) rather than just collect data. Agreement with State Water Board has not been reached, yet, but the conversation continues.

Agenda Item 4 – Exfiltration

The group discussed the recent notices of intent (NOIs) to sue from SF Baykeeper to the cities of Mountain View and Sunnyvale. Among other issues, the NOIs claim that exfiltration for the cities' collection systems contributes to high bacteria levels in nearby receiving waters. BACWA ED pointed to a study to evaluate exfiltration in Region 9 (San Diego); the group agreed that more information/ careful consideration is needed before pursuing something similar in the Bay Area and that we will monitor Region 9 developments on this issue.

Agenda Item 5 – Toxicity

Regional Water Board staff noted that the State Water Board recently provided a 3-page PDF document with a summary of anticipated revisions to the toxicity provisions. Subsequent to the meeting, staff shared the document with BACWA ED. The State Water Board is expected to release the full revised document on July 7, with a comment period through August 24. Adoption is expected December 2020. The schedule is preliminary. A meeting with the State Water Board, Regional Water Boards, and the Summit Partners will be scheduled to discuss the anticipated changes and release of the revised document.



Bay Area Clean Water Agencies

A Joint Powers Public Agency

Leading the Way to Protect our Bay

May 28th, 2020

MEMO TO: Bay Area Clean Water Agencies Executive Board
MEMO FROM: Damien Charléty, Treasurer, East Bay Municipal Utility District
SUBJECT: Tenth Month FY 2020 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, 2019 through April 30, 2020** (Ten months of Fiscal Year 2020). 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),
- Water/Wastewater Operator Training (WOT),
- Prop84 Bay Area Integrated Regional Water Mgmt (PRP84)

Houck, Matt

From: Charléty, Damien
Sent: Friday, May 29, 2020 9:48 AM
To: Houck, Matt
Subject: RE: BACWA - April 2020 Treasurer's Report

Approved.

From: Houck, Matt
Sent: Friday, May 29, 2020 9:43 AM
To: Charléty, Damien
Subject: BACWA - April 2020 Treasurer's Report

Hi Damien,

Please approve BACWA - April 2020 Treasurer's Report for distribution.

Thanks,

Matt Houck

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



MONTHLY FINANCIAL SUMMARY REPORT

April 2020

Fund Balances

In FY20 BACWA has three operating funds (BACWA, Legal, and CBC) and two pass-through funds for which BACWA provides only contract administration services (WOT & Prop 84).

BACWA Fund: This fund provides the resources for BACWA staff, its committees, and other administrative needs. The ending fund balance on April 30, 2020 was \$1,449,956 which is significantly higher than the target reserve of \$199,709 which is intended to cover 3 months of normal operating expenses based on the BACWA FY20 budget. \$389,745 of the ending fund balance is shown on the BACWA Fund & Investments Balance Report April 20, 2020 as obligated to meet ongoing operating line item expenses for BAPPG Committee Support, Legal services, IT services, Board meeting expenses, accounting services and BACWA staff support. This leaves actual unobligated excess funds of \$860,502 (i.e., actual fund balance of \$1,060,211 less target reserves) as of April 30, 2020. As the details of the costs of the various regulatory requirements included in the 2nd Nutrient Watershed Permit become better defined, these excess funds may be transferred to the CBC fund and used to offset potential Nutrient Surcharge increases to the BACWA members.

CBC Fund: This fund provides the resources for completing special investigations as well as meeting regulatory requirements. The ending fund balance on April 30, 2020 was \$1,832,251, which is significantly higher than the target reserve of \$1,000,000. \$653,181 of the ending balance is obligated to meet line item expenses for completion of the Group Annual Report contract, the Chlorine Residual BPA work, completion of the NBS Study and for technical support. This leaves an actual unobligated excess fund balance of \$179,070 (i.e., actual fund balance of \$1,179,070 less target reserves) as of April 30, 2020, 2020. Total Disbursements for FY20 from the CBC Fund include the funding the Nutrient scientific investigations as required by the Nutrient Watershed Permit in the amount of \$2.4M (i.e., \$2.6M less the \$200k advanced payment made in FY19). As the strategy to fund compliance with the 2nd Nutrient Watershed Permit becomes better defined, any excess CBC funds could be used to offset potential Nutrient Surcharge increases to the BACWA members.

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 in order to maintain the BACWA and CBC Fund balances at the levels projected in the 5 Year Plan.

Revenues as of April 30, 2020 (83% of the FY) are at 100.74%. In addition, we are expecting another fund transfer from BABC for BACWA's administrative support fees and an affiliate contribution from the City of Berkeley. Currently there is nothing invested in "Higher Yield Investments". A \$300,000 bond matured in August and was never reinvested due to market conditions. That explains why only \$1,588 has been earned to date.

Overall Expenses as of April 30, 2020 (83% of the FY) are at 85.6% We anticipate less budgeted expenses this FY due to COVID-19. COVID-19 has resulted in the cancellation of multiple in-person meetings and trainings and eliminated the costs associated with that.



MONTHLY FINANCIAL SUMMARY REPORT

April 2020

Those needing additional explanation are:

Administration: This category is 49% expended at 83% of the FY due to the timing of invoices.


Communication: This category is 27% expended at 83% of the FY due primarily to timing of invoices.

Legal: This category is 74% expended at 75% of the FY due primarily to timing of invoices.

Committees: This category is 58% expended at 83% of the FY due to timing of invoices and cancelled in-person meetings and trainings.

Line items: EB Meetings, Annual Meeting, Pretreatment, InfoShare Groups, Annual Meeting, Watershed, Legal Regulatory Support are 10% over budget. There was also an unbudgeted expense of \$25,000 for Koff & Associates to fund the ED recruitment effort.

FY 2020
BACWA BUDGET to ACTUAL

						
<u>BACWA FY20 BUDGET</u>	<u>Line Item Description</u>	<u>FY 2020 Budget</u>	<u>Actual April 2020</u>	<u>Actual % of Budget April 2020</u>	<u>Variance</u>	<u>NOTES</u>
REVENUES & FUNDING						
Dues	Principals' Contributions	\$506,774	\$506,775	100%	\$1	FY20: 2% increase. 5 @ \$101,355
	Associate & Affiliate Contributions	\$184,111	\$185,712	101%	\$1,601	FY20: 2% increase. 13 Assoc: \$8,364; 45 Affiliate: \$1,675. One collection member cancelled in FY19
Fees	Clean Bay Collaborative	\$675,000	674,250	100%	-\$750	Prin: \$450,000; Assoc/Affil: \$225,000
	Nutrient Surcharge	\$1,700,000	1,700,000	100%	\$0	See Nutrient Surcharge Spreadsheet
	Voluntary Nutrient Contributions	\$0	\$0	0%	\$0	
Other Receipts	AIR Non-Member	\$6,936	\$6,936	100%	\$0	2% increase (Santa Rosa)
	BAPPG Non-Members	\$3,876	\$3,876	100%	\$0	2% increase (Sta Rosa, Sac Reg'l, Vacaville) \$1,292/each
	Other	\$0	\$2,550	0%	\$2,550	
Fund Transfer	Special Program Admin Fees	\$5,100	\$8,421	165%	\$3,321	
Interest Income	LAIF	\$20,000	\$52,828	264%	\$32,828	BACWA, Legal, & CBC Funds invested in LAIF
	Higher Yield Investments	\$18,000	\$1,588	9%	-\$16,413	Alternative Investment Interest (Legal & CBC Funds invested in AltInv)
	Total Revenue	\$3,119,797	\$3,142,936	100.74%	\$23,139	
<u>BACWA FY20 BUDGET</u>	<u>Line Item Description</u>	<u>FY 2020 Budget</u>	<u>Actual April 2020</u>	<u>Actual % of Budget April 2020</u>	<u>Variance</u>	<u>NOTES</u>
EXPENSES						
Labor						
	Executive Director	\$207,531	\$121,060	58%	-\$86,471	ED requested 2.9%; \$99.77/hour; contract based on full time same as FY 19, 2080 hrs
	Assistant Executive Director	\$100,907	\$46,508	46%	-\$54,399	4.5% CPI (SF Bay Metro Area Dec 2018); \$63.07/hour; Reflects 1600 hours/yr (1500 FY 19 + 100 hrs additional for FY 20)
	Regulatory Program Manager	\$137,727	\$75,921	55%	-\$61,806	4.5% CPI (SF Bay Metro Area Dec 2018); \$100.16/hour; Reflects 1375 hours/yr (1250 FY 19 + 125 additional hrs for FY 20)
	Total	\$446,165	\$243,489	55%	-\$202,676	
Administration						
	EBMUD Financial Services	\$41,616	\$17,810	43%	-\$23,806	2% increase
	Auditing Services	\$5,240	\$3,500	67%	-\$1,740	New contract with Auditors through EBMUD & MAZE
	Administrative Expenses	\$7,803	\$3,043	39%	-\$4,760	2% increase. Travel, Supplies, Parking, Mileage, Tolls, Misc.
	Insurance	\$4,682	\$4,696	100%	\$14	2% increase
	Total	\$59,341	\$29,049	49%	-\$30,292	
Meetings						
	EB Meetings	\$2,601	\$1,361	52%	-\$1,240	2% increase. Catering, Venue, other expenses
	Annual Meeting	\$12,000	\$13,928	116%	\$1,928	2% increase. Catering, Venue, other expenses
	Pardee	\$6,242	\$5,834	93%	-\$408	2% increase. Catering, Venue, other expenses
	Misc. Meetings	\$5,202	\$693	13%	-\$4,509	2% increase. Hol & Comm Chair Lunch, Staff Mtgs, Fin Comm, Summit Ptnrs, CASA, NACWA Tech WS, Low Flow WS
	Total	\$26,045	\$21,816	84%	-\$4,229	
Communication						
	Website Hosting (Computer Courage)	\$600	\$0	0%	-\$600	Paid in advance in FY19 to lock in lower rate
	File Storage (Box.net)	\$750	\$720	96%	-\$30	
	Website Development/Maintenance	\$1,500	\$618	41%	-\$882	Domains (due again in FY20), website changes
	IT Support (As Needed)	\$2,600	\$0	0%	-\$2,600	
	Other Commun (MS, SM, Backup, PollEv)	\$1,750	\$640	37%	-\$1,110	MS Exchange, Survey Monkey (incr in FY20), Carbonite, Doodle Polls, PollEv, GoToMtg
	Total	\$7,200	\$1,978	27%	-\$5,222	
Legal						
	Regulatory Support	\$2,653	\$3,562	134%	\$909	2% increase
	Executive Board Support	\$2,133	\$0	0%	-\$2,133	2% increase

FY 2020
BACWA BUDGET to ACTUAL

EXPENSES						
	Total	\$4,786	\$3,562	74%	-\$1,224	
Committees						
	AIR	\$76,000	\$35,426	47%	-\$40,574	\$75k consulting support, \$1k misc expenses
	BAPPG	\$100,000	\$83,676	84%	-\$16,324	Includes CPSC @ \$10,000, OWOW @ \$10,000, and Pest. Reg Spt. @ \$15,000, Paid Baywise Hosting in FY19 to lock in rate
	Biosolids Committee	\$1,000	\$0	0%	-\$1,000	
	Collections System	\$1,000	\$0	0%	-\$1,000	
	InfoShare Groups	\$1,000	\$1,100	110%	\$100	Funds for 2 workgroups (Asset Mgmt & O&M - AM on hiatus in FY20)
	Laboratory Committee	\$1,000	\$0	0%	-\$1,000	
	Permits Committee	\$1,300	\$569	44%	-\$731	all meetings moved to include lunch hour for commuting purposes
	Pretreatment	\$2,000	\$3,402	170%	\$1,402	FY20: Includes \$1,000 for training
	Recycled Water Committee	\$1,000	\$0	0%	-\$1,000	
	Misc Committee Support	\$45,000	\$8,329	19%	-\$36,671	
	Manager's Roundtable	\$1,000	\$372	37%	-\$628	
	Total	\$230,300	\$132,874	58%	-\$97,426	
Collaboratives						
	Collaboratives					
	State of the Estuary (SFEP-biennial)	\$0	\$0	0%	\$0	Biennial in Odd Fiscal Years. (Paid biennially in odd years for even year conference)
	Arleen Navarret Award	\$2,500	\$0	0%	-\$2,500	Biennial in Even Fiscal Years. Increase in FY20
	FWQC (Fred Andes)	\$7,500	\$0	0%	-\$7,500	
	Stanford ERC (ReNUWit)	\$10,000	\$0	0%	-\$10,000	
	Misc	\$5,000	\$1,600	32%	-\$3,400	BayCAN, NBWA
	Total	\$25,000	\$1,600	6%	-\$23,400	
Other						
	Unbudgeted Items					
	Other	\$0	\$25,000	0%	\$25,000	Koff & Associates
		\$0	\$25,000	0%	\$25,000	
Tech Support						
	Technical Support					
	Nutrients					
	Watershed	\$2,000,000	\$2,400,000	120%	\$400,000	1st year of 2nd WS Permit less \$200k paid in advance in FY19
	NMS Voluntary Contributions	\$0	\$0	0%	\$0	
	Additional work under permit	\$100,000	\$37,799	38%	-\$62,202	Includes HDR PO for \$225k spread out over FY20-24.
	Regional Study on Non-Gray Scape	\$500,000	\$48,853	10%	-\$451,147	New Line item in FY20
	Member Voluntary Nutrient Contributions	\$0	\$0	0%	\$0	
	Nutrient Workshop(s)	\$0	\$0	0%	\$0	Pilot Studies/Plant Review/Innovative Technologies
	General Tech Support	\$52,020	\$14,307	28%	-\$37,713	2% increase.
	Risk Reduction	\$20,000	\$12,500	63%	-\$7,500	\$50,000 over 5 years (FY19-FY23) 2 Contracts for \$25,000 each over FY19, 20, & 21
	Total	\$2,672,020	\$2,513,459	94%	-\$158,562	
	TOTAL EXPENSES	\$3,470,857	\$2,972,826	85.65%	-\$498,031	
	NET INCOME BEFORE TRANSFERS	-\$351,060				
	TRANSFERS FROM RESERVES	\$351,060				aligns with strategy of drawing down reserves to lessen impact of Nutrient Surcharge
	NET INCOME AFTER TRANSFERS	\$0				
	TOTAL OPERATING BUDGET	\$798,837				
	OPERATING RESERVE	\$199,709				

BACWA Fund Report as of April 30, 2020

BACWA FUND BALANCES - DATA PROVIDED BY ACCOUNTING DEPT.							
DEPTID	DESCRIPTION	FISCAL YEAR BEGINNING FUND BALANCE	TOTAL RECEIPTS TO-DATE	TOTAL DISBURSEMENTS TO-DATE	MONTH-ENDING FUND BALANCE	OUTSTANDING ENCUMBRANCES	MONTH-END UNOBLIGATED FUND BALANCE
800	BACWA	1,185,382	723,941	459,367	1,449,956	389,745	1,060,211
804	LEGAL RSRV	300,000	-	-	300,000	-	300,000
805	CBC	1,926,714	2,418,995	2,513,458	1,832,251	653,181	1,179,070
	SUBTOTAL 1	3,412,096	3,142,936	2,972,825	3,582,207	1,042,926	2,539,281
802	BABC	-	299,805	70,144	229,661	-	229,661
806	BACC	-	-	1,563	(1,563)	-	(1,563)
810	WOT	322,375	-	46,211	276,164	-	276,164
	SUBTOTAL 2	322,375	299,805	117,918	504,262	-	504,262
811	PRP84	161,590	180,059	(2,859)	344,508	-	344,508
	SUBTOTAL 3	161,590	180,059	(2,859)	344,508	-	344,508
	GRAND TOTAL	3,896,061	3,622,800	3,087,884	4,430,977	1,042,926	3,388,051

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 RECEIPTS TO-DATE	TOTAL DISBURSEMENTS TO-DATE	MONTH-ENDING FUND BALANCE	RECONCILIATION TO FINANCIAL STATEMENTS	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
800	BACWA	1,185,382	723,941	459,367	1,449,956	26,924	1,476,880	1,346,531	130,349	6%	-		priority # 3 for allocation
804	LEGAL RSRV	300,000	-	-	300,000	-	300,000	-	300,000	13%	-		priority # 1 for allocation
805	CBC	1,926,714	2,418,995	2,513,458	1,832,251	-	1,832,251	-	1,832,251	81%	-		priority # 2 for allocation
	SUBTOTAL 1	3,412,096	3,142,936	2,972,825	3,582,207	26,924	3,609,131	1,346,531	2,262,600	100%	-		

802	BABC	-	299,805	70,144	229,661	-	229,661	229,661	-	0%	-		pass-through funds, no allocation
806	BACC	-	-	1,563	(1,563)	-	(1,563)	(1,563)	-	0%	-		
810	WOT	322,375	-	46,211	276,164	-	276,164	276,164	-	0%	-		pass-through funds, no allocation
	SUBTOTAL 2	322,375	299,805	117,918	504,262	-	504,262	504,262	-	0%	-		
811	PRP84	161,590	180,059	(2,859)	344,508	-	344,508	344,508	-	0%	-		pass-through funds, no allocation
	SUBTOTAL 3	161,590	180,059	(2,859)	344,508	-	344,508	344,508	-	0%	-		
	GRAND TOTAL	3,896,061	3,622,800	3,087,884	4,430,977	26,924	4,457,901	2,195,301	2,262,600	-			

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

Reconciliation to Trial Balance - accrual basis

Per Report above:		STB	1493	2,262,600	
General	3,142,936	STB	1505	2,195,301	
WOT	299,805			4,457,901	-
PROP	180,059	STB	2135	(26,924)	
subtotal	3,622,800			4,430,977	-

Billings-Pending Receipts

4686	Mem Contrib	750
4687	Transfer	-
4690	Assoc Contrib	1,675
4696	Other	-
4731	State Grant	-
4732	Grant Retention	(180,059)
subtotal		(177,634)

Trial Balance Revenue Accounts

4411	Interest	(54,415)
4686	Mem Contrib	(1,368,275)
4687	Transfer	(121,726)
4690	Assoc Contrib	(187,388)
4696	Other	(1,713,362)
4731	State Grant	-
4732	Grant Retention	-
subtotal		(3,445,165)
Difference		0

BACWA Revenue Report as of April 30, 2020

FUND #	DEPARTMENT	JOB	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
					Admin & General	Contributons	Interest, Transfers, Others	Admin & General	Contributons	Interest, Transfers, Others	ACTUAL	
800	Bay Area Clean Water Agencies	0408511	Administrative & General	-	-	-	-	-	-	-	-	-
800	Bay Area Clean Water Agencies	1011099	BDO Member Contributions	506,774	-	-	-	-	506,775	-	506,775	(1)
800	Bay Area Clean Water Agencies	1011108	BDO Other Receipts	-	-	-	-	-	-	-	-	-
800	Bay Area Clean Water Agencies	1011109	BDO Fund Transfers	5,100	-	-	8,421	-	-	8,421	8,421	(3,321)
800	Bay Area Clean Water Agencies	1011117	BDO- Interest Income from LAIF	20,000	-	-	1,788	-	-	8,083	8,083	11,917
800	Bay Area Clean Water Agencies	1011133	BDO Assoc.&Affiliate Contr	184,111	-	-	-	-	110,407	-	110,407	73,704
800	Bay Area Clean Water Agencies	1014251	BDO Non-Member Contr BAPPG	3,876	-	-	-	-	3,876	-	3,876	-
800	Bay Area Clean Water Agencies	1014252	BDO Non-Member Contr AIR	6,936	-	-	-	-	6,936	-	6,936	-
800	Bay Area Clean Water Agencies	1014511	BDO-Alternative Investment Inc	18,000	-	-	-	1,588	-	-	1,588	16,412
800	Bay Area Clean Water Agencies	1015265	BDO Other Receipts (Misc)	-	-	-	-	-	2,550	-	2,550	(2,550)
800	Bay Area Clean Water Agencies	1015266	BDO Affiliate/Associate Dues	-	-	1,675	-	-	38,525	-	38,525	(38,525)
800	Bay Area Clean Water Agencies	1015267	BDO Affil/CS/Assoc Dues	-	-	-	-	-	36,780	-	36,780	(36,780)
BACWA TOTAL				744,797	-	1,675	10,209	1,588	705,849	16,504	723,941	20,856
805	WQA-CBC	1011099	BDO Member Contributions	675,000	-	750	-	-	674,250	-	674,250	750
805	WQA-CBC	1011108	BDO Other Receipts	1,700,000	-	589	-	-	1,700,000	-	1,700,000	-
805	WQA-CBC	1011117	BDO- Interest Income from LAIF	-	-	-	9,626	-	-	44,745	44,745	(44,745)
805	WQA-CBC	1014528	BDO-Voluntary Nutrient Contrib	-	-	-	-	-	-	-	-	-
WQA CBC TOTAL				2,375,000	-	1,339	9,626	-	2,374,250	44,745	2,418,995	(43,995)
TOTAL				3,119,797	-	3,014	19,835	1,588	3,080,099	61,249	3,142,936	(23,139)

	DEPARTMENT	JOB	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
					Admin & General	Contributons	Interest, Transfers, Others	Admin & General	Contributons	Interest, Transfers, Others	ACTUAL	
802	BABC	1011099	BDO Member Contributions	-	-	-	-	-	186,500	-	186,500	(186,500)
802	BABC	1011109	BDO Fund Transfers	-	-	-	-	113,305	-	-	113,305	(113,305)
BABC TOTAL				-	-	-	-	113,305	186,500	-	299,805	(299,805)
810	WOT	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	-	-	-
WOT TOTAL				-	-	-	-	-	-	-	-	-

	DEPARTMENT	JOB	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
					Admin & General	Contributons	Interest, Transfers, Others	Admin & General	Contributons	Interest, Transfers, Others	ACTUAL	
811	PROP 84	1011142	Administrative Support	-	-	-	-	-	-	-	-	-
PROP TOTAL				-	-	-	-	-	-	-	-	-

Grand Total				3,119,797	-	3,014	19,835	114,893	3,266,599	61,249	3,442,741	(322,944)
--------------------	--	--	--	------------------	---	--------------	---------------	----------------	------------------	---------------	------------------	------------------

BACWA Expense Detail Report for April 30, 2020

EXPENSE TYPE	JOB	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
			ENC	PV	DA	JV	ENC	PV	DA	JV		
LABOR												
AS-Executive Director	1011123	207,531	-	-	-	-	165,636	121,060	-	-	286,696	(79,165)
AS-Assistant Executive Directo	1011124	100,907	(7,703)	7,703	-	-	66,705	46,508	-	-	113,213	(12,306)
AS-Regulatory Program Manager	1011149	137,727	-	-	-	-	58,901	87,807	-	(11,885)	134,822	2,905
ADMINISTRATION												
AS-EBMUD Financial Services	1011125	41,616	(5,294)	5,294	-	-	23,806	17,810	-	-	41,616	-
AS-Audit Services	1014512	5,240	-	-	-	-	5,240	5,240	3,500	(5,240)	8,740	(3,500)
BDO Other Receipts	1011108	-	-	-	-	-	-	-	25,000	-	25,000	(25,000)
AS-BACWA Admin Expense	1011118	7,803	-	-	-	-	-	-	3,209	(167)	3,043	4,760
AS-Insurance	1011126	4,682	-	-	-	-	-	-	4,696	-	4,696	(14)
MEETINGS												
GBS-Meeting Support-Annual	1014514	12,000	-	-	-	-	-	-	14,198	(270)	13,928	(1,928)
GBS-Meeting Support-Exec Bd	1014513	2,601	-	-	-	-	1,418	823	538	-	2,779	(178)
GBS-Meeting Support-Misc	1014516	5,202	-	-	-	-	-	-	693	-	693	4,509
GBS-Meeting Support-Pardee	1014515	6,242	-	-	-	-	-	-	5,835	-	5,835	407
COMMUNICATION												
CAR-BACWA File Storage	1014518	1,500	-	-	-	-	-	-	720	-	720	780
CAR-BACWA IT Software	1014520	1,750	-	-	-	-	-	-	640	-	640	1,110
CAR-BACWA IT Support	1014519	2,600	-	-	-	-	2,600	-	-	-	2,600	-
CAR-BACWA Website Dev/Maint	1011116	600	-	-	-	-	-	-	618	-	618	(18)
CAR-BACWA Website Hosting	1014517	750	-	-	-	-	-	-	-	-	-	750
LEGAL												
LS-Executive Board Support	1011110	2,133	-	-	-	-	2,133	-	-	-	2,133	-
LS-Regulatory Support	1011107	2,653	(360)	1,338	-	-	69	3,562	-	-	3,631	(978)
COMMITTEES												
AlR-Air Issues&Regulation Grp	1014253	76,000	(5,375)	5,375	-	-	40,348	34,652	774	-	75,774	226
BC-BAPPG	1011147	100,000	-	-	-	-	22,889	48,111	35,565	-	106,565	(6,565)
BC-Biosolids Committee	1011101	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-Collections System	1011097	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-InfoShare Groups	1011102	1,000	-	-	-	-	-	-	1,100	-	1,100	(100)
BC-Laboratory Committee	1011103	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-Permit Committee	1011098	1,300	-	-	-	-	-	174	395	-	569	732
BC-Pretreatment Committee	1011146	2,000	-	-	-	-	-	-	3,402	-	3,402	(1,402)
BC-Water Recycling Committee	1011100	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-Manager's Roundtable	1014777	1,000	-	-	-	-	-	186	186	-	371	629
BC-Miscellaneous Committee Sup	1011104	45,000	-	-	5,209	-	-	-	8,329	-	8,329	36,672
COLLABORATIVES												
CAS-Arleen Navaret Award	1012201	2,500	-	-	-	-	-	-	-	-	-	2,500
CAS-FWQC	1012202	7,500	-	-	-	-	-	-	-	-	-	7,500
CAS-Misc Collaborative Sup	1014521	5,000	-	-	-	-	-	-	1,600	-	1,600	3,400
CAS-PSSEP	1011112	-	-	-	-	-	-	-	-	-	-	-
CAS-Stanford ERC	1011969	10,000	-	-	-	-	-	-	-	-	-	10,000
BACWA TOTAL		798,837	(18,731)	19,709	5,209	-	389,745	365,932	110,997	(17,562)	849,112	(50,275)
TECH SUPPORT												
WQA-CE Addl Work Under Permit	1014254	100,000	-	-	-	-	182,202	37,799	-	-	220,000	(120,000)
WQA-CE-Technical Support	1011127	52,020	(839)	839	-	-	19,832	12,284	2,024	-	34,139	17,881
WQA-CE Risk Reduction	1014023	20,000	-	-	-	-	-	-	12,500	-	12,500	7,500
WQA-CE-Nutrient WS Permit Comm	1014021	2,000,000	-	-	-	-	-	-	2,400,000	-	2,400,000	(400,000)
WQA-CE-Nature Based Solutions	1015367	500,000	(48,853)	48,853	-	-	451,148	48,853	-	-	500,000	-
TECH SUPPORT (CBC) TOTAL		2,672,020	(49,692)	49,692	-	-	653,181	98,935	2,414,523	-	3,166,639	(494,619)
GRAND TOTAL		3,470,857	(68,423)	69,401	5,209	-	1,042,926	464,867	2,525,520	(17,562)	4,015,751	(544,894)
BABC												
AS-Assistant Executive Directo	1011124	-	-	-	-	-	-	316	-	-	316	(316)
Administrative Support	1011142	-	-	-	-	3,321	-	-	-	3,321	3,321	(3,321)
BDO Contract Expenses	1011143	-	-	-	38,197	-	-	-	48,883	-	48,883	(48,883)
AS-Regulatory Program Manager	1011149	-	-	-	-	-	-	2,905	69	-	2,974	(2,974)
Collateral Development	1015374	-	-	-	-	-	-	-	14,650	-	14,650	(14,650)
BABC TOTAL		-	-	-	38,197	3,321	-	3,221	63,602	3,321	70,144	(70,144)
BACC												
Administrative Support	1011142	-	-	-	-	-	-	1,471	92	-	1,563	(1,563)
BACC TOTAL		-	-	-	-	-	-	1,471	92	-	1,563	(1,563)
WOT												
Administrative Support	1011142	-	-	-	-	5,100	-	-	5,361	5,100	10,461	(10,461)
BDO Contract Expenses	1011143	-	-	-	-	-	-	-	35,750	-	35,750	(35,750)
		-	-	-	-	5,100	-	-	41,111	5,100	46,211	(46,211)
GRAND TOTAL (BDO, CBC, BABC, BACC, WOT)		3,470,857	(68,423)	69,401	43,406	8,421	1,042,926	469,559	2,630,325	(9,141)	4,133,669	(662,812)

BACWA Expense Detail Report for April 30, 2020

DEPTID	DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
				ENC	PV	DA	JV	ENC	PV	DA	JV		
811	Prop84BayAreaIntegRegnlWtrMgmt	BDO Fund Transfers	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Administrative Support	-	-	-	-	-	-	-	-	(2,859)	(2,859)	2,859
811	Prop84BayAreaIntegRegnlWtrMgmt	BDO Contract Expenses	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Regional Green Infrastructure	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Hacienda Ave Green St Improvem	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Sears Point Wtlnd & Wtrshd Res	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Bay Friendly Landscape TP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Weather Based Irrigation Cntrl	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	High Efficiency Toilet & UR	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	High Efficiency Toilet & UI	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	High Efficiency Clothes Washrs	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Napa Co. Rainwater HP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Conservation Program Admin	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Flood Infrastructure Mapping T	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Stormwater Improvements & PBP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Richmond Shoreline & San PFP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Pescadero Integrated FRAH	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Restoration Guidance, San FC	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	SF Estuary Steelhead MP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Stream Restoration in North BD	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Watershed Program Admnstrtn	-	-	-	-	-	-	-	-	-	-	-
PRP84 TOTAL			-	-	-	-	-	-	-	-	(2,859)	(2,859)	2,859

BACWA Revenue Report as of April 30, 2020

DEPTID	DEPARTMENT	JOB	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
					Admin & General	Contributons	Interest, Transfers,Ot hers	Admin & General	Contributons	Interest, Transfers,O thers	ACTUAL	
811	Prop84BayAreaIntegRegnIWtrMgmt	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1011142	Administrative Support	-	-	-	-	-	35,739	-	35,739	(35,739)
811	Prop84BayAreaIntegRegnIWtrMgmt	1011691	Water Efficient Landscape Reba	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1011702	Sears Point Wtlnd & Wtrshd Res	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1011705	Regional Green Infrastructure	-	-	-	-	-	116,839	-	116,839	(116,839)
811	Prop84BayAreaIntegRegnIWtrMgmt	1011706	Hacienda Ave Green St Improvem	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1011707	WQ Improve Flood Mgmt & EP	-	-	-	-	-	2,836	-	2,836	(2,836)
811	Prop84BayAreaIntegRegnIWtrMgmt	1011911	Stream Restoration w/Schools i	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1011912	Flood Infrastructure Mapping	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012209	Water Efficient LRP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012210	Bay Friendly Landscape TP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012211	Weather Based Irrigation Cntrl	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012212	High Efficiency Toilet & UR	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012213	High Efficiency Toilet & UI	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012214	High Efficiency Clothes Washrs	-	-	-	-	-	2,458	-	2,458	(2,458)
811	Prop84BayAreaIntegRegnIWtrMgmt	1012215	Napa Co. Rainwater HP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012216	Conservation Program Admin	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012218	Stream Restoration in North BD	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012219	Flood Infrastructure Mapping T	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012220	Stormwater Improvements & PBP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012221	Richmond Shoreline & San PFP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012222	Pescadero Integrated FRAH	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012223	Restoration Guidance, San FC	-	-	-	-	-	15,353	-	15,353	(15,353)
811	Prop84BayAreaIntegRegnIWtrMgmt	1012224	SF Estuary Steelhead MP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	1012225	Watershed Program Admnstrtn	-	-	-	-	-	6,834	-	6,834	(6,834)
PROP 84 TOTAL				-	-	-	-	-	180,059	-	180,059	(180,059)



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: _4_

FILE NO.: 21-05, 21-06

MEETING DATE: June 19, 2020

TITLE: Approval of Fiscal Year 2021 Amendments to Contracts

☐ RECEIPT ☐ DISCUSSION ☐ RESOLUTION ☒ APPROVAL

RECOMMENDED ACTION

Authorize the approval of amendments to contracts to implement the Fiscal Year 2021 BACWA/CBC Budget and Workplan.

SUMMARY

The BACWA Fiscal Year 2021 begins July 1, 2020. In order to prevent a gap in core services, BACWA typically executes contracts for the coming FY before the end of June. The amendments summarized below ensure that, as of July 1, 2020 BACWA will have Executive Director (ED) and an Assistant Executive Director (AED) services available. These service contracts were included in the BACWA FY 2021 workplan and budget and will become effective July 1, 2020. There are no benefits associated with the service contracts. All contracts have a term of one year and will terminate on June 30, 2021.

Contractor	Services	Contract Amount	File Number
Lorien Fono (Amendment #1)	Executive Director Services	\$190,000	21-05
Jennifer Dymont (Amendment #1)	Assistant Executive Director Services	\$102,551	21-06

FISCAL IMPACT

The funding for these contracts is consistent with the FY 2021 Workplan and Budget for BACWA/CBC.

ALTERNATIVES

No other alternatives were considered for these contracts as the terms of these agreements are consistent with BACWA contracting policies.

Attachments:

1. Lorien Fono Amendment #1
2. Jennifer Dymont Amendment #1

Approved: _____

Lori Schectel, Chair
BACWA

Date: June 19, 2020

AMENDMENT NO. 1
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES and
Lorien Fono
FOR
Executive Director Support

This Amendment No. 1 is made this 19th day of June 2020, in the City of Oakland and County of Alameda, State of California, to that certain agreement of December 19, 2019 (original agreement), by and between Lorien Fono and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and Lorien Fono agree to a new contract amount of \$190,000 for Executive Director Support for Fiscal Year 2021.
2. The new contract termination date will be June 30, 2021.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____ Lori Schectel, Chair BACWA Executive Board	June 19, 2020 Date _____
---	-----------------------------

By _____ Lorien Fono	Date _____
-------------------------	------------

AMENDMENT NO. 1
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES and
Jennifer Dymont
FOR
Assistant Executive Director Support

This Amendment No. 1 is made this 19th day of June 2020, in the City of Oakland and County of Alameda, State of California, to that certain agreement of February 21, 2020 (original agreement), by and between Jennifer Dymont and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and Jennifer Dymont agree to a new contract amount of \$102,551 for Assistant Executive Director Support for Fiscal Year 2021.
2. Hourly rate for FY21 is \$66.70 per hour.
3. The new contract termination date will be June 30, 2021.
4. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____
Lori Schectel, Chair
BACWA Executive Board

June 19, 2020
Date _____

By _____
Jennifer Dymont

Date _____

**BAY AREA CLEAN WATER AGENCIES
PROFESSIONAL SERVICES CONTRACT**
Executive Director

This PROFESSIONAL SERVICES CONTRACT, effective December 20, 2019, 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 Lorian Fono (Consultant), an individual doing business at 1815 Delaware Street, Berkeley, CA for professional services as described in any Exhibit A attached hereto.

The primary purpose of BACWA is to advocate for regulations that are based on sound science. BACWA often supports scientific investigations such as funding the collection of data on aquatic life and quality of waters in the San Francisco Bay system, interpretation of the data to assess the effects of pollution and other factors on the Bay, developing and disseminating information about the Bay, and carrying out other programs of interest to its members.

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

1. Consultant will perform the Services as described by and in accordance with Exhibit A and other duties that may be requested from time to time by the BACWA Executive Board. Contractor retains the sole right to control and direct the manner in which it provides the services. Notwithstanding the foregoing, BACWA shall have a right to inspect the work, which shall include the right to stop the work if necessary to ensure that it conforms to BACWA's standards and expected results. This work will be performed to the satisfaction of the BACWA Executive Board.
2. Consultant shall not contract with or otherwise use any subconsultants, subcontractors or other non-employee persons or entities (Subconsultants) to perform the Services 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. BACWA will pay Consultant a monthly flat rate of \$15,833.00 for services rendered, for a maximum total of \$79,165.00 for the remaining portion of the 2019-2020 Fiscal Year, (February 1, 2020 through June 30, 2020). Upon mutual agreement between BACWA and the Contractor, this Contract can be extended for 3 one-year terms starting July 1, 2020. With each extension BACWA agrees to increase the contract amount by the December year-over-year increase in the San Francisco Bay Area CPI.
4. No later than June 30 of each year the Executive Board shall evaluate performance under this Agreement and determine whether modification and/or renewal is appropriate.
5. BACWA agrees to reimburse Consultant for actual and reasonable expenses necessary to carry out the work described in Exhibit A. This includes, but is not limited to, travel expenses for BACWA-related meetings, and the cost of attending

- trainings, conferences and other events necessary for the Consultant to act as the Executive Director.
6. Consultant shall submit invoices on a monthly basis. Payments under this Contract will be due thirty (30) days after BACWA's receipt of invoices. The invoices shall include a brief description (not to exceed three pages) of the activities and accomplishments of the previous period.
 7. Consultant will maintain all 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.
 8. 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. 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.
 9. The Consultant expressly agrees to indemnify, defend and hold BACWA, its officers, and directors, free and harmless from and against any and all loss, liability, expense, claims, costs, suits and damages, including attorney's fees, arising out of negligence of the Consultant's work and or performance under this Contract, excepting only such injury or damage as may be caused by the negligence of BACWA.
 10. This contract shall automatically terminate on June 1, 2020. 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.
 11. If this contract is terminated before June 30, 2020, the Consultant shall only be paid for services provided through the termination date. If the termination date is any date but the last day of the month, the Consultant shall receive payment for those days calculated on a daily pro rata basis.
 12. This contract is non-exclusive. Consultant shall devote as much time, energy and ability to the performance of the Services hereunder as is necessary to perform them in a timely and productive manner. Consultant is free to perform services for his or her other clients outside the scope of this Agreement, provided such services do not create a conflict of interest with BACWA.
 13. 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 and Exhibit B: Conflict of Interest Protocol.

CONSULTANT: Lorien Fono
1815 Delaware Street
Berkeley, CA 94703

611211169

Tax Identification No.



Consultant Signature

1/23/2020

Date

Lorian Fono

Name, Title



BACWA Signature

Name, Title

BAY AREA CLEAN WATER AGENCIES
PROFESSIONAL SERVICES CONTRACT

Assistant Executive Director

This PROFESSIONAL SERVICES CONTRACT, effective February 21, 2020, 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 59, Oakland, CA 94623, and Jennifer Dymant ("Consultant"), an individual doing business at 829 Pomona Ave, Albany, CA, for professional services as described in any Exhibit A attached hereto.

The primary purpose of BACWA is to advocate for regulations that are based on sound science. BACWA often supports scientific investigations such as funding the collection of data on aquatic life and quality of waters in the San Francisco Bay system, interpretation of the data to assess the effects of pollution and other factors on the Bay, developing and disseminating information about the Bay, and carrying out other programs of interest to its members.

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

1. Consultant will perform the Services as described by and in accordance with Exhibit A in a manner acceptable to BACWA. Contractor retains the sole right to control and direct the manner in which it provides the services. Notwithstanding the foregoing, BACWA shall, have a right to inspect the work, which shall include the right to stop the work if necessary to ensure that it conforms to BACWA's standards and expected results.
2. Consultant shall not contract with or otherwise use any subconsultants, subcontractors or other non-employee persons or entities ("Subconsultants") to perform the Services 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. BACWA will pay Consultant for services at an hourly rate of \$65.00, up to a maximum annual amount of \$32,500 for the 2020 fiscal year. Consultant will not exceed the maximum amount payable without obtaining prior written approval from BACWA. Any future increases shall be implemented via an amendment to this contract.
4. BACWA agrees to reimburse Consultant for actual and reasonable expenses necessary to carry out the work described in Exhibit A. This includes, but is not limited to, travel expenses for BACWA-related meetings and events, and the cost of attending trainings necessary for the Consultant to act as the Assistant Executive Director. Travel to meetings, events and trainings outside of the San Francisco Bay and Sacramento Area must be approved by the Executive Director in advance.

5. Consultant shall submit invoices on a monthly basis. 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, back charges or claims incurred or anticipated by BACWA to the extent caused by Consultant.

6. Consultant will maintain all 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 to 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.

7. 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. 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.

8. The Consultant expressly agrees to indemnify, defend and hold BACWA, its officers, and directors, free and harmless from and against any and all loss, liability, expense, claims, costs, suits and damages, including attorney's fees, arising out of negligence of the Consultant's work and or performance under this Contract, excepting only such injury or damage as may be caused by the negligence of BACWA.

9. This contract shall automatically terminate on June 30, 2020. 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.

10. This contract is non-exclusive. Contractor is free to perform services for his or her other clients outside the scope of this Agreement, provided such services do not create a conflict of interest with BACWA.

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.

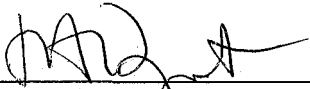
The following document is incorporated into and made a part of this Contract. Any conflicts between this document and this Contract will be resolved in favor of this Contract.

Exhibit A — Scope of Work

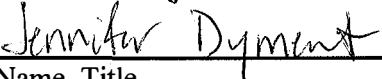
CONSULTANT: Jennifer Dymant

City, State, Zip Code

Tax Identification No.



Consultant Signature



Name, Title

2/24/2020
Date



BACWA Signature

Date: Feb 21, 2020

Lori Schectel, BACWA Executive Board Chair
Name, Title



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 5

FILE NO.: 21-07

MEETING DATE: June 19, 2020

TITLE: Request for BACWA Executive Board Approval for Amendment #2 to the Agreement with Larry Walker Associates for Interim Regulatory Program Manager Support

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Authorize agreement with Larry Walker Associates to provide Interim Regulatory Program Management Support to December 31, 2020, not to exceed amount of \$70,585.

SUMMARY

During the staff transitions in early 2020, BACWA retained interim Regulatory Program Management Support to maintain its level of service to the Executive Board, its members, and its committees. To fill this role, BACWA solicited proposals from six prospective vendors in January 2020, and four proposals were submitted. Following a review by current BACWA staff, Larry Walker Associates was chosen as the consultant who could best provide the required services. A contract with Larry Walker Associates was approved by the BACWA Executive Board at a Special Meeting on January 27, 2020. It was expected that BACWA would begin a recruitment to permanently fill the Regulatory Program Manager position in March 2020, and that a contract with a new Regulatory Program Manager would be approved in April or May 2020. Due to the ongoing COVID-19 pandemic these recruitment plans were delayed.

The original contract that was approved by the Executive Board terminated on May 31, 2020 and included a not to exceed amount of \$61,800. The contract was extended through June 30, 2020 with an increase to the not-to-exceed amount to \$78,280. This represents an increase of \$16,480, equivalent to an additional 80 hours of support at a billing rate of \$206/hour.

BACWA will begin recruiting a Regulatory Program Manager in the summer of 2020. An interim Regulatory Program Manager is necessary during this transition to maintain BACWA's level of service to the Executive Board, its members, and its committees. This contract extension will be until December 21, 2020 and not to exceed amount of \$70,585.

FISCAL IMPACT

The funding for this contract is consistent with the Fiscal Year 2021 workplans and budget for BACWA and Special Programs. The contract will be funded through the Regulatory Program Manager line item, which is estimated to contain adequate funds to fulfill this contract, based on Regulatory Program Manager Services invoices received to date.

ALTERNATIVES

Do not approve a contract for Interim Regulatory Program Management Support. This alternative is not recommended, since a lapse in this support until the Regulatory Program Manager recruitment is successfully concluded would cause a significant disruption to the services BACWA is able to provide.

Attachments:

Amendment #2 with Larry Walker Associates

FY20 Agreement with Larry Walker Associates, Inc., with Exhibit A – Scope of Work, and Exhibit B –
Rates and Reimbursable Expenses,

Approved: _____

Lori Schectel, Chair,
BACWA Executive Board

June 19, 2020

Date: _____

AMENDMENT NO. 2
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES and
Larry Walker Associates, Inc. .
FOR
Interim Regulatory Program Management Support

This Amendment No. 1 is made this 19th day of June 2020, in the City of Oakland and County of Alameda, State of California, to that certain agreement of January 27, 2020 (original agreement), by and between Larry Walker Associates, Inc. and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and Larry Walker Associates, Inc. agree to a new contract amount of \$70,585 for Interim Regulatory Program Management Support for Fiscal Year 2021.
2. The new contract termination date will be December 31, 2021.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____ Date June 19, 2020
Lori Schectel, Chair
BACWA Executive Board

By _____ Date _____
Ashli Desai
Larry Walker Associates, Inc

BAY AREA CLEAN WATER AGENCIES
CONSULTING AGREEMENT

TO:	Denise Conners Larry Walker Associates 720 Wilshire Blvd, Ste 204 Santa Monica, CA 90401	denisec@lwa.com Phone: 310-394-1036
FROM:	David Williams, Executive Director BACWA PO Box 24055, MS702 Oakland, CA 94623	dwilliams@bacwa.org Phone: 925-765-9616 FAX: (510) 287-1351

RE: BACWA Agreement for FY20 with Larry Walker Associates to provide Interim Regulatory Program Management support to the Executive Director.

This Agreement, effective February 1, 2020, covers professional services to be performed by Larry Walker Associates in order to provide As-Needed Interim Regulatory Program Management Support, as described in the Scope of Work, Attachment A. The work under this contract will be carried out under the supervision of Lorien Fono, BACWA Executive Director. The term of this agreement shall not extend beyond May 31, 2020. The total cost of professional services to be performed by Larry Walker Associates is not to exceed \$61,800. This contract will be funded by the BACWA Budget under the Regulatory Program Manager line item.

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

Larry Walker Associates shall submit invoices to the BACWA Assistant Executive Director via e-mail. Invoices shall include the hours charged by each employee, a brief description of the work performed, and a description of costs for which Consultant seeks reimbursement and which are specified in Exhibit B. Invoices will be paid within thirty (30) days of receipt.

Approved:

By 
Lori Schectel

By 
Ashli Desai

Chair, BACWA Executive Board

Larry Walker Associates

Date 1/27/2020

Date 1/28/2020

BACWA EIN: 94-3389334

EIN/TIN: 94-2610668

Exhibit A

BACWA INTERIM REGULATORY PROGRAM MANAGER

SCOPE OF WORK

Larry Walker Associates will work under the direction of the BACWA Executive Director to assist with some or all of the following:

- Track, summarize, and communicate water quality regulations and policies affecting BACWA member agencies;
- Monitor regulatory issues and assist in the preparation of comment letters on key regulations;
- Coordinate and participate in meetings with regulatory agencies, including the State Water Resources Control Board, the San Francisco Bay Regional Water Quality Control Board, and the Bay Area Air Quality Management District;
- Coordinate with other professional associations including CASA and NACWA as needed;
- Provide support for designated BACWA committees, workgroups, and projects of special benefit;
- Manage communications with the membership through the monthly BACWA Bulletin;
- Assist the Executive Director with contract and program management, and with other related tasks as requested.

Exhibit B

BACWA INTERIM REGULATORY PROGRAM MANAGER

RATES AND REIMBURSIBLE EXPENSES

Alina Constantinescu: \$206/hour

Danielle Moss: \$185/hour

Elizabeth Yin: \$206/hour

Kristine Corneille: \$206/hour

Mileage: Current IRS Rates

Transportation: Actual Expense



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 6

FILE NO.: 21-08

MEETING DATE: June 19, 2020

TITLE: Request for BACWA Executive Board Approval for Amendment #1 to the Agreement with Carollo Engineers for FY21 AIR Committee Support.

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Authorize Amendment #1 with Carollo Engineers to implement the Fiscal Year 2021 BACWA and Special Programs Budget and Workplan AIR Committee Support line item for a not to exceed amount of \$75,000.

SUMMARY

The BACWA fiscal year (FY21) begins July 1, 2020. The BACWA Air Issues and Regulations (AIR) committee is supported by a consultant who plans and manages meetings, provides regulatory and technical updates, and facilitates coordination between POTWs and regulators. Following the expiration of the previous support agreement, BACWA solicited proposals for FY20. A selection committee made up of BACWA members chose Carollo Engineers as the consultant who could best provide the required services, and a contract was approved at the June 17, 2019 BACWA Executive Board meeting. This amendment extends the contract for the first of a maximum of four years.

FISCAL IMPACT

The funding for this contract is consistent with the Fiscal Year 2021 workplans and budget for BACWA and Special Programs.

ALTERNATIVES

Discontinue consultant support for BACWA's AIR committee. This alternative is not recommended, since member agencies have expressed the need for expert assistance on air issues that affect POTWs in the Region.

Attachments: FY20 Agreement with Carollo Engineers, Inc.
Carollo Engineers, Inc. Scope of Work and FY21 Rates
Amendment #1

Approved: _____ Date: June 19, 2020
Lori Schectel, Chair,
BACWA Executive Board

AMENDMENT NO. 1
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES and
Carollo Engineers ,
FOR
AIR Committee Support

This Amendment No. 1 is made this 19th day of June 2020, in the City of Oakland and County of Alameda, State of California, to that certain agreement of June 21, 2019 by and between Carollo Engineers and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and Carollo Engineers agree to a new contract amount of \$75,000 for AIR Committee Support for Fiscal Year 2021.
2. BACWA and Carollo Engineers agree to a new period of July 1, 2020 — June 30, 2021.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____ Lori Schectel, Chair BACWA Executive Board	Date <u>June 19, 2020</u>
---	---------------------------

By _____ Sarah A. Deslauriers Carollo Engineers	Date _____
---	------------

EXHIBIT A
SCOPE OF WORK

Professional Services by Carollo

Task 1 - Quarterly Meetings with the AIR Committee

Under this task, it is assumed we will organize at least four formal meetings with the AIR Committee in each Fiscal Year. This includes coordination of meeting locations and preparation of agendas and meeting materials (e.g., handouts and presentation slides), and following each meeting with minutes. We will support AIR Committee meetings to present information on current air issues, facilitate discussions between members, and identify follow on action items. One of these meetings will be the annual BAAQMD-BACWA meeting to address issues of concern to AIR Committee members.

Task 2 - Track and Communicate Regulatory Issues, Technical Resources, and Grant Opportunities

This task is to allow for continued monitoring of regulatory agencies involved in developing air quality and climate change regulations that may affect Bay Area WWTPs, including but not limited to the BAAQMD, the San Francisco BCDC, the California Air Resources Board, and the U.S. Environmental Protection Agency. We will also track related and relevant technical resources and grant opportunities of interest to BACWA AIR member agencies. This task also includes preparation and distribution of informational material via e-mail to members to keep them informed of regulatory activities, and AIR Committee activities, between meetings.

Task 3 - Coordination and Communication with other WWTP Organizations and Regulators

When directed by the AIR Committee Chairs, we will participate in meetings with regulators, participate in member or regulator workshops and hearings, draft correspondence for AIR Committee member review and approval prior to submission, and perform other related activities. We will also coordinate with other WWTP organizations on issues of common interest. The purpose of this coordination is to share/exchange useful information, identify areas of joint interest, and prepare consistent or complementary responses on key issues, where appropriate. WWTP organizations whose objectives/interests coincide with the AIR Committee include SCAP, CVCWA, CASA, WERF, and NACWA. Activities may include conference calls, meetings, and exchange of published information.

Task 4 - Response on Special Assignments (Optional or As Needed)

This task includes performing special technical assignments under the direction of the AIR Committee Chairs (i.e., as needed). Special technical assignments may include coordinating a specialty workshop for the AIR Committee or general BACWA members, participating in AIR Committee strategy meetings, or performing other activities not included in Tasks 1-3.

EXHIBIT B

HOURLY RATES/REIMBURSABLE EXPENSES

Sarah Deslauriers	\$220
Courtney Mizutani	\$205

BAY AREA CLEAN WATER AGENCIES PROFESSIONAL SERVICES CONTRACT

This PROFESSIONAL SERVICES CONTRACT, effective July 1, 2019, 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 59, Oakland, CA 94623, and Carollo Engineers, Inc. ("Consultant"), a private corporation doing business at 2700 Ygnacio Valley Road, Suite 300, Walnut Creek, CA 94598 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 a manner acceptable to BACWA.
2. Consultant shall not contract with or otherwise use any subconsultants, subcontractors or other non-employee persons or entities ("Subconsultants") to perform the Services 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. The contract will begin July 1, 2019. BACWA will pay Consultant based on the rates in Exhibit B, up to a maximum amount payable of \$75,000.00. The term of this agreement shall not extend beyond June 30, 2020 but may be extended for additional one year terms at BACWA's discretion for an additional four years, ending June 30, 2024. If, upon reaching the end of the term of the contract, the Board elects to extend the contract, the amount of the extended contract will be negotiated at the time the contract is extended.
7. Consultant shall submit invoices monthly via email to Lorien Fono, Regulatory Program Manager, at lfono@bacwa.org. Invoices shall include the hours charged by each employee, a brief description of the work performed, and a description of costs for which Consultant seeks reimbursement and which are specified in Exhibit B.
8. 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 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. 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.

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 June 30, 2020. 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. For all claims by BACWA against Consultant, the applicable period of limitations will not commence to run, and any alleged cause of action will not be deemed to have accrued (whether such action is based on negligence, strict liability, indemnity, intentional tort or other tort, breach of contract, breach of implied or express warranty, or any other legal or equitable theory), unless and until BACWA is fully aware of all three of the following: (1) the identity of the party(ies) responsible, (2) the magnitude of the damage or injury and (3) the cause(s) of the damage or injury. The contractual limitations period and discovery rule provided herein applies in lieu of any otherwise applicable statute or related case law.
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 – Hourly Rates/Reimbursable Expenses

CONSULTANT: CAROLLO ENGINEERS, INC.

2700 Ygnacio Valley Road, Suite 300

Street Address

Walnut Creek, CA 94598

City, State, Zip Code

86-0899222

Tax Identification No.


Consultant Signature

6/17/19
Date

Lydia Holmes, Vice President

Name, Title

 , Sarah A. Deslauniers, Assoc. VP, 6/17/19

BACWA Signature

Date

Lori Schectel, BACWA Chair

Name, Title



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 7

FILE NO.: 21-09

MEETING DATE: June 19, 2020

TITLE: Request for BACWA Executive Board Approval for Amendment #3 to the Agreement with TDC Environmental, LLC for BAPPG Pesticide Regulatory Support

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Authorize Amendment #3 to the contract with TDC Environmental, LLC to track pesticide regulatory activities through the US Environmental Protection Agency (EPA) Office of Pesticide Programs and California Department of Pesticide Regulation (CDPR); provide key points for comment letters; communicate with pesticide regulatory agencies; and leverage opportunities to prevent pollution at the source through regulatory and/or policy actions, in an amount not to exceed \$60,000 for Fiscal Year 2021.

SUMMARY

In 2018, BACWA and BAPPG underwent a competitive process to select a consultant to provide pesticides regulatory support. At the June 15, 2018 Executive Board Meeting, the BACWA Executive Board approved a contract with TDC Environmental LLC to provide support to BACWA/BAPPG on regulatory, technical, and outreach issues related to emerging contaminant priorities, with a focus on pesticides. The contract allows for up to four one-year extensions, and was amended to include \$30,000 for FY20 on June 21, 2019, and amended a second time to increase the FY20 contract by an additional \$25,000 on February 21, 2020. Work under this contract is described in the attached Scope of Work, and includes the tracking of pesticide-related regulatory activities by the EPA and CDPR and making recommendations regarding regulatory participation and other follow-up steps, including recommending key points for comment letters, reviewing draft comment letters, setting up meetings with key staff at the pesticide regulating agencies to continue educating them about downstream wastewater impacts from their actions to register and/or re-register pesticide uses, and working to change the tools and information used in the registration processes to be protective of wastewater.

The total scope of work exceeds the \$60,000 budget, so work will be prioritized and directed by BAPPG's pesticides subcommittee to as to not exceed the level of effort specified in the contract. At the same time, BACWA will work to develop new funding sources from its POTW partners throughout the State.

FISCAL IMPACT

The funding for this contract is consistent with the FY21 workplans and budget for BACWA and Special Programs.

ALTERNATIVES

1. Discontinue consultant support. This alternative is not recommended since this work was included in BAPPG's approved FY20 budget and will assist BACWA with comment letters on important regulatory actions that can reduce wastewater pollution from pesticides and other products at the source. In addition, the staff at the San Francisco Regional Water Quality Control Board is supportive of this work by BACWA, and views this as part of the proactive approach it would like to see BACWA pursuing to prevent pollution at the source. The Regional Board dedicates staff resources to participate in

BACWA's monthly Pesticide Steering Committee and also submits comment letters that echo BACWA's key points.

2. Select another consultant to conduct the work. This alternative is not recommended since the selected consultant has unique expertise and knowledge in the subject area desired for supporting BACWA, and was selected through a competitive process. No other consultant knows the pesticide regulatory process better nor has the contacts/relationships at the pesticide regulating agencies (EPA Region IX, US EPA and California Department of Pesticide Regulation) than Dr. Moran of TDC Environmental. As a result, BACWA/BAPPG achieves much more effectiveness and impact for a modest investment by retaining her firm for this work.

Attachments: FY19 Agreement with TDC Environmental, LLC
FY21 Scope of Work and Rates
Amendment #3

June 19, 2020

Approved: _____
Lori Schectel, Chair,
BACWA Executive Board

Date: _____

AMENDMENT NO. 3
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES and
TDC Environmental, LLC .
FOR
BAPPG Pesticide Regulatory Support

This Amendment No. 3 is made this 19th day of June 2020, in the City of Oakland and County of Alameda, State of California, to that certain agreement of June 15, 2018 by and between TDC Environmental LLC and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and TDC Environmental, LLC agree to a new contract amount of \$60,000.00 for BAPPG Pesticide Regulatory Support for Fiscal Year 2021.
2. BACWA and TDC Environmental, LLC agree to a new period of July 1, 2020 — June 30, 2021.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____ Date June 19, 2020
Lori Schectel, Chair
BACWA Executive Board

By _____ Date _____
Kelly Moran
TDC Environmental

DRAFT
Scope of Work
TDC Environmental, LLC
Pesticide Regulatory and Technical Support
July 2020-June 2021

A. Regulatory

- Master Tracking Schedule & Action Plan. Track pesticide-related regulatory activities by EPA and Department of Pesticide Regulation (DPR) that have significant potential to affect BACWA member agencies. Notify BAPPG/BACWA Pesticides Workgroup of such items as they arise. Maintain and periodically update a schedule of anticipated pesticide regulatory activities including upcoming activities on watch list pesticides (e.g., EPA Registration Review process steps, DPR registration applications). Approximately monthly, prepare a crystal-ball schedule of upcoming items for which regulatory engagement is recommended and distribute it to BAPPG/BACWA workgroup and key agency and NGO Partners.
- Key Points/Draft Comment letters. Based on scientific review of regulatory documents, relevant scientific information, and the regulatory context, make recommendations regarding regulatory participation or other follow-up steps. Communicate about scientific reviews of regulatory documents with other agencies (DPR, Water Board). When so directed and as resources allow, work with other BACWA and member agency consultants to provide key points for comment letters for select, high-priority ecological risk assessments and risk management decisions. In 2020-21 these are anticipated to include: fipronil, several individual pyrethroids (bifenthrin, permethrin), and several swimming pool and pet flea control products.
- Outcomes Evaluations. Review pesticide regulator responses to BACWA comments to evaluate effectiveness of input and share these evaluations with BAPPG.
- Facilitate Communications with Pesticides Regulators. Maintain lines of communications with pesticides regulators at DPR and EPA (primarily EPA Region 9). Identify and arrange opportunities for BACWA/BAPPG Workgroup members to have educational conversations with regulators, with a goal of ensuring pesticide regulators understand the POTW context.
- Regulatory Engagement Priorities for 2020/2021:
 - Pet treatments (fipronil, imidacloprid, pyrethroids). Engage DPR management with a goal of getting them to initiate work on mitigation measures for POTW discharges of pesticides. Priorities are fipronil, imidacloprid discharges from pet spot-on treatments and bifenthrin and permethrin pet shampoos.
 - Continue efforts to change EPA standard procedures that currently ignore the contribution of pet flea control products (spot-ons and collars) to wastewater.
 - Continue follow-up work to finalize new swimming pool, spa, and fountain product label language to direct owners to contact their local sanitation agency prior to discharging treated water.
 - Continue follow-up work to secure POTW notification prior to applications of root control chemicals in wastewater collection systems.

- Toxic Substances Control Act (TSCA) Reform. As resources allow, Track TSCA reform implementation and support BACWA's coordination with NACWA on providing input and other communications with US EPA. Maintain lines of communication with EPA staff and allies like Washington Department of Ecology.
- NACWA Coordination on Pesticides & Other Pollution Prevention Regulatory Activities. Provide technical information to support BACWA's coordination with NACWA on Federal pollution prevention related to pesticides.

B. Science

- Obtain scientific information to support the above activities (recognizing that pesticides regulatory programs are science based). This includes obtaining scientific journal and government agency publications, reviewing, and identifying important publications. On occasion, this may include reaching out to authors regarding details of publications to understand them and/or to provide information revealing potential errors. This may include attendance at scientific conferences such as the American Chemical Society (ACS) and Society of Environmental Toxicology and Chemistry (SETAC) conferences, with prior review and approval by BACWA's Project Managers.
- Pesticides Watch list. Coordinate with BAPPG representatives to maintain a list of pesticides with potential to adversely affect POTW operations or POTW product quality (effluent, biosolids). Created a tiered list identifying highest priorities pesticides for BACWA's attention (currently copper, silver, fipronil, imidacloprid, and pyrethroids). To develop and update list, obtain and review scientific information about pesticides (e.g., monitoring data, aquatic and drinking water hazard (for future potable reuse of effluents) and reference values, environmental fate/transformation, sources/pathways to POTWs) from scientific literature, government literature, scientific conferences, and professional network. Formally update the list at least annually and distribute it to the BAPPG/BACWA Workgroup and Urban Pesticides Pollution Prevention Partnership (UP3 Partnership) allies.
- Support and encourage POTW pesticides science. Coordinate and provide scientific support for communications with EPA and DPR about wastewater pesticides discharges, wastewater pesticides monitoring, and improving wastewater pesticides predictive modeling to support registration decisions. Encourage research scientists to pursue work that would provide information to improve predictive modeling, to identify pesticides sources to POTWs, and to develop mitigation strategies.

C. Communications

- Communicate and Collaborate with UP3 Partnership Network of Allies. Maintain lines of communication with pesticide regulators, pesticide manufacturers, Water Boards (non-regulatory communications only), Federal agency staff (like USGS), non-California state agency staff working on pesticides in water/POTWs, scientific researchers, and non-government organizations through attendance at in-person science and pesticides-related meetings, online meetings, conference calls, and individual telephone conversations. Track websites, publications, letters to EPA, and activities of UP3 Partners to identify opportunities for coordination and collaboration. Encourage these partners to conduct activities that provide information (e.g., research data) or support BACWA pesticides regulatory efforts (e.g., echo BACWA scientific comments to pesticides regulators). Notify BAPPG of important information obtained through these contacts.

- UP3 Updates. Prepare periodic email updates for BAPPG/BACWA and UP3 Partners on scientific, regulatory, and other pesticides/water quality news topics. Updates will typically include background and analysis. Updates provide information, education, answer common questions, correct common misconceptions, correct errors or assist with interpretation of pesticides news stories. Updates are intended to inform BAPPG/BACWA and to build and maintain the UP3 Partnership network.
- Explore potential to set up a UP3 Website (if resources allow). Under workgroup guidance and as resources are available, examine options, and if feasible at low cost, populate a public website with resources for UP3 partners, including current pesticide watch lists and past correspondence with regulatory agencies (hundreds of POTW, Water Board, and partner pesticides scientific letters to EPA on dozens of pesticides dating back to the early 2000s that are frequently requested by UP3 Partners). A limited website set up with CASQA funding (www.UP3Partnership.org) currently exists, but its free host (“google sites”) does not have the capacity to serve as a repository for past correspondence.
- Presentations. Give presentations to educate BACWA members and partners about pesticides and wastewater. Prepare and give annual presentations to the BACWA Board and BAPPG. Scientific and wastewater-related conferences. With prior approval by BACWA’s Project Managers, give presentations at scientific and wastewater-related conferences.

D. BAPPG/BACWA Support

- BAPPG/BACWA Pesticides Workgroup Support. Based on the above tasks, develop an agenda and materials for a monthly BACWA Pesticides Workgroup teleconference meeting to determine appropriate actions and to coordinate actions with NACWA and San Francisco Bay Regional Water Board staff. Provide staff support during the meetings and an action item list after each meeting.
- Answer pesticide-related regulatory or scientific questions from BAPPG/BACWA Workgroup, BAPPG members, other BAPPG consultants, and San Francisco Bay Water Board. Provide technical and pesticide regulatory advice to support development of BAPPG program(s) or materials to address pesticides, such as planned pet flea control-related outreach. Answer simple questions (<1 hour of effort). When so directed by BACWA’s contract managers, address complex questions.
- Reporting. Provide summary of actions taken for BAPPG Annual report.

Work Products (Produced by tasks above)

- Pesticide watch list
- Pesticides regulatory tracking schedules (“action plans”)
- Comment letters
- Outcomes evaluations
- UP3 Updates
- Input for BAPPG Annual Report

Staff and Budget

All work to be conducted by Kelly D. Moran, Ph.D. with the support of Tammy Qualls, P.E. and Stephanie Hughes, P.E. In conjunction with similar work funded by CASQA, Ms. Qualls support activities (anticipated to involve <30% of total expenditures) will include tracking pesticides regulatory schedules, preparing periodic regulatory schedule updates, providing workgroup

meeting staff support and action item tracking, and when so directed and as resources allow, providing key points for draft comment letters. Ms. Hughes support activities (anticipated to involve <15% of total expenditures) will include providing key points for draft comment letters (when so directed and as resources allow) and assistance with engagement with DPR and allies around pet flea control alternatives.

All services identified in this Scope of Work shall be compensated on a time and materials basis:

- Kelly D. Moran, Ph.D. – \$220 per hour
- Tammy Qualls, P.E. – \$162 per hour
- Stephanie Hughes, P.E. – \$195 per hour
- Direct costs – at cost

Activities will be conducted as resources permit under the direction of the BACWA Pesticides Workgroup. Total expenditures not to exceed \$60,000.

Contractor

TDC Environmental, LLC
Kelly D. Moran, Ph.D., President
462 E. 28th Ave.
San Mateo CA 94403
650-627-8690
kmoran@tdcenvironmental.com

BAY AREA CLEAN WATER AGENCIES

CONSULTING AGREEMENT

TO: Dr. Kelly Moran kmoran@tdcenvironmental.com
TDC Environmental, LLC
462 E. 28th Ave.
San Mateo CA 94403
(650) 627-8690

FROM: David Williams, Executive Director dwilliams@bacwa.org
BACWA
PO Box 24055, MS702
Oakland, CA 94623
Phone: 925-765-9616
FAX: (510) 287-1351

RE: BACWA Agreement for FY19 with TDC Environmental, LLC to provide pesticide regulatory and technical support to the BAPPG Committee.

This Agreement covers professional services to be performed by TDC Environmental, LLC in order to provide support for: (1) tracking pesticide regulatory activities through the US EPA and California Department of Pesticide Regulation, providing key points for comment letters, and communicating with pesticide regulatory agencies; and (2) seeking opportunities to prevent pollution at the source. The work under this contract will be carried out under the supervision of Autumn Cleave of SFPUC (acleave@sfwater.org). The total cost of professional services to be performed by TDC Environmental, LLC is not to exceed \$30,000. This contract will be funded under the BAPPG Committee line item.

This agreement may be extended for up to four additional one-year terms upon approval of the BACWA Executive Board and an amendment to this agreement.

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 TDC Environmental, LLC for professional and competent services rendered to the date of termination upon delivery of assigned work products to BACWA.

TDC Environmental, LLC shall submit invoices to the BACWA Project Managers for approval, who will then transfer the approved invoice to the BACWA Assistant Executive Director for payment. Invoices shall indicate hours associated with each task. Invoices will be paid within thirty (30) days of receipt.

BACWA AED E-mail: Sherry Hull shulll@bacwa.org

Approved:

By _____
Lori Schectel
Chair, BACWA Executive Board

By  _____
Dr. Kelly Moran
TDC Environmental, LLC

Date: June 15, 2018

Date: June 15, 2018

BACWA EIN: 94-3389334



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 8

FILE NO.: 21-10

MEETING DATE: June 17, 2020

TITLE: Request for BACWA Executive Board Approval for Amendment #2 to the Agreement with Stephanie Hughes, ChE P.E. for BAPPG Support

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Authorize Amendment #2 to the contract with Stephanie Hughes to provide professional training, prepare comment letters, and provide policy support in an amount not to exceed \$16,000.00 for FY21.

SUMMARY

In 2018, BACWA and BAPPG underwent a competitive process to select a consultant to provide professional outreach and support. At the June 15, 2018 Executive Board Meeting, the BACWA Executive Board approved a contract with Stephanie Hughes for BAPPG support. The contract allows for up to four one-year extensions, and was amended for the first time at the June 21, 2019 Executive Board meeting. This will be the second amendment. This agreement will provide support for: (1) training to professional groups (veterinarians, dental hygienists/assistants, plumbers, etc.) on mercury, pesticides and other relevant pollutants of concern to BACWA agencies; (2) Policy Support and Comment Letters; (3) Communications support for BAPPG.

FISCAL IMPACT

The funding for this contract is consistent with the Fiscal Year 2021 workplans and budget for BACWA and Special Programs.

ALTERNATIVES

1. Discontinue consultant support. This alternative is not recommended since this work was included in BAPPG's approved FY21 budget and will assist BACWA with executing pollution prevention outreach to professional groups.
2. Select another consultant to conduct the work. This alternative is not recommended since BACWA conducted a competitive process which resulted in Stephanie Hughes being selected as the most qualified technical consultant.

Attachments: FY21 Amendment #2

FY21 Scope of Work and Rates

FY19 Original Contract with S. Hughes

Approved: _____

Lori Schectel, Chair,
BACWA Executive Board

Date: June 19, 2020

AMENDMENT NO. 2
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES and
Stephanie Hughes, ChE P.E. .
FOR
BAPPG Support

This Amendment No. 2 is made this 19th day of June 2020, in the City of Oakland and County of Alameda, State of California, to that certain agreement of June 15, 2018 by and between Stephanie Hughes, ChE P.E. and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and Stephanie Hughes, ChE P.E. agree to a new contract amount of \$16,000.00 for BAPPG Support for Fiscal Year 2021.
2. BACWA and Stephanie Hughes, ChE P.E. agree to a new period of July 1, 2020 — June 30, 2021.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____
Lori Schectel, Chair, Executive Board

Date June 19, 2020

By _____
Stephanie Hughes

Date _____



STEPHANIE HUGHES, ChE P.E.
Consulting Engineer / University Lecturer

1445 Emory Street, San Jose, California 95126

**BAPPG: Professional Training
and Policy/Regulatory Support**

Scope of Work and Cost Estimate for 2020-21

DATE: 11-May-2020

SCOPE OF WORK DESCRIPTION	BUDGET		TOTAL
	Rate: ODC	\$195.00 Hour Est	
TASK 1. Professional training: Rework the Dental and Veterinary trainings for video-conference trainings. Conduct trainings to community colleges and professional development workshops. The focus is expected to be on dental mercury and other dental office wastes, but consultant should have the expertise and experience to also provide trainings regarding proper pharmaceutical disposal, hazardous material identification during building demolition, and copper plumbing BMPs. As part of this effort, consultant shall update contact database, communicate with contacts, and seek online speaking engagements. Edit/update presentations as warranted per new regulatory context. This scope assumes up to a total of 10 presentations.	\$10	22	\$4,300.00
Task 2. Policy Support and Comment Letters: Consultant will: * Continue to track peer-reviewed research and insights about alternatives. Update flea/tick pesticide database to include new (or in-development) flea/tick pesticides and new insights. Update the Baywise website as warranted. * Reach out to companion animal professionals (large veterinary clinics, groomers, pet rescue/ shelter entities), and social media / internet sites that attract pet owners and/or environmentally-minded to introduce the issue of flea control chemicals and direct people to the Ba+A1ywise website. * Be on-call to develop regulatory letters, conduct literature reviews, or provide other technical support. Topics could include, but are not limited to, metals, pesticides, nutrients, salinity, and emerging constituents.		50	\$9,750.00
Task 3. Communications. Prepare relevant outreach sections to the BAPPG Annual Reports to be submitted to the BACWA Board of Directors. Speak at one BAPPG meeting to provide significant updates of a technical nature (e.g. flea pesticide research findings). Participate in BACWA Pesticide Committee meetings		10	\$1,950.00
Totals	\$10	82	\$16,000.00

www.stephaniehughes.net

THANK YOU FOR YOUR BUSINESS!

BAY AREA CLEAN WATER AGENCIES

CONSULTING AGREEMENT

TO: Stephanie Hughes, ChE P.E. steifehughes@yahoo.com
1445 Emory Street
San Jose, CA 95126 (408) 499-9271

FROM: David Williams, Executive Director dwilliams@bacwa.org
BACWA Phone: 925-765-9616
PO Box 24055, MS702 FAX: (510) 287-1351
Oakland, CA 94623

RE: BACWA Agreement for FY19 with Stephanie Hughes, ChE P.E. to provide professional training (mercury and copper), prepare comment letters, and provide policy support (pesticides, pharmaceuticals, etc.).

This Agreement covers professional services to be performed by Stephanie Hughes, ChE P.E. in order to provide support for: (1) training to professional groups (dental hygienists/assistants, plumbers, etc.) on mercury, copper and other relevant pollutants of concern to BACWA agencies; (2) preparing comment letters; (3) evaluating regulatory documents; (4) performing research related to controlling pollutants at their source; (5) continuing outreach to Veterinary Medical Associations and the general public related to pet spot-on flea treatments; and (6) providing policy support on pesticides, pharmaceuticals, and other pollutants of emerging concern. These efforts will be carried out under the supervision of Autumn Cleave of the San Francisco Public Utilities Commission. The total cost of professional services to be performed by Stephanie Hughes, ChE P.E. is not to exceed \$16,000. This contract will be funded by the BACWA Budget under the BAPPG Committee line item.

This agreement may be extended for up to four additional one-year terms upon approval of the BACWA Executive Board and an amendment to this agreement.

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 Stephanie Hughes, ChE P.E. for professional and competent services rendered to the date of termination upon delivery of assigned work products to BACWA.

Stephanie Hughes, ChE P.E. shall submit invoices to the BACWA Assistant Executive Director via e-mail along with approval by BAPPG. Invoices shall indicate hours associated with each task. Invoices will be paid within thirty (30) days of receipt.

BACWA AED E-mail: Sherry Hull shulll@bacwa.org

Approved:

By _____
Lori Schectel
Chair, BACWA Executive Board

By _____
Stephanie Hughes, ChE P.E.

Date: June 15, 2018

Date: June 15, 2018

BACWA EIN: 94-3389334



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 9

FILE NO.: 20-40

MEETING DATE: June 19, 2020

TITLE: ReNUWIt Industrial Advisory Board annual membership dues

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Approve ReNUWIt Industrial Advisory Board annual membership dues, at \$10,000.

SUMMARY

Reinventing the Nation's Urban Water Infrastructure (ReNUWIt) is an interdisciplinary, multi-institution engineering research center. ReNUWIt's Industrial Advisory Board plays an important role in advancing the goals of the Engineering Research Center, including creation and demonstration of the scientific, technological, economic and institutional feasibility of innovative methodologies and systems governing urban water infrastructure, assisting in the transfer of research discoveries and observations for the public benefit, and developing an interdisciplinary education program. BACWA's involvement with researchers working through ReNUWIt at UC Berkeley and Stanford ensures that Bay Area-specific needs are addressed through research.

FISCAL IMPACT

The funding for this contract is consistent with the FY20 workplans and budget for BACWA.

ALTERNATIVES

Withdraw from the ReNUWIt Industrial Advisory Board. This alternative is not recommended because BACWA's members benefit from informing ongoing research activities through ReNUWIt.

Attachments: FY20 Invoice from ReNUWIt

Approved: _____

Lori Schectel, Chair,
BACWA Executive Board

June 19, 2020

Date: _____

Invoice

Stanford University
473 Via Ortega, Room 119
Stanford, CA 94305-4211,
U.S.A
Contact: Kara Baker
Phone: 650-725-2172

Invoice Date 03 Feb 2020
Invoice# 2020003

Bill To:

Sherry Hull
Bay Area Clean Water Agencies
PO Box 24055
MS702
Oakland, CA 94623-1055

P.O.#
Terms Net 60

Invoice Date 03 Feb 2020
Due Date 03 Apr 2020

Description	Item Name	Amount
ReNUWIt Industrial Advisory Board annual membership dues for members with 50 or more employees	2020 IAB Membership Dues (50 or more employees)	10,000.00
Sub Total:		10,000.00
Balance Due:		\$10,000.00

Terms & Conditions

Please make check payable to Stanford University.
Thank you for supporting ReNUWIt.



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 10

FILE NO.: 21-11

MEETING DATE: June 19, 2020

TITLE: FY21 one-year agreement between BACWA and the Bay Area Biosolids Coalition (BABC) for BACWA to provide fiscal and administrative support to BABC.

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Approve the agreement for the fiscal year covering July 1, 2020 through June 30, 2021.

SUMMARY

The Bay Area Biosolids Coalition asked BACWA to provide fiscal and administrative support to the coalition for a one-year period beginning in FY20. Support was provided by BACWA staff. BACWA and BABC has concluded that this program is beneficial and should be continued.

FISCAL IMPACT

There will be no fiscal impact to BACWA. Support will be provided by BACWA staff on an hourly basis and invoiced to BACWA. BACWA will invoice BABC for reimbursement.

ALTERNATIVES

Do not approve the agreement. This is not recommended as the BACWA Executive Board previously reviewed the program and determined that it falls within BACWA parameters for support.

Attachments:

FY21 Support Agreement

Approved: _____

**Lori Schectel,
Chair BACWA**

Date: June 19, 2020

BAY AREA CLEAN WATER AGENCIES SUPPORT AGREEMENT

TO:	Jason Dow Bay Area Biosolids Coalition Lead Agency: Central Marin Sanitation Agency 1301 Anderson Drive San Rafael, CA 94901	jdow@centralmarinsa.org 415-459-1455 ext. 145
FROM:	Lorien Fono, Executive Director BACWA PO Box 24055, MS702 Oakland, CA 94623	lfono@bacwa.org Phone: 510-684-2993

RE: FY21 agreement between BACWA and the Bay Area Biosolids Coalition (BABC) for BACWA to provide fiscal and administrative support to BABC.

This Agreement sets forth the terms on which the Bay Area Clean Water Agencies ("BACWA") will provide fiscal and administrative support services for the Bay Area Biosolids Coalition ("Coalition").

SCOPE OF WORK

BACWA will provide fiscal and administrative support to the Coalition as requested. Tasks to be performed by BACWA include, but are not limited to:

- Operate for the use of the Coalition a designated account ("Account") within BACWA's general fund.
- All amounts deposited into the Coalition Account will be used as directed by the Coalition.
- Preparation and transmittal of accounts receivable billing.
- Disbursement and collection of revenue.
- Enter into contracts on behalf of the Coalition as directed by the Steering Committee and approved by the lead agency. The Steering Committee, as defined in the Coalition Joint Exercise Powers Agreement (JEPA), is the decision-making body of the Coalition consisting of at least one representative from each member agency. The lead agency is Central Marin Sanitation Agency (CMSA).
- Administrative Support of the Steering Committee including the reservation of venues and preparation of meeting notes.
- Inclusion of Coalition's meetings and documents on BACWA website as requested.
- Preparation, submission, and payment of BACWA invoices as approved by the Coalition lead agency in accordance with the JEPA agreement.
- Payment of other consultant's invoices, pursuant to contracts with BACWA, as approved by the Coalition lead agency in accordance with the JEPA agreement.
- Manage accounting and financial reporting, including depositing checks, tracking revenues and expenditures in the fund, and providing monthly status updates.
- BACWA (through its Treasurer EBMUD) will maintain all financial records relating to the Coalition according to generally accepted accounting principles, retain records as long as required by law, and make records available to auditors as required by law.
- All disbursements from the Account shall be treated as payments made on behalf of the Coalition. The Coalition will provide BACWA with proper documentation to accomplish this task. All payments will be made by the BACWA Treasurer, EBMUD.

RATES and BILLING

The Coalition shall compensate BACWA quarterly in the amount invoiced by BACWA for the services performed. BACWA shall submit an invoice to the lead agency reflecting the reimbursement requested for payments made to BACWA Consultants for hourly work performed for the Coalition and requesting authorization to transfer funds from the Coalition Fund to the BACWA General Fund to cover these services. All other direct costs expended by BACWA on behalf of the Coalition will be billed at cost with documentation provided.

FY21 Rates for BACWA Staff

Executive Director, Lorien Fono, PhD.: \$100.16/hour
Assistant Executive Director, Jennifer Dymont: \$66.70/hour
Regulatory Program Manager (tbd): \$100.16/hour

TERM

The term of this agreement shall be for a 12-month period commencing July 1, 2020 and terminating on June 30, 2021, unless extended by the parties or terminated earlier as provided below.

TERMINATION

The Coalition may terminate this Agreement at any time with 30 days written notice to BACWA, or sooner by mutual agreement. Upon termination of the agreement, the Coalition shall remit payment for all services performed and expenses incurred on behalf of the Coalition by BACWA up to the date of termination.

BACWA may terminate this Agreement at any time by giving the Coalition 60 days written notice of intent to terminate, or sooner by mutual agreement. The Coalition shall reimburse BACWA for all undisputed services provided pursuant to this agreement within 10 days of receiving a final invoice detailing such services.

Within 30 days of termination, BACWA shall return to the lead agency all funds remaining in the Coalition Account after payment of any undisputed amounts due to BACWA or consultants.

UNDERSTANDING of the PARTIES

The services set forth in the scope of work will be invoiced by BACWA based on the hourly rates of the individual consultants providing the services. All direct costs will be billed at cost with documentation provided. However, the Coalition and BACWA may reevaluate and reassess during the course of the agreement both the tasks required to be performed and the amount of compensation paid and determine whether adjustments are warranted in any future agreement.

Approved:

By _____
Lori Schectel
Chair, BACWA Executive Board

By _____
Jason Dow
Bay Area Biosolids Coalition Lead Agency

Date June 19, 2020 _____

Date _____

BACWA EIN: 94-3389334

BABC EIN: _____



BACWA EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 11

FILE NO.: 21-12

MEETING DATE: June 19, 2020

TITLE: Request for BACWA Chair Approval of Agreement with Carollo Engineers to Provide Project Management Services to the Bay Area Biosolids Coalition in an amount not to exceed \$90,000

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Authorize an agreement with Carollo Engineers for up to \$90,000 to provide as needed support to the Bay Area Biosolids Coalition (BABC) in FY21.

SUMMARY

BABC has utilized BACWA to provide contracting services since FY20. BABC's Executive Committee (EC) has approved the contract and Scope of Work for Carollo Engineers to provide Program Management Services. The Program Manager (PM) was responsible for support matters necessary for the BABC to function effectively toward developing regional biosolids end-use opportunities, building support among members, and support achieving the goals of the updated Strategic Plan. The PM serves at the will of the BABC EC and engages BABC members and contractors in consultation with the EC.

FISCAL IMPACT

Support for the BABC is a project of Special Benefit under the BACWA JPA. Such projects are funded by support from members outside of their BACWA dues. A special account has been established for providing support to BABC. BACWA will be sending out invoices to BABC member agencies in August 2020. Payment of invoices for this contract by BACWA is contingent upon sufficient funds being made available to BACWA by the BABC member agencies via collection of dues.

ALTERNATIVES

No alternatives were considered since the BABC EC has approved the contract amount and Scope of Work.

Attachments: Contract with Carollo, FY 21 Scope of Work, and Fees and Billing Practice

Approved: _____

Lori Schectel, Chair
BACWA Executive Board

Date: June 19, 2020

AMENDMENT NO. 1
TO AGREEMENT BETWEEN
BAY AREA CLEAN WATER AGENCIES and
Carollo Engineers Inc.

FOR

Bay Area Biosolids Coalition program management

This Amendment No. 1 is made this 19th day of June 2020, in the City of Oakland and County of Alameda, State of California, to that certain agreement of August 1, 2019 (original agreement), by and between Carollo Engineers Inc and Bay Area Clean Water Agencies, (BACWA) (the "Agreement") in consideration of the covenants hereinafter set forth.

1. BACWA and Carollo Engineers Inc agree to a new contract amount of \$90,000 for Bay Area Biosolids Coalition program management for Fiscal Year 2021.
2. The new contract termination date will be June 30, 2021.
3. Except as herein expressly modified, the Agreement will remain in full force and effect.

BAY AREA CLEAN WATER AGENCIES

By _____
Lori Schectel, Chair
BACWA Executive Board

June 19, 2020
Date _____

By _____
Sarah Deslauriers

Date _____

Exhibit A

Scope of Work

The Program Manager (PM) is responsible for supporting matters necessary for the Bay Area Biosolids Coalition (Coalition) to function effectively toward developing regional biosolids end-use opportunities, building support among members, and support achieving the goals of the Strategic Plan. The PM serves at the will of the Coalition Executive Committee (EC) and engages members and contractors in consultation with the EC.

The PM specifically has, but is not limited to, the following duties and responsibilities:

Task 1 – Project Management

This task includes monthly progress reports and coordination of meetings with Coalition members for review of deliverables.

Task 2 – Strategic Plan Support

The PM will support achieving Strategic Plan goals and is expected to:

- Support the Coalition branding and marketing efforts.
- Support Coalition efforts to advance research on the safety and value of biosolids.
- Support the Coalition in working together collaboratively with regulators to support implementation of SB 1383 and expand land application.
- Advocate for national, state, and regional project funding.
- Work with agencies and private partners willing to play the role of project host.
- Support partnerships amongst member agencies to develop Coalition projects.

Task 3 - Presentation Development

The PM will develop a presentation quarterly summarizing work completed for the Coalition. These presentations will be provided for use by Coalition members to present to their respective Boards, and Carollo will be available to participate/present at the discretion of the Coalition.

Task 4 - Future Work

This task is a placeholder for future work by the PM as determined and approved by the Coalition.

Schedule

Work will commence upon notice to proceed and Task 4 will remain open through June of 2021.

Exhibit B
Fees and Billing Practices

BACWA agrees to pay the CONSULTANT on behalf of the BAB Coalition for services as follows:

Key Staff	Hourly Rate
Sarah Deslauriers - Program Manager	\$230
Lydia Holmes - Principal-In-Charge	\$306
Project Professional	\$273
Project Assistant	\$188

Other Direct Expenses – no mark-up of Other Direct Expenses is expected and includes the following (effective January 1, 2020):

- Project Equipment Communication Expense (PECE): \$13.00/direct labor hour
- Mileage at IRS Reimbursement Rate: \$0.575 per mile
- Travel and Subsistence at cost

BAY AREA CLEAN WATER AGENCIES PROFESSIONAL SERVICES CONTRACT

This PROFESSIONAL SERVICES CONTRACT, effective August 1, 2019, 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 59, Oakland, CA 94623, and Carollo Engineers, Inc. ("Consultant"), a private corporation doing business at 2700 Ygnacio Valley Road, Suite 300, Walnut Creek, CA 94598 for professional services related to Project Management of the Bay Area Biosolids Coalition, a Project of Special Benefit of BACWA, 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 a manner acceptable to BACWA and the BABC Steering Committee.
2. Consultant shall not contract with or otherwise use any subconsultants, subcontractors or other non-employee persons or entities ("Subconsultants") to perform the Services 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. The contract will begin August 16, 2019. BACWA will pay Consultant based on the rates in Exhibit B, up to a maximum amount payable of \$110,000.00. The term of this agreement shall not extend beyond June 30, 2020. Payment of invoices by BACWA is contingent upon sufficient funds being made available to BACWA by the BABC member agencies.
7. Consultant shall submit invoices monthly via email to Jason Dow, Central Marin Sanitation Agency at jdow@centralmarinsa.org, and Lorien Fono, BACWA Regulatory Program Manager, at lfono@bacwa.org. Invoices shall include the hours charged by each employee, a brief description of the work performed, and a description of costs for which Consultant seeks reimbursement.
8. Payments under this Contract will be due thirty (30) days after BACWA's receipt of invoices, or as soon as sufficient funds are transferred to BACWA by BABC member agencies. BACWA may withhold from any progress or final payment any damages, backcharges or claims incurred or anticipated by BACWA to the extent caused 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. 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.

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 June 30, 2020. 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. For all claims by BACWA against Consultant, the applicable period of limitations will not commence to run, and any alleged cause of action will not be deemed to have accrued (whether such action is based on negligence, strict liability, indemnity, intentional tort or other tort, breach of contract, breach of implied or express warranty, or any other legal or equitable theory), unless and until BACWA is fully aware of all three of the following: (1) the identity of the party(ies) responsible, (2) the magnitude of the damage or injury and (3) the cause(s) of the damage or injury. The contractual limitations period and discovery rule provided herein applies in lieu of any otherwise applicable statute or related case law.
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 and Hourly Rates/Reimbursable Expenses

CONSULTANT: CAROLLO ENGINEERS, INC.

2700 Ygnacio Valley Road, Suite 300
Street Address

Walnut Creek, CA 94598
City, State, Zip Code
86-0899222

Tax Identification No

Sarah A. Deslauriers Ken Wilkins
Consultant Signature

11/11/19 11/11/19
Date

Sarah A. Deslauriers VP Ken Wilkins Sr. VP
Name, Title

Z. Abut

8-16-2019

BACWA Signature

Date

Lori Schectel, BACWA Chair
Name, Title



BAWA EXECUTIVE BOARD ACTION REQUEST

RESOLUTION NO. R-20-03

TITLE: Resolution to designate signatory for restrictions on JPA Powers per Government Code Section 6509.

☐RECEIPT ☐DISCUSSION ☒RESOLUTION ☐APPROVAL

Pursuant to and to the extent required by Government Code Section 6509 and pursuant to Section 5.C. of the Bay Area Clean Water Agencies’ January 4, 1984, Joint Powers Agreement, as amended, the Association shall be restricted in the exercise of its powers in the same manner as Central Contra Costa Sanitary District is restricted in its exercise of similar powers. Nothing herein shall be construed as limiting the Association’s power to adopt governing policies and procedures consistent with applicable laws.

PASSED AND ADOPTED THIS 19TH DAY OF JUNE, 2020.

Lori Schectel
Chair of the Bay Area Clean Water Agencies Executive Board



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 13
FILE NO.: 20-41
MEETING DATE: June 19, 2020

TITLE: Request for Board Approval of BACWA Policy BFP – 2.03 BACWA Contracting

☐ RECEIPT ☐ DISCUSSION ☐ RESOLUTION ☒ APPROVAL

RECOMMENDED ACTION

Approve BACWA Policy BFP – 2.03 BACWA Contracting that outlines the BACWA authority to make and enter into contracts.

SUMMARY:

Pursuant to Section 4 of the Joint Powers Agreement, BACWA has the authority to make and enter into contracts for the conduct of its business. This Policy establishes guidance for exercising BACWA's contracting authority. The Contracting Policy provides the broad powers under which BACWA enters into Professional Services Agreements. The Procedure lays out the specific restrictions upon the approval of those contracts.

The Contracting Policy is being updated to reflect the designation of Central Contra Costa Sanitary agency as BACWA's designated signatory per Government Code 6509.

The Contracting Procedure is being updated to align it with the contract duration limits approved in the February 2019 amendment of the Policy. It also reduces the sole sourcing limit from \$50,000 to \$30,000, to better align with that of our signatory agencies.

FISCAL IMPACT

No fiscal impact to BACWA.

ALTERNATIVES

This action does not require consideration of alternatives.

Attachment: BACWA Policy BFP – 2.03
BACWA Procedure 203

Approved:

Date: _____

Lori Schectel, Chair
BACWA Executive Board



BACWA BOARD POLICIES

POLICY NUMBER: BFP – 2.03

NAME OF POLICY: Contracting

LAST REVISED: ~~February 15, 2019~~ June 19, 2020

PREVIOUSLY LAST REVISED: ~~February 15, 2019~~ ~~November 15, 2013~~

PURPOSE: Pursuant to Section 4 of the Joint Powers Agreement, BACWA has the authority to make and enter into contracts for the conduct of its business. This Policy establishes guidance for exercising BACWA’s contracting authority.

POLICY

BACWA will accomplish its Mission through a combination of member agency staff volunteers and, when needed, professional services contracts.

When entering into contracts, BACWA will seek services from firms that reflect the public constituency of the BACWA participating agencies.

Contractors for needed services will periodically be selected through a competitive, qualification-based process. When services are anticipated to be annual on-going services, the goal is to conduct a competitive selection process at least every three to five years unless there is an overriding benefit associated with continuity of maintaining the same provider of services, such as Executive Director, Assistant Executive Director and Regulatory Program Manager.

Contracts should be aligned with the BACWA budget. For the purposes of California Government Code Section 6509, the BACWA’s contracting powers will be exercised subject to the restrictions upon the manner of exercising such powers as are imposed on Central Contra Costa Sanitary District.



PROCEDURE NUMBER: 203

NAME OF PROCEDURE: Contracting for Professional Services

LAST REVISED: November 15, 2013
December 21, 2018
June 19, 2020

PURPOSE: Provide guidelines for implementing Board Policy BFP 2.03 Contracting

DEFINITIONS:

Single Source: A procurement in which two or more vendors can perform the services required, but one vendor is selected without a competitive process over the others for reasons such as expertise or previous experience with similar contracts.

Informal Competition: A procurement in which information about the scope of services requested and the potential vendors' fees and qualifications are communicated informally via email, telephone, and/or facsimile transmissions followed by an evaluation by BACWA and selection of a contractor.

Request for Proposals: A description of the services sought and a solicitation to prospective contractors to submit proposals on how they would provide those services and at what level of effort. BACWA then establishes and evaluation process whereby the most qualified contractors are interviewed and a selection made

PROCEDURE: Professional Services Contracting (PSC) will be implemented in accordance with the following considerations in order comply with Board Policy BFP 2.03.

1. Check to ensure all PSC is done in accordance with procedures of the State of California to reflect the regional nature and purposes of the BACWA Joint Powers Agreement.



BACWA PROCEDURES

2. Any PSC by BACWA will include a provision to terminate for convenience on 30 days notice. This provision is based on the nature of the Association's annual budgeting process (cash accounting) and to assure conservation and effectiveness of the use of limited resources.
 3. PSC to provide support for significant projects or technical support with a value of more than \$100,000 shall be open to consideration of all qualified candidates. This provision does not apply where BACWA is funding studies as part of a regional collaboration, involving other funding sources, where funds have been pooled and directed to a central scientific research organization that provides continuity in conducting interrelated investigations over several years.
 4. Multi-year contracts will be approved annually by the Board after the Board has appropriated the funds for the multi-year contract through the approval of the annual budget.
 6. Contracting Authority shall be in accordance with Table 1 (see attached)
-

Table 1.
AUTHORIZATION
LIMITS^{4 5 6}

Annual Contract Value	Contracting Authority	Competition Requirements	Contract Terms & Limitations	Amendment Guidelines
Less than \$5,000	Executive Director Approval ¹	Single Source ²	Contract term may not exceed one fiscal year. Must be consistent with and specified in the Board-approved budget and work plan.	Any amendment requires approval of the Executive Board.
Less than \$10,000	Chair of the Executive Board Approval ¹	Single Source ²	Contract term may not exceed one fiscal year.	Chair may approve an amendment increasing the total contract amount by no more than 25%.
Less than \$3 50,000	Executive Board Approval	Single Source ²	Contract term may not exceed three -five years, including any optional extensions.	Executive Board may approve an amendment increasing the total contract amount by no more than 25%.
\$50,000 to \$99,999.99	Executive Board Approval	Informal Competition ²	Contract term may not exceed three -five years, including any optional extensions.	Executive Board may approve an amendment increasing the total contract amount by no more than 25%.
Greater than or equal to \$100,000	Executive Board Approval	Request for Proposals ³	Contract term may not exceed four -five years, including any optional extensions.	Executive Board may approve an amendment increasing the total contract amount by no more than 25%.

1. On a monthly or more frequent basis, the Executive Director will report to the Executive Board all contracts which were approved by either the Chair of the Executive Board or the Executive Director.
2. When single source or informal competition is used, the Executive Director will report to the Executive Board the reasons that a particular vendor was selected over others. With strong justification, single sourcing may be used for contracts greater than \$30,000. For example, it may be used if only one contractor is able to supply the necessary services, or a consulting firm has satisfactorily performed the preliminary stage of a project.
3. For all contracts of \$100,000 or more, BACWA will issue a request for proposals (RFP). The RFP will be developed by the Executive Director and publicly noticed. A committee comprised of the Executive Director, and at least one Committee Chair shall review the proposals received and recommend a vendor to the Executive Board based on their review and approval.

4. The Chair has the authority to approve a requested change in subcontractors on an executed contract providing the value of the work involved does not exceed 40% of the total contract amount or \$50,000. All such changes shall be reported to the Board at the next regularly scheduled Board meeting. Changes in subcontractor work greater than 40% of the total contract amount or \$50,000 must be approved by the Executive Board.
5. The Chair has the authority to approve reallocation of budget between work items in the scope of work of an executed contract provided the reallocation of budget does not exceed 20% of the total contract amount or \$50,000. Reallocations that exceed either of these limits must be approved by the Executive Board.
6. For the purposes of conforming to these authorization limits, the value of a multi-year contract is the sum of the amounts for the individual years including any optional extensions of the contract.



BAWA EXECUTIVE BOARD ACTION REQUEST

RESOLUTION NO. R-20-04

TITLE: RESOLUTION COMMENDING LEAH WALKER FOR HER DEDICATED SERVICE TO THE BAY AREA WASTEWATER COMMUNITY

☐RECEIPT ☐DISCUSSION ☒RESOLUTION ☐APPROVAL

WHEREAS, Leah Walker received her B.S. in Civil Engineering from the University of California at Berkeley in the 1980s and a M.S. in Civil and Environmental Engineering from San Jose State University in 2005; and

WHEREAS, after serving the California Department of Public Health as a supervising engineer and principal engineer, she was promoted to the Division Chief of the Division of Drinking Water and Environmental Management; and

WHEREAS, after service as a regulator, she brought her technical expertise to the City of Petaluma, and has most recently served as the Deputy Director of Environmental services; and

WHEREAS, her leadership as the Environmental Services Manager at the City of Petaluma, as a Co-Chair of the BACWA Recycled Water Committee, and as a representative of the BACWA to the Regional Monitoring Program Steering Committee demonstrates her commitment to leadership in the San Francisco Bay Area and the environment; and

WHEREAS, Leah’s staff were supportive of her skills and mentorship of younger colleagues therefore they nominated her for BACWA’s Arleen Navarret Leadership award, which she received in 2018; and

WHEREAS, over her many years of service Leah has been a true collaborator with BACWA and supporter of the wastewater communities’ interests, engaged in and leading efforts on a wide array of topics including recycled water, nutrient issues, biosolids management, air quality regulations, and a host of other policy issues, and

WHEREAS, she used her career in public service to provide expert guidance for regulatory programs within the Bay Area and the betterment of the City of Petaluma and BACWA.

NOW, THEREFORE, IT BE RESOLVED that Leah Walker is hereby commended for her distinguished service and leadership in BACWA and the Bay Area wastewater industry resulting in the continued success of BACWA as collaborative organization that promotes and helps protect the public health and the environment every day.

PASSED AND ADOPTED THIS 19TH DAY OF JUNE, 2020.

Lori Schectel
Chair of the Bay Area Clean Water Agencies Executive Board

Lori Schectel
Chair of the Bay Area Clean Water Agencies Executive Board

ATTEST:

Lorien J. Fono
Executive Director, Bay Area Clean Water Agencies

NUTRIENT WATERSHED PERMIT 3.0

In the third Nutrient Watershed Permit (NWP 3.0), scheduled for reissuance in 2024 or 2025, we propose to establish water quality based effluent limitations and related requirements based on an antidegradation approach to ensure that water quality standards are met. We envision effluent limitations will be based on load caps to specific embayments, or subembayments. Related requirements would include participation in an ongoing surveillance monitoring and modeling program to track trends in nutrient water quality degradation indicators in the subembayments and to conduct cause-and-response analyses. In addition, there would be requirements to maintain and enhance, as necessary, regional plans and possibly plant-specific plans to offset future loads to comply with load caps, and to possibly reduce loads if the surveillance program determines there is degradation due to nutrient loads.

Antidegradation

Clean Water Act section 301(b)(1)(C) and federal regulations [40 C.F.R. § 122.44(d)] require that permits include water quality based effluent limitations necessary to meet water quality standards. Water quality standards include three parts: (1) beneficial uses, (2) numeric and/or narrative water quality criteria (objectives), and (3) antidegradation policies. To ensure NPDES permits are protective of water quality, we evaluate if a discharge has a reasonable potential to exceed water quality standards in the receiving water. For nutrients discharges to San Francisco Bay, this has been difficult because the Water Board has not established numeric water quality objectives for use in conventional reasonable potential analyses, and interpretation of narrative water quality objects is complicated and difficult.

To assess nutrient impacts on water quality and options for nutrients water quality standards, the Water Board, along with interested stakeholders, developed a Nutrient Management Strategy, dated November 2012, that outlined the science needed to make informed decisions about assessing nutrient impacts on water quality and managing nutrient loads to the Bay. The Nutrient Management Strategy considered an approach that included developing numeric water quality objectives for nutrients; however, it concluded that the assimilative capacity of different habitat types within the Bay likely differ because physical factors often control nutrient bioavailability. Therefore, the Nutrient Management Strategy proposed the concept of Nutrient Numeric Endpoints, which would be indicators of nutrient over-enrichment, such as chlorophyll a (chl-a). These indicators would be used as part of an assessment framework that could establish the ecological conditions throughout the Bay, ranging from supporting to impairing beneficial uses.

However, conducting reasonable potential analysis and developing water quality-based effluent limitations based on Nutrient Numeric Endpoints has its own complications and difficulties, and would likely result in conservative, stringent limits. Therefore, we propose to base water quality effluent limitations on the antidegradation component of water quality standards. State Water Board Resolution 68-16 (“Statement of Policy with Respect to Maintaining High Quality of Waters in California”) incorporates the federal antidegradation policy set forth in 40 C.F.R. §131.12, which states that existing water quality must be maintained and protected. To comply with the antidegradation policy, NWP 3.0 will require dischargers to maintain existing performance for total inorganic nitrogen and provide for more stringent requirements (e.g., nutrient load reductions) if nutrient-related water quality degradation is observed in receiving waters.

Background

Existing nutrient concentrations in the Bay can easily support eutrophic conditions when environmental circumstances are favorable (e.g., stratified water column, less turbid waters, decreased clam grazing), suggesting that physical factors are more important than nutrient loads in determining the Bay's assimilative capacity. For example, in the Lower South Bay Synthesis Report, researchers documented that, from 1995 through 2010, total nitrogen and total phosphorus loads from wastewater treatment plants decreased by about 30 percent; however, summertime chl-a concentrations in deep subtidal channels increased nearly three-fold. The fact that other factors appear to drive changes in phytoplankton biomass highlights the need to seek additional information to forecast ecosystem response under future conditions. To better understand the Bay's responses to changing conditions and to allow the Water Board to take a measured approach to nutrient load reductions, Order Nos. R2-2014-0014 (NWP 1.0) and R2-2019-0017 (NWP 2.0) required monetary support for monitoring, modeling, and subembayment studies.

While long-term monitoring by USGS in the deep subtidal channels shows that physical factors typically control eutrophication intensity, more recent monitoring by the San Francisco Estuary Institute conducted in the Bay margins (e.g., mudflats and sloughs) indicates that phytoplankton blooms have, at times, been nutrient limited. In the Lower South Bay, continuous monitoring in the margins showed that chl-a levels peaked as nitrogen levels were depleted to below the detection limit. This suggests that physical factors may not necessarily limit eutrophication intensity in the margins. If modeling and monitoring indicate that total inorganic nitrogen is, in fact, a limiting factor in the margins, it may be necessary to reduce municipal wastewater discharge to these areas more (or sooner) than those that contribute to areas of the Bay that have more assimilative capacity, such as deep subtidal channels.

Assessing Bay Conditions

Because physical factors often control eutrophication intensity in the Bay (at least in the deep subtidal channels), nutrient concentrations will not always be reliable benchmarks to predict the attainment of beneficial uses. For this reason, the Water Board is developing a framework to assess whether Bay segments are trending toward nutrient impairment. This effort, known as the Assessment Framework, will evaluate whether nutrients are causing excessive algal growth or other adverse effects, such as low dissolved oxygen. We expect the Assessment Framework to establish indicators for whether beneficial uses are protected, such as thresholds for chl-a based on duration and magnitude. Those indicators and thresholds will likely be tiered to enable determination of an early indication of change in condition at a low tier threshold that would trigger assessment of what factors may be the cause of the change and potential sources and the relevance of nutrients as a factor or source. Further observations of change to a higher tier level might trigger more comprehensive assessments and consideration of nutrient load reductions, and certain high tier indicator thresholds might trigger an immediate need for load reductions. The Assessment Framework will be the basis of an ongoing monitoring and modeling program to track and assess nutrient levels, dissolved oxygen, other indicators, and other factors that affect the Bay.

Permitting Approach

Antidegradation requirements in NWP 3.0 will include four components: (1) precautionary load caps; (2) a monitoring and modeling program; (3) regional planning initiatives; and (4) corrective action plans.

Monitoring and Modeling

The antidegradation approach depends on a sufficiently robust monitoring and modeling program to track and assess nutrient levels, dissolved oxygen, other indicators, and other factors that affect the capacity of the Bay to assimilate nutrients (see discussion above on Assessing Bay Conditions, and the Assessment Framework). NWP 2.0 required support for monitoring and modeling studies to address many questions regarding nutrient bioavailability and the Bay's response to changes in nutrient loads and co-factors. This includes the design and development of an ongoing monitoring and modeling program. NWP 3.0 will require implementation of the monitoring and modeling program developed during NWP 2.0 and possibly further improvements, which may require more resources than available through the Regional Monitoring Program.

Precautionary Load Caps

We expect to include effluent limitations in NWP 3.0 based on “existing” nutrient discharge performance (similar to the NWP 2.0 planning level targets for nutrient discharge loads), unless scientific conclusions from monitoring and load response modeling indicate more stringent effluent limitations are necessary. Limitations based on “existing” performance would be based on performance data collected between May 1, 2014, and September 30, 2017, to account for Dischargers who have taken early actions to reduce nutrient discharges so they are not penalized for their improved performance. Precautionary load caps will likely be established for each subembayment or possibly combined subembayments. We will use the nutrient model under development to evaluate options for delineating subembayments.

Regional Planning

Treatment improvements may be needed to maintain “existing” performance and offset load increases. Moreover, if the Bay were to become degraded as a result of nutrient discharges, more improvements could be necessary, including further load reductions. Therefore, NWP 3.0 will require treatment plants to proceed with regional planning for each subembayment. Regional planning should be used to manage future nutrient load increases, ensure compliance with the subembayment load caps, and inform corrective action plans for further reductions if indicator criteria are triggered by the monitoring and modeling program. Such planning should explore concepts to minimize the chances of municipal wastewater treatment plants causing degradation. Regional planning could require dischargers to do the following:

- 1) Evaluate a range of nutrient reduction options to meet potential load reductions for total inorganic nitrogen in the most cost-effective manner possible. For each discharger, the evaluation should consider the bioavailability of nutrients and the potential for nutrients to promote algal growth. It should also consider, in part, the conclusions of the three studies required by NWP 1.0 and NWP 2.0:
 - Nutrient Reduction Study – Potential Nutrient Reduction by Treatment Optimization, Sidestream Treatment, Treatment Upgrades, and Other Means;

- Regional Evaluation of Potential Nutrient Discharge Reduction by Natural Systems; and
 - Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling.
- 2) Consider nature-based adaptation measures, such as those identified in the San Francisco Bay Shoreline Adaptation Atlas, that could offer protection against sea level rise and improve the Bay's resilience to nutrients. Some restoration work could cost effectively decrease the bioavailability of nutrients, increase denitrification rates, or improve phytoplankton biomass uptake.
 - 3) Recognize early actors that have implemented treatment plant upgrades or other multi-benefit projects to reduce nutrient loads to the Bay.
 - 4) Establish a framework for nutrient load trading to comply with subembayment load caps.

Corrective Action Plans

As described above under Assessing Bay Conditions, ongoing monitoring and modeling may trigger need for consideration of — and an immediate need for — load reductions to certain subembayments or areas of subembayments. NWP 3.0 will require dischargers to submit Corrective Action Plans individually or through a regional plan if certain indicator thresholds are exceeded. NWP 3.0 may also contain reopener provisions, triggered by certain circumstances or scenarios, to establish revised nutrient load caps and time schedules for implementation.

**Workshop on Dissolved Oxygen Thresholds in
Lower South San Francisco Bay Sloughs and Tidal Creeks**

May 21, 2020
10:00 AM – 1:00 PM

REMOTE ACCESS

Description:

<https://zoom.us/j/92089980290>

Meeting ID: 920 8998 0290

One tap mobile

+16699006833,,92089980290# US (San Jose)

+13462487799,,92089980290# US (Houston)

Dial by your location

+1 669 900 6833 US (San Jose)

+1 346 248 7799 US (Houston)

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

+1 253 215 8782 US

+1 301 715 8592 US

Meeting ID: 920 8998 0290

Find your local number: <https://zoom.us/u/avdmmsoTh>

1.	<p>Introductions, process and timeline, meeting goals</p> <p>The goals for this second meeting are to:</p> <ul style="list-style-type: none"> • Explore the Virginia Province Approach (VPA) in detail to get input on how to structure the analysis • Discuss what the temperature-metabolism approach could add to the VPA and other benefits to exploring this approach • Discuss how the fish data feed into the VPA and what other benefits exist of doing additional data analyses • Identify what additional information or analysis is needed to move the approaches forward 	<p>10:00 Melissa Foley</p>
----	---	--------------------------------

2.	Recap of first meeting Summary of the previous meeting and overview of three possible approaches to move forward (Virginia Province Approach, metabolism, fish habitat).	10:20 Ariella Chelsky
3.	Discussion: Virginia Province Approach (basic data analysis) Discuss the approach used in Suisun Marsh, identify key decision points, and explore the next steps for moving that approach forward in Lower South Bay sloughs. Meeting Materials: Steps and data used for Suisun Marsh VPA	10:30 Ariella Chelsky
	Short Break	11:30
4.	Discussion: Temperature and metabolism Discuss what this approach adds to the VPA, how it could be incorporated into the VPA, what data are needed, and what could be done to explore this approach. Also explore if there is additional information to be gained from this approach that is useful but not accommodated in the VPA Meeting Materials: Deutsch et al. 2015	11:40 Melissa Foley
5.	Discussion: Fish abundance and habitat usage Discuss how the fish abundance and habitat usage data could be used to inform the VPA. Identify other possible data analysis approaches that could provide information independent of the VPA.	12:20 Melissa Foley
6.	Review action items and next steps Identify what to work on in the near future and who is going to do it.	12:50 Ariella Chelsky and Melissa Foley
	Adjourn	1:00

Discussion questions:

1. What does this approach look like? What steps would we take?
2. What information or data are needed for this approach?
3. What can we do with the data we have?
4. Is there anything missing from this approach?
5. What additional information do we need to assess the viability of this approach?



Staff Recommendation
June 19, 2020

Application of An Integrated Earth System Model to Assess Effects of Anthropogenic Nutrient Inputs on Ocean Acidification and Hypoxia

Justine Kimball, Senior Climate Change Program Manager

RECOMMENDED ACTION: Staff recommends that OPC approve the disbursement of up to \$998,600 to Southern California Coastal Water Research Project to conduct application of an integrated earth system model to assess effects of anthropogenic nutrients on ocean acidification and hypoxia.

LOCATION: Statewide

STRATEGIC PLAN OBJECTIVE(S): 1.2.1: By 2022, provide scientific guidance to the State Water Resources Control Board to inform new nutrient loading standards that minimize biological and chemical impacts including ocean acidification, hypoxia, and harmful algal blooms

EXHIBITS:

Exhibit A: Letters of Support

FINDINGS AND RESOLUTION:

Staff recommends that the Ocean Protection Council (OPC) adopt the following findings:

“Based on the accompanying staff report and attached exhibit(s), OPC hereby finds that:

- 1) The proposed project is consistent with the purposes of Division 26.5 of the Public Resources Code, the Ocean Protection Act;
- 2) The proposed projects are consistent with OPC's Proposition 84 grant program funding guidelines and environmental license plate funding guidelines (Interim Standards and Protocols, August 2013); and
- 3) The proposed project is not ‘legal projects’ that trigger the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section, section 15378.”

Staff further recommends that OPC adopt the following resolution pursuant to Sections 35500 *et seq.* of the Public Resources Code:

“OPC hereby approves the disbursement of up to \$998,600 to the Southern California Coastal Water Research Project to implement application of an integrated earth system model to assess effects of anthropogenic nutrients on ocean acidification and hypoxia.

This authorization is subject to the condition that prior to disbursement of funds, Southern California Coastal Water Research Project shall submit for the review and approval of the Executive Director of the OPC detailed work plans, schedules, staff requirements, budgets, and the names of any contractors intended to be used to complete the projects, as well as discrete deliverables that can be produced in intervals to ensure the projects are on target for successful completion. All projects will be developed under a shared understanding of process, management and delivery.”

PROJECT SUMMARY:

The California coast is vulnerable to ocean acidification and hypoxia (OAH), which are driven by global climate change. Decisions on management of local pollution sources, which can exacerbate these stressors, is a key line of inquiry to address OAH in OPC’s Strategic Plan (2020). OPC has [previously invested](#) substantial resources in the development of a coupled physical-biogeochemical OAH model for the entire West Coast as impacted by the California Current System. The National Oceanic Atmospheric Administration has matched the state in this investment. The model is now considered a state-of-the-art global example and has resulted in numerous peer-reviewed scientific publications. In the Southern California Bight, this effort has demonstrated that coastal anthropogenic nutrients, mainly from wastewater treatment plant effluent, are having a significant impact on OAH in this region.

Building off these initial findings in the Southern California Bight, additional work is proposed to better understand the relative impact of coastal anthropogenic sources and management strategies at different spatial and temporal scales, and to extend this effort to the San Francisco and Monterey Coasts. In the Southern California Bight, more work is needed to fully characterize and document the biogeochemical budgets, causal linkages, and attribution of local pollution sources to OAH. Also, model simulations with various different management scenarios, such as increased water recycling and reduced nutrient loading, are needed to better understand how management decisions impact OAH. In the San Francisco and Monterey Coasts, another region with a large coastal population, preliminary model simulations have been run, but additional higher resolution work is needed to understand system dynamics and attribution of local pollution sources in the same way as the Southern California Bight.

The results of these additional simulations will further be applied to investigate the relative roles of climate change, natural variability, and local anthropogenic pressures in shaping the habitats of key California Current species (e.g. pteropods, crabs, echinoderms and bivalves). This will allow us to better estimate the consequences of management decisions on biological effects. The results of this modeling effort and research project will be extremely useful for the State Water Resources Control Board to consider management or regulatory actions if needed.

Project Tasks:

Task 1. Synthesize OA thresholds for bivalves: This task will synthesize literature and develop acidification thresholds for California Current System bivalves that carry ecological and economic importance. It seeks specifically to answer the question: What is the scientific evidence for thresholds of adverse impacts of acidification on bivalves, specifically with respect to different pathways of organismal impacts (physiological, lethal, behavioral) that indicates deteriorating biological conditions by life stage, duration of treatment and type of habitat exposed?

Task 2. Assess the effects of point versus non-point source anthropogenic nutrient discharges on environmental effects in the Southern California Bight: This task will document the causal linkage of anthropogenic nutrient discharges to environmental effects, including net primary production, acidification, deoxygenation, and their biological consequences. This task will address two major questions: 1) What are the environmental effects of Mexican cross border wastewater inputs and 2) Across the Southern California Bight, what are relative environmental effects of point versus non-point sources of anthropogenic nutrients that are discharged via outfalls and rivers?

Task 3. Investigate how publicly owned treatment works (POTW) water recycling and nutrient management modifies environmental effects of POTW outfall discharges to the SCB: This task will investigate the effects of nutrient management and wastewater recycling scenarios in the Southern California Bight. This task will address two major questions: 1) What is the effect of wastewater recycling on coastal biogeochemistry (net primary productivity, carbon, nitrogen, and oxygen budgets) and biological responses? 2) How does nutrient management modify that effect?

Task 4. Validate and assess the environmental effects of San Francisco Bay versus Monterey coastal terrestrial influences on the San Francisco and Monterey Coasts: This task will document the impacts of San Francisco Bay versus Monterey Coast land-based inputs on OAH and its biological effects. This task will address three major questions: 1) What is the uncertainty in model predictions of Central Coast physics, biogeochemistry, and lower ecosystem responses? 2) What is the effect of San Francisco Bay exchanges (water versus materials), coastal POTW outfalls and coastal riverine and atmospheric sources of nutrients, organic matter and acidity on central coast shelf nutrient mass balance, productivity, carbonate chemistry, and oxygen? And 3) What is the spatial and temporal footprint of this impact over seasons and interannual climate cycles?

Task 5. Apply “biological linkage” tools to coast-wide acidification and deoxygenation status and trends assessment, investigations of causal linkages and management scenarios: This task will quantify the effects of California coastal acidification on potential habitat compression for marine pelagic and epibenthic calcifiers. It addresses the following questions: 1) What are the trends and variability in southern CCS marine calcifier habitat in the past two decades, specifically considering pteropods, echinoderms, decapods, and bivalves as sentinel taxa for pelagic and epibenthic habitats? 2) what are the net effects of point versus non-point sources of nutrients on potential habitat for marine calcifying sentinel taxa in the Southern California Bight, 3) what is the change in impact of wastewater recycling versus nutrient management on potential habitat for marine calcifying sentinel taxa in the Southern California Bight? And 4) What is the relative contribution of San Francisco Bay water and materials, coastal outfalls, and coastal rivers on changes in potential habitat for marine calcifying sentinel taxa in the San Francisco and Monterey Coasts?

About the Grantee

The Southern California Coastal Water Research Project (SCCWRP) is a public research and development agency that develops and applies next-generation science to improve management of aquatic systems in Southern California and beyond. Since its founding in 1969, SCCWRP has been developing strategies, tools and technologies that the region’s water-quality management community relies on to more effectively protect and enhance the ecological health of Southern California’s coastal ocean and watersheds.

Project Timeline

June 2020 – June 2022

PROJECT FINANCING:

Staff recommends that the Ocean Protection Council authorize encumbrance of up to \$998,600 to Southern California Coastal Research Water Project to conduct application of an integrated earth system model to assess effects of anthropogenic nutrients on ocean acidification and hypoxia.

Ocean Protection Council	\$998,600
TOTAL	\$998,600

The anticipated source of funds will be from the Ocean Protection Council’s Fiscal Year 2018/2019 appropriation of California Environmental License Plate Funds (ELPF). Using these funds to support this project is consistent with the California Ocean Protection Act, Section 35650(b), as well as OPC’s Strategic Plan and Grant Program Funding Guidelines as discussed in more detail in the following section.

CONSISTENCY WITH CALIFORNIA OCEAN PROTECTION ACT:

The proposed project is consistent with the Ocean Protection Act, Division 26.5 of the Public Resources Code, because it is consistent with trust-fund allowable projects, defined in Public Resources Code Section 35650(b)(2) as projects which:

- Improve management, conservation, and protection of coastal waters and ocean ecosystems
- Provide funding for adaptive management, planning coordination, monitoring, research, and other necessary activities to minimize the adverse impacts of climate change on California's ocean ecosystem

CONSISTENCY WITH THE OPC'S STRATEGIC PLAN:

This project directly implements Objective 1.2.1: By 2022, provide scientific guidance to the State Water Resources Control Board to inform new nutrient loading standards that minimize biological and chemical impacts including ocean acidification, hypoxia, and harmful algal blooms. Specifically, this project will examine, using an integrated earth system model, the effect of anthropogenic nutrient inputs to ocean acidification and hypoxia, and subsequent biological effects.

CONSISTENCY WITH THE OPC'S GRANT PROGRAM FUNDING GUIDELINES:

The proposed project is consistent with the OPC's Grant Program Funding Guidelines for Environmental License Plate Funds, in the following respects:

Required Criteria

1. Directly relate to the ocean, coast, associated estuaries, or coastal-draining watersheds: *The project directly investigates ocean and coastal processes to support best available science in decision-making and management.*
2. Support of the public: *See Exhibit A.*
3. Greater-than-local interest: *This project is statewide in scope with implications to the health and resilience of fisheries and ecosystems.*

Additional Criteria

4. Improvements to management approaches or techniques: *The findings from this project will provide scientific support and evidence so that the State Water Resources Control Board (SWRCB) may support new nutrient loading standards (regulatory loads) that minimize biological and chemical impacts from ocean acidification and hypoxia.*
6. Timeliness or Urgency: *The SWRCB's [2019 Ocean Plan Review](#) identified "Ocean Acidification, Hypoxia, and Climate Change Impacts" as one its five highest-ranked issues. Further research is needed to evaluate how to develop water quality objectives and improve the resilience of the coastal environment. This project directly supports the priorities of the 2019 Ocean Plan Review.*
7. Coordination: *This project will compliment and coordinate with similar modeling efforts in San Francisco and Monterey Coasts.*

COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):

The proposed project is not a 'legal project' that triggers the California Environmental Quality Act pursuant to Public Resources Code section 21068 and Title 14 of the California Code of Regulations, section 15378.

MEETING MINUTES

May 29, 2020

NMS Nutrient Technical Work Group Meeting

Participants

Melissa Foley (SFEI)	David Senn (SFEI)	Kristin Art (SFEI)
Derek Roberts (SFEI)	Allie King (SFEI)	Ariella Chelsky (SFEI)
David Halsing (SBSPRP)	Terry Fleming (USEPA)	Steve Culberson (IEP)
Tom Hall (EOA)	Jackie Zipkin (EBDA)	Justine Kimball (OPC)
Karin North (Palo Alto)	Yuyun Shang (EBMUD)	Ian Wren (SFEI/Baykeeper)
Deb Stoliker (USGS)	Lorien Fono (BACWA)	Richard Looker (R2 Water Board)
Eric Dunlavey (San Jose)	Thomas Mumley (R2 Water Board)	Kevin Lunde (R2 Water Board)
Lisa Thompson (Sac. Regional San)	Brian Meux (NOAA)	Joe Dillon (NOAA)
Janis Cooke (R5 Water Board)	Robert Schlipf (R2 Water Board)	

AGENDA

1. Introductions, meeting goals

SFEI established the following goals:

- Establish NTW priorities and funding alternatives for FY2021
- Provide feedback on a few specific discussion topics
 - Synthesis: priority projects
 - Feedback/stakeholder priorities: balanced plan, timing

2. Overview of Program Plan

- SPM provided an overview of the NMS structure, management objectives and targets for the current 5-year NMS cycle (2019-2024)
- Provided an overview of the FY2021 Work Plan, which utilizes interactive tabs to indicate what program areas are targeted by each proposed project, in terms of Science Targets, Focus Areas, and Program Areas. SPM sought feedback on the structure of the file and whether this is a useful approach to walking through the proposed program area.
- Feedback included requests to link deliverables to the project lists and to capture the historic projects that are not reflected in the table.
- A request was made to provide an update on the relationship to Delta projects and modeling efforts.

3. Discussion topic #1

Several scenarios were presented that partly reflect limitations associated with the shelter in place limitations – refer to the pdf circulated by the SPM ‘2_FY021_Specifics.pdf’. Feedback was sought regarding the appropriate option or mix of projects in FY21:

- Option A: ‘Max Plan’ that includes fieldwork that is currently unlikely. (\$3.79 M)
- Option B: Delays shoal monitoring and synthesis work. Given that more fieldwork would be carried out, this would reduce the amount of synthesis work doable in this time period (\$3.515 M)
- Option C: An intermediate between Options A and D. Includes some moored sensors and fieldwork. (\$3.17 M)
- Option D: This is the conservative option that limits fieldwork and some synthesis work to reflect limitations associated with the inability to do some fieldwork, recruit new scientists, and perform the necessary planning. (\$2.685 M)

Comments/Questions:

- Questions were raised regarding whether synthesis work could be carried out in the absence of additional fieldwork.
- Comments were made to prioritize biogeochemistry and light attenuation data and rates over other monitoring efforts, if possible.
- Question included whether synthesis work could be rapidly deployed if people were made available. It was indicated that it wouldn’t be turned on and off. Responses included that we should only pursue monitoring projects where we have a high level of confidence that we can implement, given the costs and inefficiencies of starting and stopping efforts.
- SPM indicated that a lot of the fieldwork is dependent on partnerships. SFEI and USGS are developing policies for performing fieldwork. Outside partners are currently not allowed on USGS vessels. USGS is developing a framework for performing fieldwork and those are relaxing more. USGS is getting closer to being able to achieve science objectives in a safe manner.
- SFEI asked whether a flexible funding framework is a viable approach, given that we are unable to fully fund the program
- Stakeholders indicated that they are alright with a delay in the program given the emergency nature of the project. If that means delays in the permit then that is acceptable but if the regulators are not satisfied with delays this would change the thinking.
- The Water Board and NOAA suggested that permitting delays would likely play into this decision and a reasonable approach would be taken.
- If possible, we should identify the highest priority projects that are most likely to be able to proceed. Much of the fieldwork would be delayed under Options C & D until spring 2021.
- The IEP has received feedback from the Water Board that budget reductions are likely and that a decision matrix should be prioritized. The Central Valley Water Board has indicated that regulatory requirements are in place until the regulators agree that a waiver has been approved.

4. Discussion topic #2 & #3:

Do you agree that projects P8 and P10a are among the highest synthesis topics to explore in FY2020?

P8 Involves synthesis/interpretation of stratification events and high-frequency mooring data to capture variability in chl-a data and whether the higher resolution chl-a ‘signals’ provide additional insights into productivity factors. Also involves collecting velocity data from the mooring to augment those interpretations, as well as an Annual Reporting task

Comments:

Clarification was sought regarding how the various options presented in Discussion #1 would influence the synthesis work. It was made clear that if these projects were pursued, and if monitoring was allowed to progress, then less synthesis work would likely progress, as illustrated in Dave's slides, given that existing resources would be applied to monitoring efforts rather than synthesis.

The question was posed regarding whether P8 Projects can all progress using available data. It was confirmed that there is additional analysis to perform using the existing data from LSB mooring sites.

Can you provide an update on the OA modeling and the interplay between the Bay and Ocean? SPM provided some background on the project examining the effects of nutrients from the Bay on the outer coast, which is being pursued by UCLA/SCCWRP/UC Santa Cruz. They are planning on having a team update in June but Chris Edwards' postdoc started recently and a status update will be available in the coming months. A query was made regarding requests to understand nutrient inputs from the outer coast to the Bay. This will be explored as the modeling project progresses.

SPM asked Regional San to provide an update on the upgrade project (ECHO Water). The project is moving forward and when a sufficient number of 'batteries' are constructed they can start testing biological nutrient removal (BNR). They are working with Delta science project proponents and researchers to ensure updates are provided that could influence results. The nitrification system is operating. SPM updated the NTW on the report recently finalized related to nutrient monitoring activities pursuant to that project. A post-doc was funded to measure nutrient cycling and biogeochemical rates in the Delta/Suisun Bay.

SPM presented modeling outputs and recent results that begin to quantify the role of nutrients on phytoplankton production, as well as future needs and steps.

5. Recap / Capture NTW feedback

General

- Link the Program Plan Google Sheet to project descriptions and deliverables
- Present a less detailed, more holistic table to the Steering Committee

Fieldwork vs. Synthesis

- Develop a decision framework/matrix for contingency planning
- Synthesis projects can be ramped up if fieldwork is not possible
- Avoid fieldwork ramp up if there is a significant risk of not occurring
- Prioritize the biogeochemical sampling program because it's needed for modeling
- Discuss the potential of shifting permit deadlines with regulators in light of the pandemic

Synthesis Topics

- Priorities identified seem like no regrets projects to move forward
- Use the synthesis analyses to inform future fieldwork effort and design (focus on reducing uncertainty)
- Update previous literature reviews as part of synthesis work

6. Wrap-up and Adjourn

Planning Subcommittee Meeting No. 47

June 3, 2020

9:00 am – 12:00 pm

Teleconference

Chair: Eric Dunlavey

Meeting Notes

Attendees: Dave Senn, Tom Mumley, Eric Dunlavey, Ian Wren, Robert Schlipf, Richard Looker, Lorien Fono.

1. *Agenda Modifications (All) 5 min*

Personnel matters will be addressed as part of the Science Program report-out.

2. *Review Outstanding Action items (DW) 5 min*

- Schedule and develop materials for NTW meeting – Dave and Ian (complete)
- Meet to lay out plan for hiring modeler – Dave and Tom (complete)
- Work with Dave to finalize revisions to Charter – Ian and Lorien (complete)
- Contact Mark Gold about participating in the Steering Committee – Ian (complete)
- Update Science Plan Overview graphic – Ian (on the back burner for the time being)

3. *Science Program update (DS) 10 min*

a. *Staffing*

The NMS hired a modeler, who will start mid-June to maximize the overlap with Ali. We will raise the question of another hire at a future meeting. Tom asked about the status of forming a modeling advisory group. Dave replied that it is an explicit project in the program plan. There will be significant modeling needs for different watershed purposes, as well as an integration of different modeling platforms: There will be different models, and the NMS will need to choose which platform to move forward with based on which is working better. The different work products getting done in SFEI's silos are best integrated rather than managed separately.

There was a discussion about potentially hiring another modeler who would be at a more junior level. There is a gap in program management that may or may not be addressed by hiring one new staff. There was a discussion about funding levels and the ability to sustain the position. In the short term, this may not be an issue as a top candidate may go back to grad school. The program management question will wait for a future meeting.

b. *Other*

None.

4. NMS Priority Updates

a. Report-Outs - 10 min

Martha Sutula provided an update to Dave that the work with UCLA on OAH is getting more traction with the State Water Board. Jon Bishop has said that in the view of the SWB, the work is at the level has established a connection between nutrient discharges and local impacts. The OPC will come out with a Staff Report next Tuesday on OAH, and will support this effort, including the Central and Northern Coast simulations, with more staff. There will need to be a discussion about the relative roles of SCCWRP versus SFEI. The new OPC representative will attend the next Steering Committee meeting, and we want to discuss this as an agenda item in advance. Dave and Ian will set up a meeting.

b. Current Issues – none

c. NMS Calendar Review -10 min

i. Review future SC and PS meeting schedules (DW/IW)

The next PSC meeting will be July 1 and the next Steering Committee meeting is on June 12. The Assessment Framework meeting will be June 8.

5. Other Updates

a. Discussion: LSB DO Technical workgroups debrief

Dave gave an update on discussions he's had with stakeholders before and after the LSB DO meeting. The take home we got from the meeting was an outline of a Work Plan. The Virginian Province Approach will move forward, with a planning step at the beginning. The other two lines of inquiry are uncertain since the methods aren't as established, so there will be a scoping level analysis to ascertain their usefulness.

There were questions about stakeholders' considerations regarding the DO workshop. There is a 2004 "functional equivalence" guidance document from the State Water Board associated with 303(d) listing decisions. There was a discussion about how to make regulatory decisions to establish measuring impairment. There were questions about using non-local species for making decisions. Water Board staff clarified that a 303(d) listing wouldn't necessary be tied to management actions. This will be discussed in more detail at the Assessment Framework meeting on June 8.

Dave will review the contract with SCCWRP that Region 2 developed for previous work. The plan is to continue to engage with the expert workgroup, and a process for that will be built into next year's budget.

b. Charter Review

Eric reviewed the proposed edits to the Charter, and made a few notes of additional edits. There was a discussion about the nature of public outreach, especially as we get closer to management decisions.

Eric asked about the chair selection. We need to make sure we're using a consistent term for Dave's position throughout the document.

Ian raised some bigger picture questions to address:

- The authorization limits for Science Program Core Team and PSC – should it be raised? This will be raised with the Steering committee.
- Quorum – Group agrees that the definition will be greater than half of members.
- External peer review – How often to do a deep external review of science plan? This will be an annual agenda item for the Steering Committee to determine the frequency and timing. It will be left in the Charter as a contingency in case it's needed.

A clean and marked up version will be sent to the Steering committee. Any contentious issues will be tagged for review at subsequent meetings, and the other revisions will be accepted.

6. *Planning the next Steering Committee meeting – 45 min*

Ian shared the draft agenda for the steering committee. We may remove or, more likely, minimize time associated with Action Item and PSC report-out sections on the agenda. The issue of the USGS vessel will be discussed at the SC meeting under "Other Business Items". There is no decision from USGS to commit to the program past one year. We are asking them for a long-term commitment. The meeting will be compressed to 4 hours with no lunch break.

Dave asked about what level of detail should be used to present the Science Workplan. Additional project information will be provided in the meeting packet.

7. *Review of Action items from meeting (DW)*

- Meet with new OPC rep to plan OAH staff report item at SC – Dave and Ian
- Finalize Charter Markup and circulate to Steering Committee – Ian
- Finalize and distribute Steering Committee Agenda – Ian

8. *Adjourn or address Parking Lot items*

Parking Lot of Identified PS Future Agenda Items

- a. Outreach to resource agencies re: DO objectives
- b. Brainstorming on future priorities for the PS (ALL)
- c. EPA nutrient criteria discussion
- d. Discuss concept of holding an annual forum on nutrients

AF Subcommittee Meeting

June 8, 2020

Assessment approaches

- Virginia Province Approach
- Multiple stressors
- Fish community data

Next steps: VPA

- Move forward with the Virginia Province Approach for LSB slough and tidal creek habitats
- Add percent DO to criteria
- Pursue additional lines of evidence that can support VPA (next slides)
- Reassess whether lab studies targeting sensitive species should be conducted to fill in data gaps
 - E.g., If salmonids and sturgeon are included they will drive the criteria, additional studies may not 'move the needle' very far

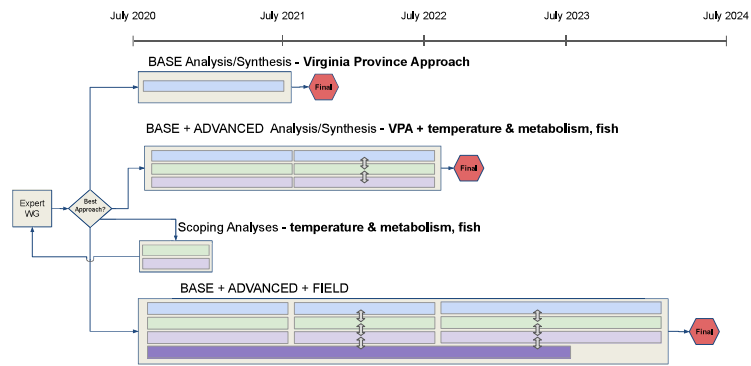
Next steps: Multiple stressors

- Scoping level analysis needed to identify what is possible
 - Assess physiological data availability
 - Focus on sensitive species (salmon and sturgeon) and look at status of data for SFB
- 'Moving the needle' assessment
 - Estimate how much temperature would change thresholds based on reviews of hypoxia tolerance
- Determine how multi-stressor information could be used in a regulatory context (e.g., integrated with VPA?) or in broader AF

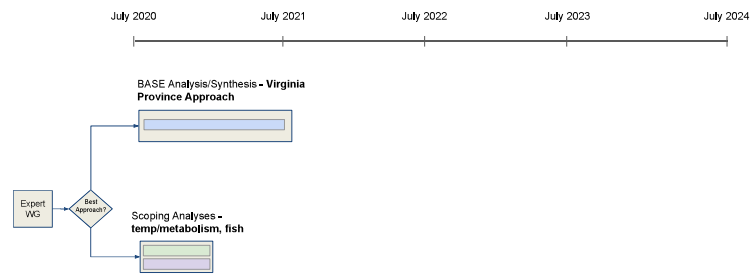
Next steps: Fish community data

- Scoping level analysis needed to identify feasibility of proposed next steps:
 - Improved statistical models for multispecies community data, impacts of continuous variables
 - Habitat suitability indices- DO requirements within the context of temperature/salinity and season
 - Combine observations with lab physiological measurements to scale up to field conditions
- Determine whether targeted additional field studies are needed to improve confidence of some of the above types of analyses
- Determine how fish community data could be used in a regulatory context (e.g., integrated with VPA?) or in broader AF

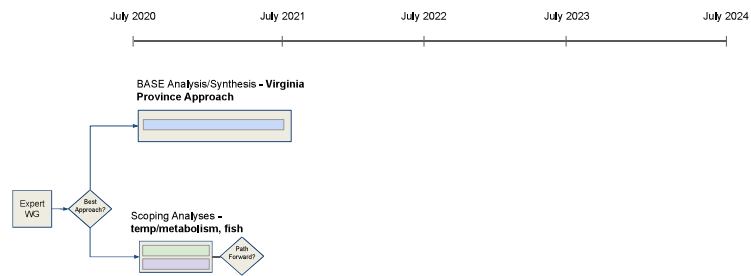
DO workplan options



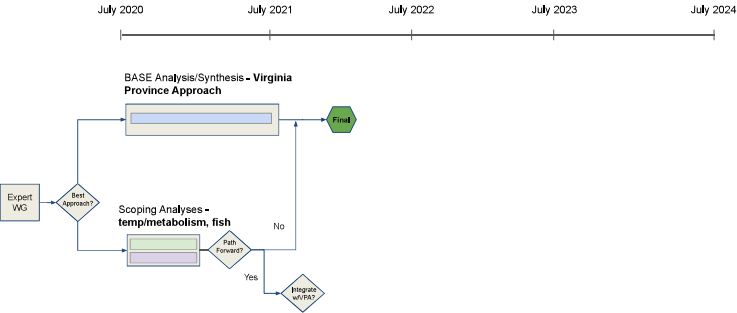
Proposed DO workplan



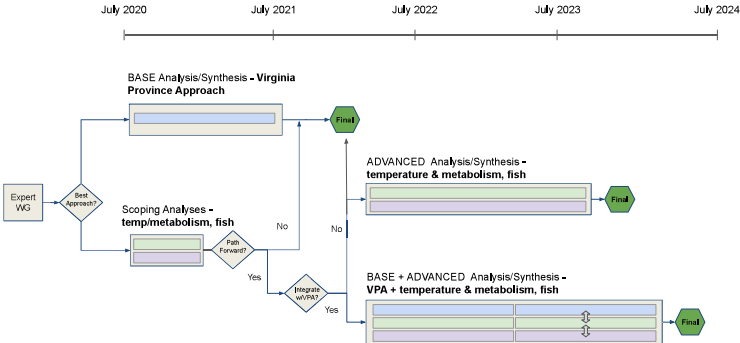
Proposed DO workplan



Proposed DO workplan



Proposed DO workplan





June 1, 2020

Community Wastewater Surveillance as an Alternative Metric for Shelter-in-Place Policies

The issue of determining when to relax or reimpose shelter-in-place policies during the Novel Coronavirus (SARS-CoV-2) pandemic has become a lightning rod across the globe as we enter the summer months. Individual testing, while increasing in parts of the United States, is still lacking in both availability and confidence. Municipal wastewater treatment provides essential public services across the nation and can offer a complementary metric for assessing those policies. This will become increasingly important in anticipation of a possible second wave in the fall.

What is Wastewater Based Epidemiology?

Individuals infected with COVID-19, both asymptomatic and symptomatic, shed strands of virus RNA in bodily excretions that find their way to the sewerage system. Testing the raw (influent) wastewater can detect the RNA of SARS-CoV-2 whether it is infectious or not. Such testing is known as Wastewater Based Epidemiology (WBE) and has been used for decades around the globe. WBE allows communities to track whether the scale of outbreak is declining, increasing, or staying level and is also more practical and cost-effective than testing every individual multiple times. Should an increase in the presence of the virus be discovered, existing protocols used commonly in the wastewater pretreatment program can be employed to identify the general location of the source so that individual testing can then be used for mitigation purposes. While influent testing does not determine infectivity, further testing can be done should that information be necessary to identify sources in the community.

Where is Wastewater Based Epidemiology Being Used?

The wastewater sector in California, across the U.S., and the globe is already utilizing WBE on a limited basis, with multiple universities and private labs offering such analyses. Laboratories and the wastewater sector are currently working with the federal government to establish baseline methodologies. However, there is a critical need for funding and federal coordination in order to effectively implement WBE. A coordinated effort is vital to provide a data repository and to ensure comparable results, standard methods guidelines, timely notifications, and data interpretation between labs.

Why am I receiving this Information?

We offer WBE as a viable additional metric to inform community, state, and federal policies to mitigate impacts from SARS-CoV-2. This letter serves to raise awareness of this option and to seek directed funding to establish national coordination, standard methods and increase lab capacity.

Please contact Greg Kester, with the California Association of Sanitation Agencies (CASA), at gkester@casaweb.org or at 916-844-5262 for further information.



CALIFORNIA ASSOCIATION of SANITATION AGENCIES

1225 8th Street, Suite 595 • Sacramento, CA 95814 • TEL: (916) 446-0388 • www.CASAwab.org

June 2, 2020

Dr. Robert Redfield, Director
Centers for Disease Control and Prevention (CDC)

via electronic submission: olx1@cdc.gov

Subject: Wastewater Based Epidemiology (WBE)

Dear Director Redfield:

The California Association of Sanitation Agencies (CASA) strongly recommends the Centers for Disease Control and Prevention (CDC) work with the wastewater sector, global research community, and state public health officials in utilizing WBE as a cost-effective additional metric to assess community outbreak of SARS-CoV-2 (COVID-19). CASA is an association of local agencies engaged in advancing the recycling of wastewater into usable water, as well as the generation and beneficial use of renewable energy, biosolids, and other valuable resources. Through these efforts, we help create a clean and sustainable environment for Californians.

Municipal wastewater treatment provides essential public services across the nation and can offer an alternative metric for assessing shelter in place policies. Many wastewater agencies in California, across the nation, and the globe are pursuing analysis of their influent wastewater (i.e., WBE) to determine the presence or absence of COVID-19, and if the trend is increasing, decreasing, or plateauing in their community. This will become increasingly important in anticipation of a possible second wave in the fall. Please see the attached Fact Sheet for further information.

Multiple university and private labs are offering analytical services but are using a variety of methods for sample collection, preservation, quality assurance and control, and analysis. For this to be a viable national metric, CDC should serve as the governing federal agency for these efforts. It is critical that the CDC provide clear guidance on standardizing baseline requirements to ensure comparable and credible results. CDC should also serve as the national repository for wastewater surveillance data, establishing minimum data needs, providing interpretation of results, and developing a web-based portal for receipt of data. By so doing, CDC can provide invaluable and necessary guidance to state and local health officials that better informs when it is safe to begin reopening their communities.

We strongly recommend support and necessary resources be directed to your staff so they may implement these measures. The wastewater sector stands ready to assist and to provide data as appropriate. Please contact Greg Kester of my staff with any questions or for further clarification at gkester@casaweb.org or at 916-844-5262.

Sincerely,

Adam D. Link
Executive Director

cc: Admiral Giroir, Assistant Secretary of Health – HHS - ASH@hhs.gov
Dr. Jay Butler, Deputy Director IDIM of COVID-19
Dr. Mia Mattioli – CDC
Dr. Amy Kirby – CDC
Dr. Vince Hill – CDC
Greg Kester, Director of Renewable Resource Programs, CASA

POTW Participation in CECs Studies

White Paper



Bay Area Clean Water Agencies

Updated June 2020

POTW Participation in CECs Studies

BACWA White Paper

Updated June 2020

Contents

Introduction	3
Background	3
Benefits of CECs Program Management through RMP	5
POTW Participation in RMP CECs Program.....	6
Identifying Representative Facilities for future studies.....	6
Case study – selecting a suite of representative POTWs to participate in CEC study	7
POTWs funding for RMP CECs Program.....	10
CEC Management in SF Bay – Next Steps	10
Appendix 1: POTW Location	12
Appendix 2: Population and Flows	13
Appendix 3: Treatment Technology.....	15
Appendix 4: Water sources.....	17

Introduction

The Bay Area Clean Water Agencies (BACWA) is a joint powers agency whose members own and operate Publicly-Owned Treatment Works (POTWs) throughout the SF Bay Region. Through the San Francisco Estuary Institute's Regional Monitoring Program (RMP), BACWA members participate in studies on unregulated Contaminants of Emerging Concern (CECs) on a voluntary basis. However, a Regional understanding of CECs in wastewater is skewed when studies only consider the handful of agencies who often volunteer to participate. This White Paper puts forth an approach to ensure that the Publicly Owned Treatment Works (POTW) who are requested to participate in future regional studies of CECs are generally representative of wastewater effluent quality from all Bay Area POTWs.

In the future, it is envisioned that the list of agencies participating in CECs studies, and the rationale for their selection for particular studies will be maintained as appendices to this White Paper. This approach will track participation over time and provide a historical record of which agencies have participated and how they were selected.

Background

The RMP forms the core of water quality, sediment quality, and tissue monitoring in the San Francisco Bay. Historically, each POTW was responsible for performing receiving water monitoring as part of its individual NPDES Permit. The RMP was created in 1993 through San Francisco Regional Water Quality Control Board (Regional Water Board) Resolution No. 92-043 that directed the Executive Officer to implement a Regional Monitoring Plan in collaboration with permitted dischargers pursuant to California Water Code, Sections 13267, 13383, 13268, and 13385. The goal was to replace individual receiving water monitoring requirements for dischargers with a comprehensive Regional Monitoring Program.

The Regional Monitoring Program's specific objectives are to:

- Describe the distribution and trends of pollutant concentrations in the Estuary;
- Project future contaminant status and trends using best understanding of ecosystem processes and human activities;
- Describe sources, pathways, and loading of pollutants entering the Estuary;
- Measure pollution exposure and effects on selected parts of the Estuary ecosystem (including humans);
- Compare monitoring information to relevant benchmarks, such as total maximum daily load (TMDL) targets, tissue screening levels, water quality objectives, and sediment quality objectives; and
- Effectively communicate information from a range of sources to present a more complete picture of the sources, distribution, fate, and effects of pollutants and beneficial use attainment or impairment in the Estuary ecosystem.

The RMP has been investigating CECs since 2001 and established a formal workgroup to address the issue in 2006. The RMP Emerging Contaminants Workgroup (ECWG) includes representatives from RMP stakeholder groups including POTWs, regional scientists, and an advisory panel of expert researchers that work together to address the Workgroup's guiding management questions:

- Which CECs have the potential to adversely impact beneficial uses in San Francisco Bay?
- What are the sources, pathways and loadings leading to the presence of individual CECs or groups of CECs in the Bay?
- What are the physical, chemical, and biological processes that may affect the transport and fate of individual CECs or groups of CECs in the Bay?
- Have the concentrations of individual CECs or groups of CECs increased or decreased in the Bay?
- Are they predicted to increase or decrease in the future?
- What are the effects of management actions?

The overarching goal of the ECWG is to develop cost-effective strategies to identify and monitor CECs to support management actions to minimize impacts to the Bay. The ECWG guides an annual process of contaminant evaluation and long-term planning and optimization to respond to new RMP data and the rapidly evolving body of science on CECs.

Following this process for over a decade, the RMP has generated one of the world's most comprehensive datasets for CECs in an estuarine ecosystem. While RMP stakeholders are the primary audience and user of RMP data and communications, the Program informs broader decision-making through outreach to state and federal agencies.

The RMP first published a formal CEC Strategy in 2013 as part of a continuous effort to refine approaches for supporting the management of CECs in San Francisco Bay. Periodic revision of the Strategy is essential given the rapid evolution of the science surrounding emerging contaminants; in 2017, the RMP completed its first revision of the RMP's CEC Strategy, which was then updated in 2018.

For CECs known to occur in the Bay, the RMP prioritizes CECs using a tiered risk-based framework, as illustrated in Figure 1. This prioritization framework guides future monitoring proposals for each of these contaminants, the results of which, in turn, provide key data to update evaluations of potential risk. The criteria listed below are used for placement in each tier.

Figure 1. RMP's Risk-based tiered framework

	RISK LEVEL DESCRIPTION	MONITORING STRATEGY	WATER QUALITY MANAGEMENT ACTIONS
HIGH CONCERN	Bay occurrence data suggest a high probability of a moderate or high level effect on Bay wildlife.	Studies to support TMDL or alternative management plan.	303(d) listing.* TMDL or alternative management plan.* Aggressive control/treatment actions for all controllable sources.
MODERATE CONCERN	Bay occurrence data suggest a high probability of a low level effect on Bay wildlife.	Consider including in Status and Trends monitoring. Special studies of fate, effects, sources, pathways, and loadings.	Action plan/strategy. Aggressive pollution prevention. Low-cost control/treatment actions.
LOW CONCERN	Bay occurrence data suggest a high probability of no effect on Bay wildlife.	Discontinue or conduct periodic screening level monitoring in water, sediment, or biota. For CECs previously considered moderate concern, maintain Status and Trends monitoring for at least two cycles. Periodic screening level monitoring for chemical(s) detected in wastewater or stormwater to track trends.	Low-cost source identification and control. Low-level pollution prevention. Track product use and market trends.
POSSIBLE CONCERN	Potential for concerns or uncertainty in measured Bay concentrations or toxicity thresholds suggest uncertainty in the level of effect on Bay wildlife.	Screening level monitoring to determine presence in water, sediment, or biota. Screening level monitoring for presence in wastewater or stormwater.	Maintain (ongoing/periodic) effort to identify and prioritize emerging contaminants of potential concern. Track international and national efforts to identify high priority CECs. Develop biological screening methods and identify available analytical methods.

Up to date information, including the most recent CEC Strategy, can be found at the RMP's Emerging Contaminants webpage¹.

Benefits of CECs Program Management through RMP

Different approaches have been discussed for monitoring CECs in aquatic ecosystems through the State of California, including requirements in individual NPDES permits, and a State-wide monitoring program. The San Francisco Bay Region is fortunate to have a mature and sustainable CECs program. The advantages of this program, over individual requirements include the following:

¹ <https://www.sfei.org/programs/sf-bay-regional-monitoring-program#tab-1-4>

- CEC science and strategy planning happens under one umbrella and is directed by scientists and stakeholders. We avoid competing or duplicative studies.
- CECs monitoring is tailored to the specific questions that need to be answered in the SF Bay while maximizing use of limited funds.
- Data quality control for CECs follows protocols established by the RMP science team. Data upload is managed through RMP staff who routinely upload data to the California Environmental Data Exchange Network (CEDEN) database.

POTW Participation in RMP CECs Program

POTWs are an important pathway for some CECs to the SF Bay. Sampling of CECs in wastewater effluent has been a component of many of the studies conducted through the RMP. Past studies have looked at POTWs as sources of pharmaceuticals, pesticides, and more recently, microplastics. Over the previous decade, as the need for effluent studies was identified by the RMP staff and ECWG, a call was put out to POTWs seeking volunteers in these studies.

BACWA, a joint powers agency whose members own and operate POTWs throughout the SF Bay Region, has worked with the RMP to ensure that there has been participation in these studies by the POTW community. Involvement in these studies has been on a volunteer basis. As the CECs program moves forward, there is interest in developing an approach to ensure that the POTWs participating in these studies are representative of wastewater effluent quality from all POTWs, and studies do not focus on the subset of agencies who repeatedly volunteer to participate.

Identifying Representative Facilities for future studies

It is not cost-effective nor particularly useful to sample effluent at every POTW when a smaller number of representative POTWs can yield the information that is being sought in a particular study. One of the purposes of this White Paper is to provide information about BACWA's member agencies that can be used to identify "representative" participants for future studies. The following characteristics were identified as pertinent because of their potential impacts on CECs in wastewater effluent. The information about each of the POTWs in the Region is included in the Appendices as listed below. It is important to note that the criteria used in various studies and the final selection of POTWs will vary based on the constituent(s) of interest and the scope of each study.

- Location by subembayment – Appendix 1²
- Number of connections – Appendix 2
- Population served – Appendix 2
- Average dry weather permitted flow – Appendix 2
- Discharge volume to Bay – Appendix 2
- Pretreatment Program Implementation – Appendix 2
- Type of Treatment – Appendix 3
 - Secondary

• ² Subembayment boundaries may be reassigned in the future based on RMP modeling findings.

- Advanced Secondary/Filtration
- Disinfection type
- Source water – surface vs. groundwater, potential agricultural impacts – Appendix 4

Flow and population served are important criteria; depending on the study, small agencies may be a low priority for sampling due to limited staffing and because they represent a small portion of wastewater contributions to the Bay.

Industrial inputs to POTWs will also be important for some CECs. POTWs with effluent volumes over 5 million gallon per day (mgd) maintain pretreatment programs whereby they regulate industrial users that contribute significant flow or federally regulated pollutants to the collection system. However, many CECs may be discharged from commercial facilities that are not traditionally regulated, such as nursing homes, pet grooming facilities, hotels, and plant nurseries.

Keeping a comprehensive list of businesses that may be associated with CECs in each agency's jurisdiction is not feasible due to the changing identity and location of these businesses over time, and uncertainty regarding which CECs will be important in future studies. When an industrial use is associated with a CEC that is being studied, BACWA will work with the RMP to perform an online search for the businesses and industries of interest, then work to identify in which POTW's jurisdiction or sewershed they operate. To help in this effort, BACWA, in conjunction with the Region Water Board and SFEI, is developing a POTW sewershed map. Information on businesses presence in each service area may also be available from agencies' billing records; BACWA can work with agencies to obtain information from these records, when needed.

Some agencies have expressed concern that participating in CEC studies would lead to adverse impacts to their agencies, in terms of negative attention from regulators or the public. The Regional Water Board has made it clear that the intent of monitoring representative POTWs is to ensure that the results will be considered characteristic of all POTWs of types similar to those monitored and not simply attributed to a particular POTW. Monitoring results will not be considered representative of just those POTWs that participated, and participating POTWs will not be subject to any specific action(s) or regulatory consequence as a result of monitoring results.

To provide the State Water Board with the data it needs to avoid regulatory action on CEC monitoring, results from these studies will be entered into California Environmental Data Exchange Network (CEDEN) database. However, agencies that participate in the studies may request that their data be anonymized and that they not be mentioned by name when the studies are described in articles submitted to scientific journals or in communications with the press.

Case study – selecting a suite of representative POTWs to participate in CEC study

To illustrate the process of selecting representative POTW, a case study is presented below. In the summer of 2019, the RMP conducted a study of ethoxylated surfactants (ES). The goal for POTW selection was to recruit a selection of POTWs with the following characteristics:

- Geographical diversity to help interpret observed surface water concentrations

- Diversity of treatment technologies to understand impact of treatment processes on ES compounds
- Facilities with higher flow rates to capture a significant portion of the total wastewater loading of ES compounds to the Bay

In a literal sense, some of these criteria are mutually exclusive. For example, sampling at the EBDA outfall would allow capture of a greater portion of the loading to the Bay, but since the outfall discharge is made up of effluent from six different POTWs with different treatment trains, no information about individual treatment processes would be available from sampling at EBDA. Likewise, sampling at SFPUC's Southeast Plant would have allowed capture of more of the total load to the SF Bay, but SFPUC uses the same secondary treatment technology, high purity oxygen activated sludge, and discharges to the same subembayment as EBMUD, so smaller facilities with different treatment technologies that discharge to different subembayments were selected.

The final selection of treatment facilities is presented in Table 1.

In the future, it is envisioned that the list of agencies participating in CECs studies will be maintained as a new appendix for this White Paper. This will allow BACWA members, the Regional Water Board, and RMP staff to track participation over time, and provide a historical record of which agencies have participated and how they were selected.

Table 1. POTW sampling design for ethoxylated surfactants.

	Facility	Annual Average Daily Effluent Flows (mgd)	Subembayment	Secondary	Tertiary Treatment	Nitrification	Denitrification	Disinfection
1	San Jose- Santa Clara	87	LSB	Activated Sludge/Biological Nutrient Removal	Y	Y	Y	Liquid Chlorine
2	Palo Alto	18.4	LSB	Trickling Filter/Nitrifying Activated Sludge	Y	Y		UV
3	Hayward	10.0 (discharge through EBDA outfall)	SB	Trickling Filter/Solids Contact				Sodium Hypochlorite
4	EBMUD	52.5	CB	High Purity Oxygen Activated Sludge				Sodium Hypochlorite
5	CCCSD	35.4	Suisun Bay	Activated Sludge with Anaerobic Selector				UV
6	Fairfield Suisun	13.4	Suisun Bay	Oxidation Tower/Activated Sludge	Y	Y		UV
7	Vallejo	9.2	San Pablo Bay	Trickling Filter/Solids contact				Sodium Hypochlorite
8	San Mateo	10.4	SB	Activated Sludge				Sodium Hypochlorite

POTWs funding for RMP CECs Program

The RMP participants, including dredgers, stormwater agencies, and municipal and industrial dischargers that hold Regional Water Board permits for waste discharge into the Estuary, fund the RMP as a requirement of their permits. Each year, a portion of this funding was allocated to CECs studies, but by 2016, as overall RMP funding was decreasing due to diminishing contribution from the dredgers, an alternative source of funding was sought.

In 2015, BACWA worked with the SF Regional Water Board to review the costs and benefits of the routine monitoring required by agencies' individual NPDES permits, and concluded that significant resources were being spent on monitoring for pollutants that were rarely detected. BACWA and the Regional Water Board reached an agreement to reallocate resources from low-value effluent testing to the RMP. The strategy reflected the need to shift our effort from contaminants that were of concern historically, largely due to industries that are no longer located in the region, to emerging priorities. In April 2016, the Regional Water Board adopted order R2-2016-0008, which establishes opt-in Alternative Monitoring and Reporting Requirements for municipal NPDES permittee, and which can raise a maximum of \$289K per year for RMP studies.

Because of the limited funding available to the RMP for CECs studies, POTW effluent monitoring is not included in some RMP studies where it is a lower priority than monitoring other matrices. In the past, individual POTWs have volunteered to fund effluent monitoring for studies that are managed by RMP staff. A recent example of this approach is the 2017 *Screening of Pharmaceuticals in San Francisco Bay Wastewater Study*³. Because relying on agency volunteers to fund these special studies puts an unfair burden on those agencies who step up, when all agencies throughout the Region benefit, beginning in FY21 BACWA is considering providing a budget derived from member dues for POTW-specific CEC studies led by the RMP. Descriptions of POTW-funded studies will be included as an appendix in future updates to this White Paper.

CEC Management in SF Bay – Next Steps

As described in the Tiered Risk Framework, CECs in the “moderate” tier are subject to management plans and pollution prevention. While BACWA welcomes information about removal efficacy for CECs through different wastewater treatment trains, we view pollutant prevention as the most important strategy for reducing CEC loading to receiving waters.

BACWA's Bay Area Pollution Prevention Group (BAPPG) funds public outreach, and professional outreach and training for both traditional pollutants such as Fats, Oils, and Grease, mercury, and copper, as well emerging contaminants such as pharmaceuticals. In Fiscal Year 2021, microplastics and PFAS will be added to the list of prioritized pollutants. BAPPG's public facing website, baywise.org, contains public outreach materials that can be used by member and partner agencies.

³ See full report:

https://www.sfei.org/sites/default/files/biblio_files/BACWA%20Pharmaceutical%20Report_103018.pdf

In addition to public outreach, BAPPG also supports regulatory advocacy for pollutants such as pesticides, including fipronil. POTWs don't have direct authority to regulate pesticides in their service area. However, over the past few years, BAPPG has partnered with the Regional Water Board to comment on EPA's pesticide re-registrations, to urge them to consider pathways to the sewer when doing risk assessments. The selection approach proposed in this White Paper can be used to support BAPPG's efforts; such as in collaborative studies with the California Department of Pesticides Regulation. More information about BAPPG's Pollution Prevention activities can be found in their most recent Annual Report⁴.

DTSC's Safer Consumer Products initiative is another pathway to address the use of CECs of moderate or higher concern⁵. DTSC maintains this program to identify and develop a regulatory response for chemicals, formulations, or products that may pose a human health or ecological risk.

Finally, POTWs, either individually or through BAPPG, CASA, or other associations, support legislation to control products leading to CEC pollution. Support of pharmaceutical take-back programs is an example of effective advocacy in the past.

The RMP's CEC Program has been key to our understanding of emerging concerns in the San Francisco Bay. Moving into the future, the CEC program through the RMP will continue to inform BACWA's pollution prevention efforts, and BACWA is committed to its continued support.

⁴ <https://bacwa.org/wp-content/uploads/2020/01/2019-BAPPG-Annual-Report.pdf>

⁵ <https://dtsc.ca.gov/scp/safer-consumer-products-program-overview/>

Appendix 1: POTW Location

Figure A1. POTW Location by subembayment



Appendix 2: Population and Flows

Table A2: Population and flows

POTW	# connections served (2014)	Estimated Population ^c	Permitted ADWF (mgd) ^d	2018/19 Flow to Bay ^e	Pretreatment Program (y/n)
American Canyon	5,562	20,470	2.5	1.58	N
Benicia	9,569	28,000	4.5	2.23	N
Burlingame ^a	1,600	37,000	5.5	2.99	Y
CCCSD	115,109	482,000	53.8	38.6	Y
CMSA	52,161	105,000	10	12	Y
Delta Diablo	57,700	213,000	19.5	8.74	Y
DSRSD ^b	53,509	146,900	20.2	2.3 (2016)	Y
EBDA ^b			107.8	65	Y
EBMUD	160,000	650,000	120	58.0	Y
FSSD	38,800	144,000	23.7	15.4	Y
Hayward ^b	32,000	153,000	18.5	10.0 (2015)	Y
Las Gallinas	15,800	30,000	2.92	2.62	N
Livermore ^b	29,500	85,000	8.5	3.3 (2016)	Y
Millbrae ^a	6,550	22,000	3	1.73	Y
Mt. View SD	10,500	21,900	3.2	1.88	N
Napa SD	36,000	82,700	15.4	7.42	Y
Novato SD	28,700	60,000	7	4.78	Y
Oro Loma SD ^b	47,000	190,000	20	10.3 (2015)	Y
Palo Alto		217,000	39	21.9	Y
Petaluma	25,300	61,500 (2011)	6.7	4.02	Y
Pinole	11,215	42,500	4.06	2.78	N
Richmond ^c	20,000	70,000	16	5.1 (2017)	Y
Rodeo	2,967	8,700	1.14	0.680	N
San Jose-Santa Clara	483,667	1,500,000	167	93.8	Y
San Leandro ^b	15,300	60,000	7.6	4.3	Y
San Mateo	37,823	150,000	15.7	11.6	Y
Sewerage Agency of Southern Marin	14,800	29,000	3.6	2.67	N
SFO ^a	n/a	n/a	2.2	1.22	N
SFPUC Southeast	450,000	580,000 (2013)	85.4	55.5	Y

POTW	# connections served (2014)	Estimated Population^c	Permitted ADWF (mgd)^d	2018/19 Flow to Bay^e	Pretreatment Program (y/n)
Sausalito Marin City SD	6,500	18,000	1.8	1.30	N
SSF ^a		113,500	13	8.55	Y
Sunnyvale	28,314	150,000	29.5	11.6	Y
Sonoma Valley County SD	17,200	28,000	3	1.48	N
Silicon Valley Clean Water		199,000	29	15.6	Y
Treasure Island		2,500	2	0.412	N
Union Sanitary District ^b	111,184	343,500	33	21.6 (2015)	Y
Vallejo	37,845	120,000	15.5	10.1	Y
West County WD ^c	32,300	100,000	12.5	8.3 (2017)	Y
West County Agency ^c		170,000	28.5	13.3	Y

^a The cities of Burlingame, Millbrae, South San Francisco, and San Bruno, and the San Francisco International Airport form the North Bayside System Unit (NBSU), a joint powers authority, and discharge to a common outfall.

^bEBDA provides the outfall to the SF Bay for the City of Hayward, Oro Loma Sanitary District, the City of San Leandro, and Union Sanitary District, as well as the Livermore Amador Valley Water Management Agency, which includes Livermore and Dublin San Ramon Services District.

^cWest County Agency provides the outfall to the SF Bay for the City of Richmond and West County Wastewater District.

^dUnless noted otherwise, service area population and ADWF are from each POTW current NPDES permit.

^eFlows are from the 2019 Nutrient Group Annual Report, unless noted and then the flows are from each POTW current NPDES permit.

Appendix 3: Treatment Technology

Treatment technology can impact the removal of CECs biodegradation and partitioning to solids. Disinfection technology will impact the formation of disinfection byproducts. Table 3 shows the treatment technologies used at each POTW.

Table A3. Treatment Technologies.

AS = Activated Sludge; TF = Trickling Filter; BNR = Biological Nutrient Removal; MBR = Biological Membrane Reactor

POTW	Secondary Treatment Type	Disinfection Type	Advanced secondary/filtration (y/n)
American Canyon	MBR	UV	y
Benicia	AS and Rotating Biological Contactor (RBC)	Liquid Chlorine	n
Burlingame	AS	Sodium Hypochlorite	n
CCCSD	AS	UV	n
CMSA	TF/AS	Liquid Chlorine	n
Delta Diablo	TF/Solids contact	Sodium Hypochlorite	n
DSRSD	AS	Liquid Chlorine	n
EBMUD	High Purity Oxygen	Sodium Hypochlorite	n
FSSD	Oxidation Towers/AS	UV	y
Hayward	TF/Solids contact	Sodium Hypochlorite	n
Las Gallinas	Rock TF, nitrification TF, deep bed granular filter	Liquid Chlorine	n
Livermore	AS	Sodium Hypochlorite	n
Millbrae	AS	Sodium Hypochlorite	n
Mt. View SD	TF, nitrification biotower	UV	y
Napa SD	AS	Sodium Hypochlorite	n
Novato SD	AS	UV	n
Oro Loma SD	AS	Sodium Hypochlorite	n
Palo Alto	TF/AS	UV	y
Petaluma	AS/BNR	UV/Sodium Hypochlorite	n
Pinole	AS	Liquid Chlorine	n

POTW	Secondary Treatment Type	Disinfection Type	Advanced secondary/filtration (y/n)
Richmond	AS	Sodium Hypochlorite	n
Rodeo	AS	Sodium Hypochlorite	n
San Jose	AS/BNR	Sodium Hypochlorite	y
San Leandro	TF/AS	Sodium Hypochlorite	n
San Mateo ^a	AS	Sodium Hypochlorite	n
Sewerage Agency of Southern Marin	TF	Liquid Chlorine	n
SFO	AS	Liquid Chlorine	n
SFPUC	High Purity Oxygen	Sodium Hypochlorite	n
Sausalito Marin City Sanitary district	TF	Liquid Chlorine	n
SSF	AS	Liquid Chlorine	n
Sunnyvale	TF/DAF/Dual Media Filtration	Chlorine Gas	y
Sonoma	AS	Sodium Hypochlorite	n
Silicon Valley Clean Water	TF/AS	Liquid Chlorine	n
Treasure Island	TF	Sodium Hypochlorite	n
Union Sanitary District	AS	Sodium Hypochlorite	n
Vallejo	TF/Solids Contact	sodium hypochlorite	n
West County WD	AS	Sodium Hypochlorite	n

^a San Mateo is in the process of an upgrade to BNR/MBR

Appendix 4: Water sources

There are seven major water wholesalers and large retailers serving residents in the service area of Bay Area POTWs. These seven are highlighted below; see Table A4 for a complete list of water agencies and supplies in the Bay Area.

- Alameda County Water District (ACWD) – ACWD’s primary sources for water supply are the State Water Project, SFPUC, and local groundwater.
- Contra Costa Water District (CCWD) - CCWD’s primary source of water supply is the United States Bureau of Reclamation’s Central Valley Project (CVP).
- East Bay Municipal Utilities District (EBMUD) - EBMUD delivers water from the Mokelumne River watershed, supplemented with water from East Bay watershed reservoirs. Water from the EBMUD is not expected to include groundwater, or be influenced by agricultural drainage.
- SFPUC Region Water System (RWS) – The SFPUC delivers water imported from the Hetch Hetchy reservoir, as well as reservoirs in the Alameda Watershed and Peninsula Watershed. Beginning in 2017, SFPUC began accessing local groundwater supplies. Water from the SFPUC is not expected to be influenced by agricultural drainage.
- Santa Clara Valley Water District – SCVWD – Sources of supply for the District include natural groundwater recharge, local surface water, imported surface water from the State Water Project (SWP) and CVP, and transfers. Imported water from the SWP and CVP is expected to have some impact from agricultural drainage at its source in the SF Delta.
- Sonoma County Water Agency (SCWA) – The Russian River provides most of the Water Agency’s water supply with groundwater supply from the Santa Rosa Plain as a secondary source. Water from the Russian River is expected to have some impact from agricultural drainage.
- Zone 7 –The SWP is Zone 7’s largest water supply, and is supplemented by local surface water and groundwater. Imported water from the SWP and CVP is expected to have some impact from agricultural drainage at its source in the SF Delta.

Information about the water supplies in the sewersheds of each POTW is presented in the Water Agencies’ Urban Water Management Plans (UWMP), which are available on DWR’s website⁶. The POTWs for each Water Agency are reported in Table 6.3 of each UWMP. For each POTW, Table A4 identifies the Water Agencies supplying their service area, the agencies’ water sources, and whether there may be an agricultural influence on the source water supply, or if groundwater is a significant supply source. Most areas are served by smaller retailers who provide a combination of water purchased from wholesalers, and local surface or groundwater.

⁶ https://wuedata.water.ca.gov/uwmp_plans.asp

Table A4: Source Water Supplies

WW Agencies	Water Agency	Sources	Groundwater supply (y/n)	Potential Agricultural Impacts (y/n)
American Canyon	American Canyon City Of	SWP, City of Vallejo (see below)	n	y
Benicia	City of Benicia	SWP, Sacramento River, Solano Project (Lake Baryessa), local surface water	n	y
Burlingame	Hillsborough Town Of	SFPUC RWS	n	n
	Burlingame City Of	SFPUC RWS	n	n
CCCSD	Martinez City Of	CCWD	n	y
	Contra Costa Water District	Central Valley Project, other Delta supplies	n	y
	East Bay Municipal Utility District	Mokelumne Watershed, local surface water	n	n
CMSA	Marin Municipal Water District	Local surface water	n	n
Delta Diablo	Contra Costa Water District	Central Valley Project, other Delta supplies	n	y
	Antioch City Of	Delta, and Contra Costa Canal (CCWD)	n	y
	Pittsburg City Of	CCWD, and local groundwater	y	y
	Golden State Water Company - Bay Point	CCWD, and local groundwater	y	y
DSRSD	Zone 7	State Water Project, Local surface Water, Local Groundwater, Imported Surface Water from Byron-Bethany Irrigation District	y	y
	Pleasanton City Of	Zone 7, and local groundwater	y	y
	Dublin San Ramon Services District	Zone 7	y	y
	East Bay Municipal Utility District	Mokelumne Watershed, local surface water	n	n
EBMUD	East Bay Municipal Utility District	Mokelumne Watershed, local surface water	n	n
Fairfield-Suisun Sewer District (FSSD)	Suisun - Solano Water Authority	SWP, Solano Project (Lake Barryessa)	n	y

WW Agencies	Water Agency	Sources	Groundwater supply (y/n)	Potential Agricultural Impacts (y/n)
Hayward	Hayward City Of	SFPUC RWS	n*	n
LGVSD	Marin Municipal Water District	Local surface water	n	n
Livermore	Zone 7	State Water Project, Local surface Water, Local Groundwater, Imported Surface Water from Byron-Bethany Irrigation District	y	y
	California Water Service Company Livermore	Zone 7 (SWP), and local groundwater	y	y
	Livermore City Of	Zone 7	y	y
	Pleasanton City Of	Zone 7, and local groundwater	y	y
Millbrae	Millbrae City Of	SFPUC RWS	n	n
Mt. View Sanitary District	Contra Costa Water District	Central Valley Project, other Delta supplies	n	y
	Martinez City Of	CCWD	n	y
Napa Sanitation District	American Canyon City Of	State Water Project, City of Vallejo (see below)	n	y
	Napa City Of	SWP, local surface water	n	y
Novato Sanitary District	North Marin Water District	SCWA, local surface water	y	y*
Oro Loma Sanitary District	East Bay Municipal Utility District	Mokelumne Watershed, local surface water	n	n
Palo Alto	California Water Service Company Los Altos/Suburban	SCVWD (State Water Project, Central Valley Project), Local Groundwater	y	y
	California Water Service Company Mid-Peninsula	SFPUC RWS	n	n
	East Palo Alto City Of	SFPUC RWS	n	n
	Mountain View City Of	SFPUC RWS, SCVWD, and local groundwater	y	y
Petaluma	City of Petaluma	SCWA, local groundwater	y	y
Pinole/Hercules	East Bay Municipal Utility District	Mokelumne Watershed, local surface water	n	n
Richmond	East Bay Municipal Utility District	Mokelumne Watershed, local surface water	n	n

WW Agencies	Water Agency	Sources	Groundwater supply (y/n)	Potential Agricultural Impacts (y/n)
Rodeo Sanitary District	East Bay Municipal Utility District	Mokelumne Watershed, local surface water	n	n
San Jose	Milpitas City Of	SFPUC RWS, and SCVWD (CVP and SWP, not GW)	n	y
	San Jose City Of	SFPUC RWS, SCVWD (surface), and local groundwater	y	y
	San Jose Water Company	SCVWD, and local groundwater	y	y
	Santa Clara City Of	SFPUC RWS, SCVWD (surface), and local groundwater	y	y
	Great Oaks Water Company Incorporated	Local groundwater	y	n
San Leandro	East Bay Municipal Utility District	Mokelumne Watershed, local surface water	n	n
San Mateo	California Water Service Company Mid-Peninsula	SFPUC RWS	n	n
	Hillsborough Town Of	SFPUC RWS	n	n
Sanitary District No. 5 (Tiburon)	Marin Municipal Water District	Local surface water	n	n
	SCWA	Russian River	n	y
Sewerage Agency of Southern Marin	Marin Municipal Water District	Local surface water	n	n
	SCWA	Russian River	n	y
Sausalito-Marín City Sanitary District	Marin Municipal Water District	Local surface water	n	n
	SCWA	Russian River	n	y
SFPUC	San Francisco Public Utilities Commission	SFPUC RWS (Hetch Hetchy, and local surface water, local groundwater)	y	n
SFO	SFO	SFPUC RWS	n	n
Silicon Valley Clean Water	California Water Service Company Bear Gulch	SFPUC RWS, local surface	n	n
	East Palo Alto City Of	SFPUC RWS	n	n

WW Agencies	Water Agency	Sources	Groundwater supply (y/n)	Potential Agricultural Impacts (y/n)
	Menlo Park City Of	SFPUC RWS	n	n
	Mid-Peninsula Water District	SFPUC RWS	n	n
Sonoma	Sonoma County Water Agency (SCWA)	Russian River, local groundwater	y	y
South San Francisco and San Bruno	California Water Service Company South San Francisco	SFPUC RWS, and local groundwater	y	n
Sunnyvale	California Water Service Company Los Altos/Suburban	SCVWD (State Water Project, Central Valley Project), Local Groundwater	y	y
	Sunnyvale City Of	SFPUC RWS, SCVWD (surface), and local groundwater	y	y
Treasure Island	Treasure Island Water System	SFPUC RWS	n	n
Union Sanitary District	Alameda County Water District	SWP, SFPUC RWS, local groundwater	y	y
Vallejo Flood & Wastewater District	Vallejo City Of	SWP, Solano Project (Lake Barryessa), local surface water	n	y
West County Wastewater District	East Bay Municipal Utility District	Mokelumne Watershed, local surface water	n	n

Lorien Fono

From: Lorien Fono
Sent: Thursday, June 11, 2020 3:14 PM
To: Lorien Fono
Subject: FW: Draft PFAS Investigation Order Summary Table

From: "Kihara, Annalisa@Waterboards" <Annalisa.Kihara@waterboards.ca.gov>
Date: Wednesday, May 27, 2020 at 11:47 AM
To: Jared Voskuhl <JVoskuhl@casaweb.org>
Cc: "Farahnak, Shahla@Waterboards" <Shahla.Farahnak@waterboards.ca.gov>, "Linck, Wendy@Waterboards" <Wendy.Linck@Waterboards.ca.gov>, "Newton, Daniel@Waterboards" <Daniel.Newton@waterboards.ca.gov>, "St.Pierre, Brianna@Waterboards" <Brianna.St.Pierre@waterboards.ca.gov>, "MacDonald, Alex@Waterboards" <Alex.MacDonald@waterboards.ca.gov>
Subject: Draft PFAS Investigation Order Summary Table

Hi Jared,

Thank you for coordinating the meeting with us last week on our draft PFAS Investigative Order. As mentioned, below is a summary of the draft order monitoring requirements for a 1 year duration with a Final Report at the conclusion. Can you please pass this on to Greg Kester, Jen Jones, Adam Link, Lorien Fono, Steve Jepsen, Debbie Webster, and anyone else I may have missed?

	# of POTWs	TREATMENT SYSTEM SAMPLING		BIOSOLIDS	BRINE	GROUNDWATER MONITORING (Only for POTWS with Existing Groundwater Monitoring Program)	
		Locations	Frequency	Frequency	Frequency	Criteria	Frequency
1 to 5 MGD	152	Influent, Effluent	Quarterly for 1 year	Once	Where applicable, Quarterly for 1 year	Provide a minimum of 3 well locations on a map and data for Regional Board approval	Once
> 5 MGD	149			Quarterly for 1 year			

Thank you,

POTWs >10 Mgd Design Flow Chlorine and SBS Dosage and Usage (Responses as of 6/10/2020)

Discharger	Chlorine Dosage Range (mg/L)	Final Chlorine Residual Range (mg/L)	FY 18/19 Chlorine Cost (\$)	Total SBS Dosage Range (mg/L)	Excess SBS Dosage Range (mg/L)	FY 18/19 Total SBS Cost (\$)	FY 18/19 Excess SBS Cost (\$)
Central Martin Sanitation Agency (Deep Water; 10.0 mgd)	3.7-6.8	2.6-6.6	\$219,876	7.9-14	3.3-8.4	\$236,031	\$126,749
Delta Diablo (Deep Water; 19.5 mgd)	4 - 8	3 - 7	\$86,722	13 - 39	3 - 13	\$216,479	\$13,800
East Bay Dischargers Authority (EBDA) (Deep Water; 107.8 mgd)	0	0.29	0	Variable	Variable	\$182,621	\$137,000
East Bay Municipal Utility District (Deep Water; 120 mgd)	1.7 – 6.7	0.5 – 2.0	\$244,000	6.5 – 20.5	1.6 – 9.8	\$781,000	\$347,000
Napa Sanitation District (Shallow Water; 15.4 mgd)	4 - 9	3 – 4	\$74,000	6 - 7	2 - 3	\$117,000	\$53,000
San Francisco, Southeast Plant (Deep Water; 85.4 mgd)	2 – 5	1 – 2	\$1,131,000	2 – 4	1 – 2	\$615,000	\$185,000
San Jose - Santa Clara, Regional WW Facility (Shallow Water; 167 mgd)	2.5 Cl & 6:1 Cl:NH3	0.9 – 1.6	\$750,000	DCS Calc to neutralize	Avg 0.54 SBS residual	\$713,000	\$107,000
San Mateo, City of (Deep Water; 15.7 mgd)	5 - 8	3.5 - 5	\$180,000	11 - 14	2 – 4	\$400,000	\$132,000
Silicon Valley Clean Water (Deep Water; 29 mgd)	7.6 – 17.6	3.3 – 6.1	\$344,372	3.3 – 6.1	1.2 – 4.4	\$203,174	\$44,700
South San Francisco and San Bruno, Cities of (NBSU dechlorination) (Deep Water; 13 mgd)	13 - 14	8 - 9	\$293,400	12 - 14	2 - 4	\$335,400	\$80,000
Sunnyvale, City of (Shallow Water; 29.5 mgd)	4 - 11	1 - 2	\$144,000	5 - 12	2 - 3	\$128,000	\$51,000
Vallejo Flood and Wastewater District (Deep Water; 15.5 mgd)	1.5 - 4	1.0 - 3.0	\$87,000	2 - 6	1 – 1.5	\$104,000	\$20,000
West County Agency (dechlor at Richmond) (Deep Water; 28.5 mgd)	NA	2.5 – 4.5	0	6 - 10	3 - 5	\$268,000	\$133,500
TOTAL			\$3,554,370			\$4,299,705	\$1,430,749

Chlorine Dosage Range – Range of target chlorine dosages added at head of chlorine contact tanks for disinfection (e.g., 8-10 mg/L)

Final Chlorine Residual Range – Measured range of chlorine residuals end chlorine contact tanks before SBS addition (e.g., 2-3 mg/L)

FY 18/19 Chlorine Cost – Estimated annual cost of chlorine purchased for disinfection (e.g., \$80,000/year)

Total SBS Dosage Range – Target range of SBS added for complete dechlorination including excess SBS (e.g., 6-8 mg/L)

Excess SBS Dosage Range – Estimated concentration range of SBS added in excess of measured chlorine residual (e.g., 2-4 mg/L) (same as residual SBS concentration in final effluent, if measured)

FY 18/19 Total SBS Cost – Estimated annual cost of SBS purchased for dechlorination (e.g., \$100,000/year)

FY 18/19 Excess SBS Cost – Calculated annual cost of SBS based on concentration of SBS added above that theoretically needed to neutralize the measured concentration of chlorine residual present (e.g., \$20,000/year)

Flow – Applicable total annual flow (or average daily flow x 365)

**Summary of Significant Changes Made
Between the October 2018 Draft Toxicity Provisions
and the July 2020 Draft Toxicity Provisions**

Application of the Toxicity Provisions
<ul style="list-style-type: none"> Clarify the interaction of the Provisions with Basin Plans and the State Implementation Policy.
Most Sensitive Species
<ul style="list-style-type: none"> Provide Regional Water Boards the discretion to determine when a species sensitivity screening for acute toxicity is required. Allow data from species sensitivity screenings generated within 10 years prior to the effective date of the Provisions to be used to determine the most sensitive species, and provide discretion to Regional Water Boards in determining if these data are sufficient. Extend the amount of time, from 10 years to 15 years, that Regional Water Boards may allow before requiring a new species sensitivity screening for chronic toxicity. Allow seasonal and intermittent dischargers to use fewer than four sets of tests for the species sensitivity screening. Provide Regional Water Boards the discretion to not require dischargers that do not discharge at least 15 days in any quarter of the year to conduct a species sensitivity screening. Remove the exception for conducting a species sensitivity screening for chronic toxicity for dischargers who participate in a regional monitoring program. This exception is no longer needed due to other changes made to the species sensitivity screening requirements. Allow Regional Water Boards to specify in permits that the Executive Officer or Executive Director can authorize the temporary use of an alternative most sensitive species under certain conditions.
Reasonable Potential
<ul style="list-style-type: none"> Provide Regional Water Boards the discretion to determine when a reasonable potential analysis for acute toxicity is required. The requirement to include effluent limitations without first demonstrating reasonable potential was adjusted so that the requirement applies to all publicly-owned treatment work (POTW) dischargers that are authorized to discharge at a rate equal to or greater than 5 million gallons per day (MGD) <i>and that are required to have a pretreatment program</i>. Require the reanalysis of toxicity test data or additional toxicity testing to determine reasonable potential when the discharger has not conducted four toxicity testing at the instream waste concentration (IWC).

Monitoring Requirements

- Require non-storm water NPDES dischargers that do not have effluent limitations to conduct at least two routine chronic aquatic toxicity tests per year consistent with current Regional Board practices.
- Reduce the minimum routine monitoring frequency for chronic toxicity from quarterly to twice per year for POTW dischargers that are authorized to discharge less than 1 MGD.
- Provide Regional Water Boards the discretion to reduce chronic toxicity routine monitoring frequency for dischargers whose previous permit did not include a chronic toxicity effluent limitation when certain conditions are met.
- Provide the Regional Water Boards the discretion to reduce routine monitoring frequency during a toxicity reduction evaluation (TRE) if toxicity testing is conducted as part of the TRE.
- Require the Regional Water Boards to consider relevant scheduling constraints identified by the discharger and laboratories when setting the start of the “calendar month.”
- Allow dischargers additional time to initiate median monthly effluent limitation (MMEL) compliance tests if the test does not meet test acceptability criteria or if the test was not completed due to circumstances outside of the discharger’s control.
- Specify that replacement tests for all required toxicity tests that are not completed must be initiated as soon as possible.

Effluent Triggers to Determine When to Conduct a TRE

- Require Regional Water Boards to include daily and monthly chronic toxicity effluent triggers in permits for dischargers without chronic toxicity effluent limitations. Triggers would not be subject to effluent limitation violations but may lead to a toxicity reduction evaluation (TRE).

Use of the Chronic *Ceriodaphnia dubia* Reproduction Toxicity Test

- Add language to the adopting resolution directing staff to coordinate a study to identify ways to reduce within-lab variability and improve consistency between laboratories for the *C. dubia* reproduction toxicity test method and report back to the State Water Board with recommendations for refinements of the method as appropriate. The study is anticipated to be completed by December 31, 2023.

- When permits that are reissued, renewed or reopened after the effective date of the Provisions but before December 31, 2023, the Provisions provide the following options for Regional Water Boards:
 - For dischargers with no numeric chronic aquatic toxicity effluent limitations in their current permit and when *C. dubia* is identified as the most sensitive species, the permit shall include a maximum daily effluent limitations (MDEL) and a median monthly effluent trigger (MMET). Exceedances of the MMET would not result in an effluent limitation violation, but could trigger a toxicity reduction evaluation (TRE).
 - For dischargers with no numeric chronic aquatic toxicity effluent limitations in their current permit and when another test species (not *C. dubia*) is identified as the most sensitive species, the permit shall include a MDEL and a median monthly effluent limitation (MMEL) using the most sensitive species.
 - For dischargers with numeric effluent limitations in their current permit and when the most sensitive species is identified as *C. dubia*, the permit shall include either:
 - A MDEL and MMEL using *C. dubia* as the most sensitive species; or
 - A MDEL using *C. dubia* as the most sensitive species, a MMET using *C. dubia* as the most sensitive species, and a MMEL using the next applicable species as the most sensitive species.
 - For dischargers with numeric chronic aquatic toxicity effluent limitations in their current permit and when another test species (not *C. dubia*) is identified as the most sensitive species, the permit shall include a MDEL and a MMEL using the most sensitive species.

Toxicity Reduction Evaluations

- Specify when a TRE is required for dischargers that do not attain chronic toxicity triggers.

Exemptions

- Remove the exemption for POTWs serving small disadvantaged communities.
- Add an exemption for drinking water system discharges.
- Add an exemption for biological pesticide and residual pesticide discharges.
- Add an exemption for natural gas facilities discharges.

**BAY AREA CLEAN WATER AGENCIES
SUCCESSION PLANNING
Fiscal Year 2021**

A. BACWA Principal Representatives

<u>Agency</u>	<u>Representatives</u>	<u>Title & Roles</u>
CCCSD	Lori Schectel	BACWA Chair, CASA State Legislative Committee, Nutrient Governance Steering Committee Alternate, Summit Partners
	Roger Bailey (Alternate)	
	Jean-Marc Petit (Alternate)	
EBDA	Jacqueline Zipkin	BACWA Executive Board Rep, ReNUWIt Industrial Advisory Committee Member
	Jason Warner, Oro Loma (Alternate)	
EBMUD	Eileen White	BACWA Executive Board Rep, Nutrient Management Strategy Governance Steering Committee, Bay Area Regional Reliability Project, SF Estuary Partnership
	Maura Bonnarens (Alternate)	AWT Certification Committee
SFPUC	Amy Chastain	BACWA Executive Board Rep,
	Greg Norby (Alternate)	
	Jennie Pang (Alternate)	
	Bryan Henderson (Alternate)	
San Jose	Amit Mutsuddy	BACWA Executive Board Rep, Joint SFEI/ASC Board
	Eric Dunlavey (Alternate)	RMP Steering Comm; Nutrient Management Strategy Comm;

Changes to Principal Representation require submission of a Designation Letter and a Statement of Economic Interest Form within 30 days

B. Other BACWA Representations

<u>Group/Organization</u>	<u>Current Representative</u>	<u>Succession Planning</u>
RMP Technical Committee	Mary Lou Esparza, CCCSD	
	Yuyun Shang, EBMUD	
	Samantha Engelage, Palo Alto (Alternate)	
RMP Steering Committee	Karin North, Palo Alto;	
	Eric Dunlavey, San Jose	
Summit Partners	Lorien Fono, BACWA	
	Lori Schectel, CCCSD	
Joint SFEI/ASC Board	Eileen White, EBMUD	Karin North, Palo Alto, First Board Alternate; Amit Mutsuddy, San Jose, Second Board Alternate
	Lorie Fono, BACWA	Amy Chastain, SFPUC, Alternate
Nutrient Management Strategy Governance Steering Committee	Eric Dunlavey, San Jose	
	Eileen White, EBMUD	
	Jackie Zipkin, EBDA	
	Lori Schectel, Alternate	
NMS Planning Subgroup	Eric Dunlavey, San Jose	
NMS Technical Workgroup	Eric Dunlavey, San Jose	
SWRCB Nutrient SAG	Lorien Fono, BACWA	
NACWA Taskforce on Dental Amalgam	Tim Potter, CCCSD	
BAIRWMP	Cheryl Munoz, City of Hayward;	
	Florence Wedington, EBMUD	
	Lorien Fono, BACWA	
NACWA Emerging Contaminants	Karin North, Palo Alto;	
	Melody LaBella, CCCSD	
CASA State Legislative Committee	Lori Schectel, CCCSD	

CASA Regulatory Workgroup	Lorien Fono, BACWA	
ReNUWit	Jackie Zipkin, EBDA	
	Karin North, Palo Alto	
ReNUWit One Water	Jackie Zipkin, EBDA	
	Eric Hansen, SVCW	
RMP Microplastics Liaison	Artem Dyachenko, EBMUD	
Bay Area Regional Reliability Project	Eileen White, EBMUD	
WaterReuse Working Group	Cheryl Munoz, City of Hayward;	
SF Estuary Partnership	Eileen White, EBMUD	
	Lorien Fono, BACWA	
CPSC Policy Education Advisory Committee	Colleen Henry, CCCSD	
California Ocean Protection Council	Lorien Fono, BACWA	
Countywide Water Reuse Master Plan	Karin North, Palo Alto	
	Pedro Hernandez, San Jose	
CHARG - Coastal Hazards Adaptation Resiliency Group	Jackie Zipkin, EBDA	

Changes to BACWA Representation requires Executive Board Approval.

C. BACWA Committees

Committee	Chair	Vice/Co-Chair	Comments	Succession Planning
AIR	Nohemy Revilla, SFPUC, Co-Chair	Randy Schmidt, CCCSD, Co-Chair	CASA Climate Change Group Represen	Nohemy Revilla; Randy Schmidt
BAPPG	Autumn Cleave, SFPUC, and Robert Wilson, Santa Rosa (Co-chairs)	Joe Neugebauer, WCWD Vice-Chair		Autumn Cleave, Chair; Joe Neugebauer (WCWD) V-Chair
BAPPG Pesticide Subcommittee	Karin North, Palo Alto	Robert Wilson, Santa Rosa; Autumn Cleave, SFPUC		Karin North, Robert Wilson, Autumn Cleave
Biosolids	Co-Chair	Co-Chair	Committee Dormant due to biosolids activities being carried out by BABC.	Committee Dormant until further notice
Collection Systems	Andrew Damron, Napa San, Chair	TBD		
InfoShare Ops/Maint	Joaquin Gonzales, Delta Diablo, Co-Chair	Kevin Dickison, EBMUD, Co-Chair		
InfoShare Asset Mgmt	Co-Chair	Co-Chair	Committee planned to restart in FY21	Dana Lawson, Aaron Johnson, Co-Chairs
Laboratory	Dan Jackson, Union San, Chair	Nicole Van Aken, FSSD, Vice-Chair		
Permits	Mary Lou Esparza, CCCSD Chair	Jennie Pang, SFPUC, Vice-Chair		
Pretreatment	Tim Potter, CCCSD, Co-Chair	Michael Dunning, Union San, Co-Chair		
Recycled Water	Stefanie Olsen, DSRSD, Co-Chair	Reena Thomas, EBMUD, Co-Chair		

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

Proposed BACWA meeting schedule FY 2021

Meeting Date	Location
July 19 2020	Videoconference
August 21, 2020	Videoconference
September 24-25 - Technical Seminar	Pardee or Videoconference
October 16, 2020	EBMUD or videoconference
November 20, 2020	SFPUC or videoconference
December 20, 2020	EBMUD or videoconference
January 15, 2021	SFPUC or videoconference
Feb 19, 2020 - Annual Meeting	Scottish Rite or webinar
March 19, 2021	EBMUD or videoconference
April 16, 2021	SFPUC or videoconference
May 21, 2021	EBMUD or videoconference
June 18, 2021	SFPUC or videoconference

Lorien Fono

From: OSRC Rentals <rentals@scottish-rite.org>
Sent: Thursday, June 11, 2020 2:02 PM
To: Lorien Fono
Cc: Chris Boggess; Fred Kao
Subject: RE: BACWA Annual Meeting 2021

Hi Lorien,

Thank you for reaching out. I hope you and your loved ones are doing well. It is definitely a challenging time.

Most of our corporate clients have shifted their events to Q3, Q4 and a few into Q1 & Q2 of 2021. The ones going into 2021 are handled on a case by case basis. We continue to get inquiries for events in 2020 and 2021. Due to the size and layout of the building we are able to accommodate physical distancing for clients that are expecting a lower attendance rate than initially anticipated. We are currently working with the Alameda County Department of Environmental Health to ensure we are meeting and following all guidelines for opening. Items like temperature checks at the door, portable hand washing stations, sanitizer stands, face mask and physical distancing requirements, etc. are all being put in place. Our staff is doing top down disinfecting before and after events and we have established upgraded disinfecting protocols for during events.

I am available to discuss plans, options and strategies either on the phone or zoom if you like

Be safe, be healthy and I will talk to you soon,

Thank you,

Chris Boggess

Rental Coordinator
[Oakland Scottish Rite Center](#)

1547 Lakeside Drive
Oakland, CA 94612

Phone: (510) 832-0819

cboggess@scottish-rite.org

Rental Inquiries: [OSRC events powered by SocialTables](#)

Find us on:

[Instagram](#) | [Facebook](#)

Please consider the environment before printing.

This email may contain material that is confidential, privileged and/or attorney work product for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender and delete all copies.

NOTICE: This message, including any attachments, is proprietary to Oakland Scottish Rite intended solely for the use of the individual or entity to whom it is addressed and may contain information designated as internal use, confidential, and/or attorney-client privileged work product doctrine information. If you are not



DRAFT REQUEST FOR PROPOSALS

BACWA Regulatory Program Manager

PROPOSAL ISSUED – June x, 2020

PROPOSALS DUE – July x, 2020

The Bay Area Clean Water Agencies (BACWA) is a regional organization created by a joint powers agreement among the five largest wastewater treatment agencies in the San Francisco Bay Area. BACWA represents Bay Area wastewater agencies by undertaking relevant scientific and technical studies and research, and by participating in the development of national, state, and regional policies. BACWA is seeking a part-time Regulatory Program Manager to assist the organization in identifying, analyzing and responding to regulatory and policy issues affecting member agencies.

Scope of Work

The applicant selected will work under the direction of the BACWA Executive Director to assist with some or all of the following:

- Track and summarize water quality regulations and policies affecting BACWA member agencies;
- Monitor regulatory issues and assist in the preparation of comment letters on key regulations;
- Coordinate and participate in meetings with regulatory agencies, including the State Water Resources Control Board, the San Francisco Bay Regional Water Quality Control Board, and the Bay Area Air Quality Management District;
- Attend and report to the Executive Board on public and industry meetings, including but not limited to environmental stakeholder groups, regulatory task forces and workgroups, scientific organizations and BACWA Committee Meetings;
- Coordinate with other professional association including CASA and NACWA;
- Provide support for designated BACWA committees and workgroups;
- Assist the Executive Director with contract and program management, and with other related tasks as requested.

Qualifications

This position is open to individuals, sole proprietors, partnerships, and corporations. Partnerships and corporations should identify an individual who will serve as the lead in carrying out the work.

Applicants should possess technical expertise related to the wastewater industry particularly collection and treatment facilities and processes, be familiar with state and regional environmental regulations particularly those dealing with water quality, and be able to work with a variety of professionals on committees and other workgroups while providing technical and administrative assistance, have excellent written and oral communication skills, and demonstrate excellent interpersonal skills.

Proposals

The following information must be included in all responses to this proposal:

- Name and address of applicant;
- Description of qualifications (not to exceed three pages excluding curriculum vitae);
- Identification of potential conflicts of interest;
- Hourly rate schedule.

Proposals must be received no later than 5:00 p.m. on July x, 2020 and should be submitted via email to Jennifer Dymont, BACWA Assistant Executive Director, jdymont@bacwa.org.

Selection Process and Contracting

Following receipt of proposals, the BACWA Board will evaluate the proposals and may elect to hold interviews by videoconference with one or more of the Proposers or forego interviews and simply select the best proposal. Following a selection, a contract will be negotiated. The contract will specify a not to exceed amount with billing for services on an hourly basis as required to complete the Scope of Work.

The starting date of the contract is negotiable. The term of this agreement shall not extend beyond July 30, 2021 but may be extended for additional one-year terms at BACWA's discretion. The contract total is anticipated to be in the range of \$110,000 - \$140,000 with the actual amount to be set after completion of negotiations. If, upon reaching the end of the term of the contract, the Board elects to extend the contract, the amount of the extended contract will be negotiated at the time the contract is extended.

Selection of the consultant shall be based on the following criteria:

Criterion	Weight
Familiarity with SF Bay Region regulatory issues	5
Technical/scientific Expertise	5
Knowledge of wastewater engineering	5
Communication and writing skills	5
Hourly billing rate	5
Total	25



Dear BayCAN Member,

The Bay Area Climate Adaptation Network (BayCAN) is a regional collaborative network of local governments and their partners designed to help the Bay Area respond effectively and equitably to the impacts of climate change on human health, infrastructure and natural systems.

As we head into BayCAN Year 3, we hope you are benefiting from our new and expanded services. BayCAN's Equity Work Group, the new "Assessment to Adaptation" (AtoA) Work Group, our one-on-one consultations, the PSPS/Microgrid/COVID webinar in a few weeks, the big July all-region meeting—these are all designed to help you protect and support your area's health, infrastructure, and natural systems. (Coming soon from BayCAN: How Bay Area resilience work can create good paying jobs and help your community recover.)

BayCAN exists because our local government members support our lean and mean budget with a sliding scale fee structure. These fees are your ticket to participation, and our fuel to continue this work. Our annual budget is primarily dedicated to our two (very) part time staffers, Director Bruce Riordan and Project Manager Yeshe Salz. These are the people who really make BayCAN go. Last year, we raised a little over \$82,000 from our 42 members, which funds our newsletter, web site, regional and sub-regional meetings, working groups, webinars and, most importantly, our on-going networking platform to help you meet, connect and learn from your peers.

As we are on a July 1 through June 30 fiscal year, renewals are due now for FY20-21 and membership renewal invoices will be sent next week. We know these are difficult budgetary times for local governments, and so we are writing now in advance of invoices going out in order to alert you, provide some guidance on our goals, and offer an opportunity to share your views with us.

Some of our members have indicated that they might have an easier time renewing their participation in BayCAN using current year resources. We are of course fine with this. Others may need more time to pay on a renewal invoice, and we can work with you on this as well.

We have developed the following approach, which we ask you to review:

- 1) Renewals will go out to all existing members within a few days.
- 2) Any members who can renew prior to July 1 using current FY funds will be welcome and much appreciated
- 3) Members who intend to renew in FY20-21: please communicate that intention to us below regardless of the timing for arrival of those funds.
- 4) Members who are uncertain about their ability to renew for next year: please communicate this to us as well.
- 5) Any members who know now that they will not be renewing their membership, please give us a call.

- 6) Policy on participation in BayCAN: We have watched our pennies in Years 1 and 2 and have put aside a small “rainy day fund” which can help get us through July and August while renewals are processed and our overall financial situation becomes clearer. This will allow us to continue to involve our current members in all BayCAN activities until September 1. At that point, depending on expected 20-21 revenue, we will have to consider the very difficult issue of scaling back BayCAN activities, reducing or eliminating staff hours, or shutting down entirely at some point in 20-21.

Again, we know these are tough times. At the same time, we have learned from the pandemic that preparation is critical to successfully facing existential challenges and that our collaboration with you helps us all to be prepared.

Please reach out with any thoughts. Thank you.

Sincerely,

David Behar
Chair, Bay Area Climate Adaptation Network

Sarah Church
Vice-Chair, Bay Area Climate Adaptation Network



The Bay Area Climate Adaptation Network (BayCAN) is a regional collaborative network of local governments and their partners designed to help the Bay Area respond effectively and equitably to the impacts of climate change on human health, infrastructure and natural systems.

Impacts: BayCAN addresses the full range of climate impacts, including heatwaves, drought, extreme storm events, sea level rise, wildfires, and the spread of disease-carrying vectors.

Geography: BayCAN’s geographic focus is the nine-county Bay Area—Santa Clara, San Mateo, Alameda, Contra Costa, San Francisco, Marin, Sonoma, Napa and Solano.

Adaptation Focus: While BayCAN is principally focused on understanding and addressing climate change adaptation, we recognize that adaptation is inextricably linked to both climate mitigation and to other hazards. Therefore, this network engages, as appropriate, with networks and organizations addressing these other issues, but always from the perspective of climate adaptation and resilience.

Partnerships: BayCAN’s activities are designed to complement and add value to the many existing climate-related efforts underway in the Bay Area. To that end, BayCAN develops partnership agreements with these organizations and networks that direct and clarify our working relationships.

Benefits: In 2020-21, BayCAN Members will take part in a wide range of activities, including:

Four BayCAN Member Meetings:

Two Bay Area-wide meetings (half day) per year plus two sub-regional meetings (two each in North Bay, Central Bay, and South Bay) for networking, information-sharing, in-depth presentations from climate experts, and the latest adaptation news on funding, legislation, and more.

Equity Working Group:

The BayCAN Equity Working Group serves as a “Community of Practice” for our members to help embed equity within all our adaptation work. The EWG brings community based organizations and local governments together, conducts trainings, and is developing an Equity Toolkit, among other activities.

Assessment to Adaptation (AtoA) Working Group:

This new BayCAN group (formed in February 2020) is helping members develop the critically-needed road map for moving sea level rise planning from vulnerability assessments to on-the-ground projects.

Webinars:

Six webinars on critical adaptation topics. In the last year, we featured the Public Safety Power Shutoff, COVID and Climate, County-City Collaborations, and the BayCAN Slide Deck.

www.BayCANadapt.org:

Access to news and resources on the BayCAN website www.baycanadapt.org.

BayCAN Monthly Newsletter

News on BayCAN and key regional and state-level activities, including a calendar of events.

BayCAN in the Alliance of Regional Collaboratives for Climate Adaptation (ARCCA):

Network of networks, a forum for engagement with fellow practitioners, State policies and agencies, and statewide funding proposals.

Consultations:

Two Personal Consultations per year with BayCAN staff to help problem-solve your top questions/needs

BayCAN Membership Sliding Scale Dues Structure FY 2020-21

Entity	Level	Annual Dues
Counties		\$5,000
Cities (based on population)	> 250,000	\$5,000
	100,000 – 250,000	\$2,500
	< 100,000	\$1,000
Water and Wastewater Districts (based on population served)	> 1 million	\$3,000
	500,000 – 1 million	\$2,000
	< 500,000	\$1,000
NGOs/Consortiums/ Independent local agencies/ Special Districts (based on annual revenue)	> \$5 million	\$2,500
	\$1 million – \$5 million	\$1,500
	\$500,000 - \$1 million	\$500
	< \$500,000	\$250
Private Sector (based on annual revenue)	> \$5 million	\$5,000
	\$1 million – \$5 million	\$2,500
	\$500,000 - \$1 million	\$1,500
	< \$500,000	\$500

*** Membership provides access to all BayCAN activities for all staff in the member organization

**Committee Notes are available [online](#).
28 attendees representing 21 member agencies**

Regional Water Board Report (Debbie Phan)

- The Regional Board is currently accepting nominations for the 2020 Dr. Teng-chung Wu Pollution Prevention Award. Please send nominations to [Debbie Phan](#) by July 10.
- RWB staff working on creating a map for collection systems/POTW service areas in the Bay Area. Effort is put on hold for now.

Updates on Committee Activity

- Spring campaign: started off with flea/tick messaging (through 3/30) and shifted to wipes in April, to address the COVID-19 crisis. The wipes campaign has been very successful with over 100,000 people watching the [video](#) from Central San. SGA will send a final campaign report to the committee, to be added to the BAPPG Annual Report.
- Pesticides: BAPPG signed on to a comment letter submitted May 15 and developed by the California Product Stewardship Council in support of listing carpets and rugs containing Perfluoroalkyl or Polyfluoroalkyl Substances (PFAS) as a 'Priority Product' under DTSC's Safer Consumer Products Program. Committee is currently reviewing several letters on EPA site assessment.

Presentation on Pollution Prevention in the time of COVID-19

- The featured presentation focused on agencies' experiences adapting their pollution prevention programs to the new norms of the COVID-19 public health emergency. SFPUC, West County, Palo Alto, and SVCW [presented](#) on their experiences followed by a round table discussion where attendees share other agencies' experiences.
- Activities such as public outreach, pretreatment inspections, etc. can be challenging in these times.
- Common approaches for operational changes are staggered shifts, face coverings and health checks (for staff and visitors alike), working from home when possible, reducing sampling and inspections at businesses.
- Common themes for changes in outreach include holding more virtual events, focus on social media presence, shift to virtual classrooms.

Committee Leadership Announcement

- For FY20/21, Robert Wilson and Autumn Cleave are continuing as co-chairs and Joe Neugebauer is continuing as vice-chair. Robert Wilson has accepted a new position at the City of Santa Rosa, but his involvement with BAPPG is not changing.

Next BAPPG General Meeting: August 5, 2020. This is the Committee's Annual Pollutant Prioritization Meeting when the group selects pollutants of interest for the next fiscal year (FY21/22).

Committee Request for Board Action: none

47 attendees (via teleconference only) representing 24 member agencies; SWRCB/ELAP staff

Chlorine Residual Basin Plan Amendment

The Regional Water Board held a CEQA Scoping [Meeting](#), the first step towards adoption of a Basin Plan (BP) Amendment on May 22. A draft Staff Report is expected in July, followed by a public comment period. Adoption is expected at the Regional Water Board November meeting.

The proposed Basin Plan chlorine objectives are based on EPA criteria (0.013 mg/L) as 1-hr average; permit limits to be based on the objective and include full dilution. Current 0.0 mg/L instantaneous maximum limit will be removed from BP. The RWB proposed an RL of 0.05 mg/L be included in the BP, whereas the POTW community feels that 0.1 mg/L is more realistic. BACWA is working to provide supporting documentation for a higher ML.

COVID-19 prevalence in wastewater – Bay Area studies

Attendees discussed their agencies' experiences participating in recent studies evaluating the prevalence of the COVID-19 virus in wastewater (as a gauge of presence in the community). A number of agencies had filled out a [survey](#) on the topic. Many of those who sent samples to research labs are awaiting results.

Revised ELAP Regulations – discussion with Christine Sotelo (ELAP)

Most of the meeting was dedicated to a [presentation](#) and Q&A with ELAP staff regarding the transition to the new TNI-based ELAP regulations. Highlights are noted below:

- The regulations are expected to go into effect on October 1 and agencies will have 3 years to achieve full implementation.
- ELAP has been getting a lot of questions around requirements for the application process for certificate renewals. Staff directed attendees to a [roadmap](#) infographic outlining this process for various situations, dependent of when current certification expire.
- ELAP intends to hold 20 workshops during the transition period. Staff also noted that they will setup telephone consultations with individual labs to provide personalized help.
- ELAP has also gotten many questions around Third-Party Assessments (TPAs). A TPA [webinar](#) explaining the TPA process was held on June 8. Many questions are addressed in the TPA [FAQs](#) and related [infographic](#).

In other ELAP-related news, there is a FY 20/21 Fees Stakeholder [meeting](#) scheduled on June 11, 10a-12p

Microplastics

DDW has proposed a [definition](#) of microplastics in drinking water that is expected to be adopted at the June 16 SWRCB [meeting](#). Comments/ response to comments (including by CASA and SFEI) are available [here](#).

PFAS

Sampling at POTWs: 13267 Orders requiring PFAS monitoring at POTWs >1MGD expected June/July. Anticipated requirements: one year of quarterly influent, effluent, and biosolids monitoring to begin the last quarter of 2020. BACWA is working with the Regional Water Board on an alternative approach for the Bay Area (through the RMP).

New [Environmental Screening Levels](#) (ESLs) for PFAS were recently proposed by the SF Regional Water Board.

Committee Leadership

Dan Jackson (Union Sanitary District) and Nicole Van Aken (FSSD) are the committee chair and vice-chair, respectively, for FY20/21. Attendees thanked Jason Mitchell (EBMUD) for his leadership this current FY.

Next meeting: August 9, 2020

Committee Request for Board Action: None

36 attendees by teleconference, representing 19 member agencies.

Report from BACWA Board-Regional Water Board joint [meeting](#) on June 4

- COVID-19 Response: Regional Water Board noted that they are planning procedures for re-starting inspections and asked for feedback. Agency representatives responded that they could accommodate inspections but would like advanced notice to make sure procedures are in place to accommodate visitors on site.
- Other business not on the agenda: RWB staff would like some information on what agencies are doing (if anything) to plan for climate change and sea level rise. The request is not intended to be as extensive as a 13267 Order; they would just like to get an understanding of on-going efforts. It was agreed that BACWA Board will discuss and report back with a proposed approach/level of effort for collecting this type of information.
- Other topics from the meeting are covered in items below

Toxicity Provisions Update

- The State Water Board recently provided a preliminary 3-page [document](#) with a summary of anticipated revisions to the toxicity provisions. There are many issues of interest to dischargers; highlights noted below.
 - Allow data from within 10 years (as opposed to 5 years) to be used to determine the most sensitive species
 - The requirement to include effluent limitations without first demonstrating reasonable potential was adjusted so that the requirement applies only to POTWs >5MGD and that have a pretreatment program.
 - Regional Water Boards to consider scheduling constraints when setting the start of the “calendar month” and allow dischargers additional time to initiate MMEL compliance tests if the test does not meet test acceptability criteria or if the test was not completed due to circumstances outside of the discharger’s control.
- The State Water Board is expected to release the full revised provisions on July 7, with a comment period through August 24. Adoption is expected December 2020. The schedule is preliminary. A meeting with the State Water Board, Regional Water Boards, and the Summit Partners will be scheduled to discuss the anticipated changes and release of the revised provisions.

Chlorine Residual Basin Plan Amendment

- The Regional Water Board held a CEQA Scoping [Meeting](#) on 5/22, the first step towards adoption of a Basin Plan (BP) Amendment. A draft Staff Report is expected in July, followed by a public comment period, and a planned adoption at the Regional Water Board November meeting.
- The proposed Basin Plan chlorine objectives are based on EPA criteria (0.013 mg/L) as 1-hr average; permit limits to be based on the objective and include full dilution. Current 0.0 mg/L instantaneous maximum limit will be removed from BP. The RWB proposed an RL of 0.05 mg/L be included in the BP, whereas the POTW community feels that 0.1 mg/L is more realistic. BACWA is working to provide supporting documentation for a higher ML.

Nutrients

Nutrient Discharge Reduction Studies: Response to HDR RFI on Recycled Water and Natural Systems studies is due June 19, but extensions can be granted if agencies are experiencing challenges due to COVID-19.

Regulatory vision for the third Nutrient Watershed Permit: The Regional Water Board has recently provided BACWA with a 4-page document outlining a regulatory vision for the third Nutrient Watershed Permit. The document was discussed at the June 4 BACWA-RWB meeting and again at the Permits meeting. Highlights from the discussion are noted below. BACWA ED and Board will continue discussions with the RWB staff and reports back to the group.

- The vision lays out a sustained monitoring and modeling program, as well as load caps (mentioned in the second permit’s fact sheet) implemented using antidegradation as a rationale.
- It also would require regional planning for further nutrient load reductions (with possible trading within subembayments), and corrective action plans by individual agencies, should the science indicate the Bay is impaired by nutrients in the future.
- Regional Water Board staff noted that they would hope the science questions around what constitutes impairment will be answered in the current permit term. Staff indicated that, if circumstances warrant (like delays around COVID-19), it is possible to extend the term of the current permit in order to complete the science studies.

Exfiltration – Updates on Baykeeper’s Notice on Intent to sue Mountain View and Sunnyvale

- The group discussed the recent notices of intent (NOIs) to sue from SF Baykeeper to the cities of Mountain View and Sunnyvale. No updates from the affected cities; response is still in negotiations. A study to evaluate exfiltration in Region 9 (San Diego) is underway; more information is needed before pursuing something similar in the Bay Area. BACWA will monitor Region 9 developments on this issue and provide updates as needed.

Upcoming Permits

June: Treasure Island, no issues noted
Novato Sanitary District, no issues noted
July: Las Gallinas Valley Sanitary District, no issues noted

CECs

PFAS

- Sampling at POTWs: 13267 Orders requiring PFAS monitoring at POTWs >1MGD expected June/July. Anticipated requirements: one year of quarterly influent, effluent, and biosolids monitoring to begin the last quarter of 2020. BACWA is working with the Regional Water Board on an alternative approach for the Bay Area (through the RMP).
- New [Environmental Screening Levels](#) (ESLs) for PFAS were recently proposed by the SF Regional Water Board.

CEC monitoring at POTWs – review White Paper

- Group discussed draft BACWA White Paper that lays out approach for monitoring CECs at Bay Area POTWs. Comments were discussed and a final version will be presented to the BACWA Board. The White Paper will also be shared with the Regional Water Board and may inform the anticipated PFAS monitoring study.
- Microplastics:** DDW has proposed a [definition](#) of microplastics in drinking water that is expected to be adopted at the June 16 SWRCB [meeting](#). Comments/ response to comments (including by CASA and SFEI) are available [here](#).

Committee Leadership transition

Mary Lou Esparza (Central San) and Jennie Pang (SFPUC) are the committee chair and vice-chair, respectively, for FY20/21. Attendees thanked Samantha Engelage (Palo Alto), in absentia, for her leadership this current FY. This was Leah Walker's (Petaluma) final Permits Committee meeting before retirement and also Robert Wilson's final meeting (currently with Petaluma) before moving into a new position with the City of Santa Rosa.

Announcements

- Revised ELAP Regulations adopted 5/6; anticipated effective date October 2020, with 3-year implementation period. ELAP staff presented at the BACWA Lab Committee meeting. More information available in the Lab Committee Board Report and meeting minutes.
- This was Leah Walker's (Petaluma) final Permits Committee meeting before retirement and also Robert Wilson's final meeting (currently with Petaluma) before moving into a new position with the City of Santa Rosa.
- BACWA member news section in Bulletin – contact Alina

Next BACWA Permits Committee Meeting: August 11, 2020.

Pretreatment Committee – Report to BACWA Board

Pretreatment Committee Meeting: 06/04/2020
Executive Board Meeting: 06/19/2020
Committee Chairs: Tim Potter, Michael Dunning

Committee Request for Board Action: None

06/04/20 Meeting – 41 attendees representing 21 agencies (remote participation only)

1. COVID-19 Engagement with Regulators – Template Letter

- The June meeting focused on a debrief from a May meeting with committee leaders, BACWA ED, and RWQCB staff. That meeting discussed pretreatment program issues associated with agencies' response to the pandemic. One outcome was the development of a template letter that an agency can consider using, if the response to the shelter in place orders results in the internal approved pretreatment program standards not being met (e.g., a commitment to monthly or quarterly sampling). The letter would notify the RWQCB of this condition and identify that the details of the program changes will be communicated in the required pretreatment program reports. The template letter was shared with attendees ahead of time and discussed during the meeting.
- Committee leaders reviewed the template letter and took questions from attendees. Feedback was positive and the letter was well-received by the group. In brief, the letter covers the following potential issues:

- Suspension of in-person inspections or inspection related to IU surveys
- Suspension of IU sampling

The letter also makes clear that federally-mandated requirements, such as ones listed below, continue to be met.

- Track IU discharge and reporting violations
- Issue enforcement actions
- Respond to any reported accidental discharges or emergency bypass requests
- Continue to issue IU permits
- Committee leaders also noted that RWQCB asked that variations from pretreatment program requirements be noted in the semi-annual and annual reports, and not in the monthly NPDES self-monitoring reports. Standardized text to consider including in the monthly NPDES self-monitoring reports to identify when internal approved pretreatment program standards were not met was discussed. The discussions during the May meeting with RWQCB staff emphasized the use of this text should only be used when the program's internal approved pretreatment program standards were not met during the reporting period and should not be used as a precautionary notification.

2. Round Table: Pretreatment Programs in the Age of COVID-19

Attendees shared their agencies' experiences/ modified operations during the current public health crisis. Some common themes are noted below:

- Many agencies suspended or minimized field activities (inspection and sampling); focusing first and foremost on meeting federally-mandated minimums for SIUs: one inspection and two sampling events (at least one event conducted by agency)
- Emergency call-outs still taking place

- Continue to receive and review IU data and reports
- Rotating staff between working from home/ shifts in the office
- WFH has its challenges (such as accessing internal databases and work files)
- Timely enforcement is challenging; agencies are focusing on high-priority cases
- Some agencies have been conducting virtual inspections – asking IU representative to walk around facility during video call
- On-site inspections are different now: most are announced (partially to make sure IUs are open and have SOPs in place for visitors); masks and social-distancing are required.

3. Next meeting: TBD, third quarter of 2020

Committee Request for Board Action: none

Detailed notes from meetings are posted [online](#).

29 attendees (all participating remotely) representing 12 member agencies

Updates on funding opportunities:

Federal:

- WIIN Act:
Funding: Bureau of Reclamation has yet to release list of projects to be funded under FY19, thus also delaying the list for FY20. Due to all the delays, it appears that the plan is to skip the FY20 award selection process and distribute the FY20 grant total (~ \$20M) to the FY19 awardees. After the FY19 award list is transmitted to Congress, Reclamation will likely turn their focus to a FY21 FOA for late summer/fall, depending on the appropriations process. No money has been appropriated for FY21 yet, but they're anticipating another \$20M.
Reauthorization bills: Bills waiting in the background as Congress focuses on COVID-19 relief bills. This includes Napolitano's bill (H.R. 1162) to reauthorize the program at \$500M. The same provisions were in a draft bill by Huffman, which they expect to introduce soon (possibly within a month).
- Title XVI:
Application period ended Feb 19; applications are under review. A second application deadline is expected, for proposals to be considered for FY21 funding, contingent on appropriations.

State (BAIRWM Prop 1):

- The final awarded [projects](#) from the San Francisco Bay Area funding have been posted. They total close to \$23M. The next phase is drafting the funding agreements with DWR.
- Governance: Changes to the governance language for the BA IRWMP will be presented for adoption at the 6/22/20 Coordinating Committee meeting. The main changes are to add DAC and tribal representation as voting members to the Committee along with Function Area representatives. If the language changes are approved by the Coordinating Committee, the changes will need to be incorporated into the BAIRWMP during the next update.
- Status of the Plan Update: The 2019 Plan Update was posted on DWR's website for a 30-day public review period ending 3/21/19. DWR subsequently found the Plan to be consistent with the 2016 IRWM Guidelines.

EPA's Draft National Water Reuse Action Plan

The group received updates on the status of collaboration opportunities on EPA's Draft National Water Reuse Action Plan, specifically proposed action 2.2.16. The project team Scope of Work/ contract has been reviewed and is pending approval. The team is in the process of doing a literature review as well as finalizing a list of sites/agencies for further study. They are looking at South Bay Water Recycling/ City of San Jose/ Valley Water as potential sites of interest.

Transition to State General Order

On 4/8/2020, Regional Water Board staff released the Notice of Applicability (NOA) and associated Monitoring and Reporting Program (MRP) letter to transition agencies enrolled under Region 2 Order 96-011 to the State General Order 2016-0018 (WRR for Recycled Water Use). All but four permittees were transitioned; the four remaining agencies will be enrolled at a later date following a review by DDW.

At the meeting, Melissa Gunter and Maggie Monahan (Regional Water Board) encouraged agencies to review the NOA and MRP carefully for requirements specific to their agency's level of treatment. Agencies have the rest of the 2020 to adapt to the new monitoring/ reporting requirements. Permittees need to keep track of activities like setting up new sampling procedures, SCADA programming, etc. and document any delays in implementing new monitoring requirements in the 2020 annual report, due April 2021.

DWR California Building Standards Proposed Changes (Olson)

Committee discussed DWR's proposed changes to the Building Standards and decided there was no need for the Committee to submit comments.

Update on State Water Board Volumetric Reporting

The deadline for the 2019 volumetric annual report for compliance with Order No. 2019-0037-EXEC was extended to June 30, 2020.

Regional Recycled Water Update

Mike Falk (HDR) reported that prepared and sent out a Request for Information (RFI) to permittees. The deadline for completion is June 19, but individual extensions can be granted if agencies are experiencing staffing/operation challenges due to COVID-19. HDR is conducting four webinar trainings to help agencies fill out the RFI.

Legislation and Regulatory Updates

- a. Water Research Foundation - DPR Regulation Research: Add COVID-19 into research and completed by 2023 deadline
- b. Legislation
 - i. Members asked to scale down bill packages to COVID response/recovery, homeless, wildfire, and other pressing issues
 - ii. Policy committee to hold only one hearing; bills originally double referred will change to single referrals
 - iii. Letters can be submitted on committee website/ portal
- c. Budget Update: revised budget expected in August after 7/15 tax receipts
- d. Climate Resilience Bond Update: likely to end up as a broader stimulus package
- e. Letter to Governor from Legislators calling for funding and accelerated job striation by streamlining shovel ready projects (including water recycling).
- f. Introduced Bills to Date
 - i. AB 3256 (Garcia) Assembly Bond Vehicle: heard by Assembly Natural Resources on 5/13; request for \$750m = \$1b in grants and low interest loans for water recycling as stand-alone program
 - ii. AB 2560 (Quirk) Water quality notifications: move the bill
 - iii. SB 996 (Portantino) CECs: sponsors asked to shelve bill and reintroduce in 2021
 - iv. SB 1052 (Hertzberg) Stormwater Capture Reuse: sponsors asked to shelve bill

Next Meeting – Tuesday, May 19, 2020, 10:30 am to 12:30 pm, teleconference only



BACWA ACTION ITEMS

Number	Subject	Task	Responsibility	Deadline	Status
Action Items from April 17, 2020 BACWA Executive Board Meeting			resp.	deadline	status
2020.05.60	RPM Recruitment	Develop recruitment post for June meeting	ED	6/12/2020	complete
2020.05.61	Nutrient Trading	Freshwater Trust to be invited to next meeting & email asking for group questions.	ED	5/31/2020	complete
2020.05.62	Exfiltration Study	Agendize in special meeting with Water Board in early June to determine next steps	ED	5/31/2020	complete
2020.05.63	ELAP Adoption	Send Lab meeting invite to BACWA regarding Lab meeting and slides from hearing if received	RPM	5/31/2020	complete
2020.05.64	Designation of JPA signatory designee	Coordinate call with attorneys to discuss further	ED	5/31/2020	complete
Action Items Remaining from Previous BACWA Executive Board Meetings					
2019.8.12	BAAQMD Permit Backlog	Set up separate meeting to discuss with Air District management	RPM/ED	11/30/2019	pending
2019.7.05	Sewer Rate Survey	Post as Google Sheet, and publicize update	RPM	8/31/2019	pending
2018.4-93	Website Policy	Add reference to regulatory requirements for Agency websites	ED	4/30/2019	pending
FY20:	63 of 64 Action Items completed				
FY19:	109 of 110 action Items completed				
FY18:	66 of 66 Action Items completed				
FY17:	90 of 90 Action Items completed				

NUTRIENTS:

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

- Discussed 2nd and 3rd WS permit and trading strategies with Freshwater Trust
- Attended expert workgroup meetings on DO in LSB on May 5 and May 21
- Attended and drafted summary 5/6 NMS Planning Subcommittee meeting
- Attended NTW meeting on 5/29
- Reviewed and made suggested edits to NMS Charter
- Discussed NMS program with Water Board staff
- Reviewed Water Board vision statement for WSP 3.0

BACWA BOARD MEETING AND SUPPORT

- Conferred with BACWA counsel on designation of Signatory per Joint Powers Act of CA. Arranged and participated in a multilateral call with counsel to Central San, ASC, BACWA, and EBDA on significance of designation of signatory.
- Developed table of member agencies' restriction on power/contracting policies
- Edited minutes and action items from 4/17 meeting
- Worked with BACWA staff to plan and manage 5/15 BACWA Executive Board meeting
- Conducted the monthly agenda review with the Chair of BACWA
- Planned 6/4 joint meeting with RWB
- Continued to track all action items to completion

COVID-19:

- Worked with committees to transition to teleconference meetings
- Communicated with member agencies on regulatory concerns and requests for information
- Discussed wastewater-based epidemiology (WBE) with members and ReNUWIt
- Participated in ReNUWIt WBE webinar
- Participated in CWEA Webinar on POTW management during COVID-19

COMMITTEES:

- Hosted COVID-19 focused managers Roundtable Meeting on May 28
- Drafted BABC Summary for March meeting
- Met with Pretreatment Committee chairs to discuss template letter for COVID-19 inspection practices reporting to the Water Board
- Participated in BABC teleconference meeting May 10 and drafted meeting summary
- Planned and participated in Recycled Water Committee meeting
- Participated in Pretreatment Committee meeting

REGULATORY:

- Reviewed May update of Regulatory Issues Matrix
- Discussed exfiltration with member agency and consultant
- Attended 5/13 RWB meeting, including PFAS item
- Participated in call with SWB staff on PFAS investigative order
- Discussed regional strategy for PFAS monitoring on calls with Water Board, BACWA members, RMP

- Prepared for and participated in call with lab committee members to develop strategy for communicating with
- Participated in 5/22 CEQA scoping meeting on Chlorine Residual BPA
- Prepared for and participated in call with Water Board staff and lab committee members regarding finalizing Chlorine Residual Basin Plan Amendment and ML.
- Discussed biosolids information request with RWB staff and communicated their response to members

FINANCE:

- Reviewed the monthly BACWA financial reports, summary, and budget to actual tracking sheet for April
- Worked on FY21 Chart of Accounts with AED
- Reviewed and approved invoices
- Developed authorizations to correct previous contract errors

COLLABORATIONS:

- Participated in 5/12 Clean Water Summit Partners meeting
- Participated in 5/20 SFEP Implementation Committee meeting
- Discussed BACWA research interests with WRF staff

ASC

- Discussed ASC and BACWA JPA signatory designation with ASC ED and SJ Board member
- Reviewed materials sent via email by ASC ED

BABC:

- Attended 5/12 meeting and produced May meeting summary.

ADMINISTRATION:

- 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 updating of web page and provided general direction to BACWA staff.
- Worked with the RPM in the preparation of the monthly BACWA Bulletin.
- Developed and responded to numerous emails and phone calls as part of the conduct of BACWA business on a day-to-day basis.
- Worked with AED to streamline committee signups to Google Groups
- Worked with AED on Brown act compliance for agendas posted to website

MISCELLANEOUS MEETINGS/CALLS:

- Worked with BACWA Chair and Committee Chairs on items that arose during the month
- Other miscellaneous calls and inquiries regarding BACWA activities
- Responded to Board members requests for information



Regulatory Program Manager's Report to the Board

May 2020

REGULATORY COMMENTS: None.

COLLABORATIONS: Attended CASA Water Regulatory Workgroup (5/21).

COMMITTEE SUPPORT:

BAPPG – Prepared April meeting minutes. Attended 5/12 Steering Committee meeting.

Collection Systems – Prepared Board Report from April meeting.

Laboratory – Prepared Board Report from April meeting. Exchange with committee leadership and regulators regarding recent adoption of revised ELAP regulations. Coordinated Committee feedback on ELAP's request for input on Third-Party Assessments. Participated in 5/19 pre-planning meeting ahead of RWB meeting on chlorine BP Amendment; attended 5/22 CEQA meeting. Prepared Google sheet survey on Bay Area POTWs' participation in studies on COVID-19 prevalence in wastewater.

Recycled Water – Attended 5/19 Committee meeting. Updated committee roster.

Permits – Prepared Board Report from April meeting.

Executive Board – Attended 5/15 meeting, provided input on EB minutes and action items.

BACWA BULLETIN – Prepared May Bulletin.

OTHER REGULATORY TASKS – Completed updates to the Regulatory Issues Matrix; prepared revisions to BACWA CECs White Paper. Attended CWEA-CASA Webinar on COVID-19 in wastewater (5/6). Attended Regional Water Board PFAS informational workshop (5/13). Attended NACWA Pretreatment conference: national updates and PFAS (5/12-5/13).

ADMINISTRATION/STAFF MEETING – Met with BACWA ED and AED to prepare for May activities and discuss BACWA operations.

MEETINGS ATTENDED:

Staff meeting (5/4), BAPPG Steering Committee (5/12), Regional Water Board PFAS informational workshop (5/13), Executive Board (5/15), Recycled Water Committee (5/19), Chlorine ML Approach strategy call (5/19), CASA – Water Regulatory Workgroup (5/21), Chlorine BP Amendment CEQA Scoping meeting (5/22).

From: Jared Voskuhl <JVoskuhl@casaweb.org>
Sent: Wednesday, June 3, 2020 3:45 PM
Subject: [Regulatory] CASA June 2020 Regulatory Update



Good afternoon,

Please find updates from May and for June below. Our next Regulatory Workgroup meetings will be on Thursday, June 11, and both of the committees' calls will begin at 8:30 AM. Please let us know if you have any questions about the information included in this message. We hope you're staying healthy and safe.

Thank you,
The CASA RWG Team

COVID-19

WRF's Congressional Briefing on Sewershed Surveillance, WEF's Residuals and Biosolids Report

On May 21, the Water Research Foundation (WRF) participated in a Congressional Briefing on the genetic fingerprint of COVID-19 in sewersheds. You may view the presentation [here](#) and the slides [here](#). Additionally, the Water Environment Federation (WEF) released its [residuals and biosolids document](#) pertaining to COVID-19 survivability, on which CASA contributed to its development.

CASA Website Updates, CDC Letter, and Upcoming Webinars

CASA continues to update our [COVID-19 webpage](#) with new resources for [best practices when reopening businesses](#), updated information on [FEMA/CalOES application processes](#), and [a library of articles and research](#) specific to wastewater based epidemiology (WBE). Additionally, CASA [submitted a letter to the CDC](#) on June 2 to support their serving as the federal coordinating agency for WBE, which entails monitoring influent wastewater and/or primary sludge for the RNA of SARS-CoV-2. CASA included a [fact sheet](#) which was developed to explain what WBE is and why it is important. CASA and CWEA are co-hosting the [third free webinar in the series on COVID-19 and wastewater on June 16](#), along with [a webinar on wet wipes on June 18](#), and CASA staff will be speakers at both. And, through Greg Kester's leadership, CASA also provided quotes to [an article in Consumer Reports](#) on the safety of going to the beach during the COVID-19 crisis and provided input on the development of an excellent [fact sheet](#) about the fate of COVID-19 in biosolids and wastewater, jointly released by the Central States Water Environment Association, Illinois WEA, and Illinois Association of Wastewater Agencies.

WATER

Revised Toxicity Provisions Tentatively Scheduled for Release in July

The State Water Resources Control Board (SWB) tentatively is planning to release in the first half of July the revised toxicity provisions, staff report, and response to comments on the July 2019 version of the provisions, followed up by a staff workshop in the second half of July. CASA will be meeting with SWB staff later this month for an update about what's new in the pending materials. Please reach out to [Adam Link](#) with questions.

OPC Meeting on June 19 – Items Proposing a California OAH Monitoring Network and Microplastics Research in Wastewater

The Ocean Protection Council released its [agenda](#) for their next meeting which will be held on Friday, June 19. There will be updates for items on ocean acidification and hypoxia (OAH), as well as for microplastics. The OAH item will feature a presentation from Steve Weisberg of the Southern California Coastal Water Research Project (SCCWRP) with recommendations for enhancing California's OAH monitoring network, followed by another presentation by senior OPC staff for authorization to disburse funds for a model to assess anthropogenic nutrient impacts on OAH. The microplastics item also features presentation by OPC staff for authorization to disburse funds for identifying sources and pathways of microplastics in stormwater and the efficacy of various treatment methods on microplastic removal. Written comments for these items are due by 5pm on June 17, 2020. Please reach out to [Jared Voskuhl](#) if you have questions or input for consideration.

Multiple SWB Workshops on Fees in June

The SWB will be hosting multiple fee workshops the week of June 8. There will be a Water Quality Fees meeting on June 9. Due to the [Department of Finance's "workload budget"](#) in response to COVID-19, there has been close attention to how water quality fees for FY 20-21 would change from [the initial projections in March](#). The [revised figures on June 2](#) were released, and from March's estimates, fees are projected to increase further by 3% for both WDR and NPDES fees, reflecting a 13.9% and 14% increase respectively over 2019-20 levels. The three Budget Change Proposals (BCPs) to which these are attributed are for the [Governor's resiliency portfolio](#), [assessing surface water quality](#), and [the cannabis program](#), while notably the Harmful Algal Blooms and Stormwater BCP's have been withdrawn and are not listed. Staff informally have indicated their intent is ideally for fees to not be increased this year at all by using a combination of mitigation measures available to offset the programmatic increases, and more formal info about this will be shared on June 9, but the matter ultimately will be contingent upon the state budget that is passed in mid-June and corresponding funding allocations. With regard to all of the changing costs under ELAP following the May 5 adoption of the updated regulations, there will be a June 8 [workshop about contracting with third-party assessors](#) who perform the statutorily required on-site assessments, and a second one on June 11 on the new fee structure for the program. Please reach out to [Jared Voskuhl](#) if you have questions.

June 8 @ 10:30 AM – 12 PM: ELAP, [Third-Party Assessor Workshop](#)

June 9 @ 9 – 10 AM: [Water Quality Fees](#)

June 11 @ 10 AM – 12 PM: ELAP, [Program Fees](#)

SWB PFAS Investigative Order Update

The SWB is planning to release its Phase 3 investigative order later this summer, with an intent for sampling to begin in 4Q 2020. Details are short, but it appears the Order will require facilities with design flows above 1 MGD to sample their influent and effluent

quarterly for one year. Facilities between 1 and 5 MGD will need to sample their biosolids once, and facilities above 5 MGD must quarterly sample their biosolids for one year. While this is an improvement from the original proposal of 2 years of monitoring, CASA still has concerns with the costs for agencies to perform such widespread testing. Unfortunately, the investigative team has not been persuaded with our methodological concerns and how the value of the data may be reduced by the lack of an approved method for wastewater compounded by the absence of standardization between the labs which are accredited by ELAP to use the DOD QSM (which is *not* a method) for nonpotable matrices. Unlike Phase 1 and Phase 2 orders however, POTWs will not have to develop and submit sampling workplans to the regional boards for approval before sampling commences. Rather, only submission of the data through GeoTracker will be required, along with the completion of an annual report at the end of the year. Please let us know your agency's input on this proposal and whether you think it is an acceptable compromise or if there are concerns with its feasibility by reaching out to [Jared Voskuhl](#).

California Water Quality Monitoring Council Releases Draft of Revised Interagency MOU

The California Water Quality Monitoring Council (Council) released a draft [revised Memorandum of Understanding \(MOU\)](#) to update their [2007 MOU](#) between the California EPA and the California Natural Resources Agency (CNRA). The changes also are reflected in this [redlines version](#) and are substantial, plus numerous new state agencies are added as part of the MOU. As you may recall, last year CNRA withdrew from the 2007 MOU, which is the predicate for this revised version. If you're unfamiliar with the Council, you may read more information about their background [here](#), or review their chartering legislation, [SB 1070 \(Kehoe, 2006\)](#), which establishes the Council as a public information hub for the public and an entity for coordinating water quality monitoring efforts around the state. The current list of Council members may be viewed [here](#), and they include representatives from CASA, ACWA, and CASQA from the regulated community and SCCWRP for the scientific community. The various workgroups may be viewed [here](#), and a listing of CASA members' representation on them is available [here](#). If you are able, please review this information and reach out to [Jared Voskuhl](#) if you have any comments on the newly drafted MOU, would like more details about how the Council or its workgroups operate, or are interested in participating in their workgroups.

CASA, CVCWA, Others Submit Letters to the State Water Board about Analyzing the Economic Feasibility of MCLs

CASA submitted [comments](#) on the State Water Board's [White Paper](#) for assessing the economic feasibility of a hexavalent chromium MCL. You may view [here](#) the State Water Board's workshop on the White Paper. As you may remember from 2017, a [California Superior Court rejected](#) the previously adopted MCL due to features in the State's economic analysis supporting the MCL during the rulemaking process. Letters on the White Paper were also submitted by the [Central Valley Clean Water Association](#), the [Association of California Water Agencies along with the California Municipal Utilities Association and California Water Association](#), and [Downey Brand](#) on behalf of their impacted clientele. Please reach out to [Jared Voskuhl](#), if you have questions.

June 30 Due Date for Recycled Water Volumetric Annual Reporting – Submissions are Currently near 50%

On April 29, the [SWB officially extended the April 30 deadline](#) for recycled water volumetric annual reporting to June 30. These reports are required under [Executive Order 2019-0037](#), for which the State Water Board released multiple materials including a [FAQ](#) and a [Help Guide for GeoTracker](#) to assist the 800+ permittees affected by the changes to monitoring and reporting programs for WDRs, NPDES permits, water

reclamation requirements, master recycling permits, and general waste discharge requirements. During the program's informational update to the SWB on June 2, it was shared that approximately 400 of 800 permittees had submitted their annual report. For questions about preparing your report, reach out to [Rebecca Greenwood](#) at the State Water Board.

USEPA Extends Comment Period to June 10 on PFAS Determination

The United States Environmental Protection Agency (USEPA) extended the comment period from May 11 to June 10 for a [preliminary regulatory determination to regulate PFOS and PFOA](#) in drinking water. The end of the notice requests input for potential monitoring requirements, regulatory constructs, and grouping of analytes. The National Association of Clean Water Agencies (NACWA) is receiving input for a comment letter, and you may reach out to [Emily Rummel](#) if you have feedback.

SCAP Leads the Clean Water Sector with Comments on DTSC's Vapor Intrusion Guidance

Earlier this spring, the [Department of Toxic Substances and Control issued guidance on vapor intrusion in buildings](#), along with [supplemental guidance for screening](#). The Southern California Alliance of Publicly Owned Treatment Works prepared comments for which CASA signed-on that are available [here](#). If you are interested in these proceedings, please reach out to SCAP's Executive Director, [Steve Jepsen](#).

LAND

CASA Comments on Climate Action Reserves' Soil Enrichment Protocol

CASA submitted a [comment letter](#) on the [Soil Enrichment Protocol](#) from the Climate Action Reserve (Reserve). "The Reserve is developing a Soil Enrichment Protocol (SEP) that will provide guidance on how to quantify, monitor, report, and verify agricultural practices that enhance carbon storage in soils. The primary GHG benefit targeted will be the accrual of additional carbon in agricultural soils, with hopes to incentivize GHG emission reductions from other sources, such as N₂O from fertilizer use." The protocol is focused on metrics for quantification rather than on how to increase carbon storage and reduce GHG emissions. Biosolids are not mentioned in the report, though "sewage sludge" is included in the Glossary as an organic nitrogen source. Our comments mainly provide a high level recommendation for biosolids to be recognized as a valuable means of increasing carbon storage, reducing irrigation needs, and avoiding fossil fuel intense inorganic fertilizer. Thanks very much to Ryan Batjiaka (SFPUC), Rebecca Overacre (EBMUD), and Sarah Deslauriers (Carollo/CASA) for providing input. If you have any questions, please reach out to [Greg Kester](#).

CalOSHA – Biogas Pipeline Injection

CASA received confirmation of a beneficial decision by CalOSHA relative to their regulations for when a wastewater plant injects biogas into the pipeline or otherwise transports it offsite. This followed from a meeting with staff in Carson at the Joint Water Pollution Control Plant of the Sanitation Districts of Los Angeles County on February 20. The language below articulates what was agreed to in the meeting and can serve as guidance to any public wastewater plants who are contemplating pipeline injection of their biogas. In summary, there are two main mechanisms through which the Process Safety

Management (PSM) program allows exemptions from its requirements in addition to those who are using all or part of their biogas on-site.

Scenario 1: POTW X generates 100,000 pounds of biogas. It uses 91,000 pounds for its on-site energy and/or heating needs and injects 9,000 pounds into the common carrier pipeline. Since less than 10,000 pounds is injected, the exemption is granted. It should be noted that the volume of biogas injected is measured from the point of connection to the point of injection, so includes all gas in piping and any storage units or treatment units along the way.

Scenario 2: POTW Y generates 100,000 pounds of biogas. 51,000 pounds or 51% of it is sold via the retail market (small volume users such as vehicles) and 49,000 pounds is sold on the wholesale market. Since more than 50% of the biogas is sold on the retail market, the exemption is granted. This facility could also use 90,000 pounds for energy or heating needs on-site, sell 5,100 pounds via the retail market and 4,900 pounds via the wholesale market and retain the exemption.

This puts to rest what has been a huge issue for the past several years and opens the door to allow more pipeline injection of biogas from wastewater treatment plants. Many thanks to Tom Fang (LACSD) for his persistence and assistance, as well as the entire team at LACSD, and to John Hake, Micheal Hyatt, and Alicia Chakrabarti (EBMUD) for all of their diligence on this as well. Please contact [Greg Kester](#) if you have any questions or comments.

CASA Comments on DTSC's Proposal to List Carpets Containing PFAS as a Priority Product

[CASA sent a support letter](#) and provided oral testimony to the Department of Toxic Substance Control (DTSC) in support of their proposal to list carpets and rugs containing PFAS as Priority Products. This is a proactive source control approach taken by DTSC to mitigate PFAS use, which we strongly support. Please reach out to [Greg Kester](#), if you have questions or for updates.

USEPA Announces \$3m in Grants for Anaerobic Digestion of Diverted Food Waste

USEPA has announced \$3 million in [grant funding for anerobic digestion projects](#) related to diversion of food waste and other organic materials. Applications are due by July 14, 2020. Additional information is available [online](#) under Funding Opportunity Announcement EPA-OLEM-ORCR-20-02. US EPA expects 10 to 40 cooperative agreements, and grant awards may range between \$50,000-\$300,000. There is an informational webinar on June 2, 2020 about the funding opportunity and applying for it, which you may register for [here](#). Please reach out to [Greg Kester](#) for additional information.

Biogas USA Virtual Webinar

A free virtual webinar is being hosted on June 30 by Biogas USA. The brochure and registration is available [here](#). Please scroll all the way down the page and you will be able to register as a visitor for free. There is also an option which provides a bit more access for \$299. Greg Kester will be one of the speakers talking about the regulations to implement SB 1383 and the challenges and opportunities it provides to the wastewater sector. Biogas USA is still also hoping to hold its in-person conference in late October in Los Angeles, for which Greg also is slated to speak.

Remembering Eliot Epstein

Eliot Epstein passed away on May 17th at the age of 91. You will find [here](#) in BioCycle a very thoughtful remembrance of this pioneer in biosolids composting, by Todd Williams (Jacobs Engineering). Many thanks to Todd for writing it and to Nora Goldstein for publishing it. Eliot was a great person and colleague!

June Biosolids Library

Please find the June [installment](#) on biosolids research and the [abstracts for June's library](#) from Dr. Sally Brown (U of Washington) and Northwest Biosolids. This month's topic is soil health and how biosolids can improve it. If you would like any of the complete articles, please reach out to [Greg Kester](#).

CALENDAR

June 8	SWB ELAP Third Party Assessor Workshop
--------	--

June 9	SWB Water Quality Fees Workshop
--------	---------------------------------

June 10	US EPA Comment Deadline for PFAS/PFOA Determination
---------	---

June 11	CASA Regulatory Workgroup Meetings
---------	------------------------------------

June 11	SWB ELAP Fee Workshop
---------	-----------------------

June 16	SWB Meeting + Adoption of Microplastics Definition
---------	--

June 17	OPC Comment Deadline re: OAH and Microplastics
---------	--

June 19

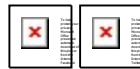
OPC Meeting

June 29 & 30

SWB Water Data Science Symposium

June 30

SWB Recycled Water Volumetric Reporting Deadline



[Visit our website](#)