



**Executive Board Meeting
AGENDA**
Friday, May 17, 2019, 9:00 a.m. – 12:30 p.m.
EBMUD, 2nd Floor Large Training Room
375 11th Street, Oakland, CA

Agenda Item

Time

**Page
Number**

ROLL CALL AND INTRODUCTIONS	9:00 AM	
PUBLIC COMMENT	9:03 AM	
CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER	9:04 AM	
CLOSED SESSION 1 Public Employee Discipline/Dismissal/Release Gov't Code 94957(b)(1)	9:05 AM	
CONSENT CALENDAR 2 April 19, 2018 BACWA Executive Board Meeting Minutes 3 March 2019 Treasurer's Reports	9:30 AM	1-9 10-19
APPROVALS & AUTHORIZATIONS 4 <u>Approval</u> : BACWA Policy on Committee Responsibilities 5 <u>Approval</u> : Contract with SFEI for Nature Based Solutions Study for Nutrient Reductions 6 <u>Approval</u> : Amendment to TDC Environmental Contract 7 <u>Authorization (ED)</u> : Legal & IT Support Amendments FY20 8 <u>Authorization (Chair)</u> : Agreement with SFEI for Technical Assistance on Enterococcus Investigation	9:35 AM	20-21 22-34 35-36 37-39 40-44
OTHER BUSINESS - POLICY/STRATEGIC 9 <u>Discussion</u> : Nutrients a. Regulatory i. Debrief on San Francisco Water Board meeting ii. Review of Request for Proposal for Recycling Report iii. Approach to Contract Management of the Nature Based Solutions Study b. Technical Work i. Science Manager Update c. Governance Structure i. Update on Alternatives for Continuation of the USGS Monitoring Program 10 <u>Discussion</u> : Planning for Annual Meeting with BAAQMD 11 <u>Discussion</u> : Chlorine Residual Basin Plan Amendment 12 <u>Discussion</u> : Review Draft Agenda for the Joint Meeting with WB on 5/20/19 13 <u>Discussion</u> : Collection System Requirements in NPDES Permits 14 <u>Discussion</u> : Key Legislation Update 15 <u>Discussion</u> : Preparation for the Upcoming Microplastics Workshop May 22 Meeting Packet 16 <u>Discussion</u> : Update on the SWRCB Toxicity Provisions 17 <u>Discussion</u> : Participation in the Ethoxylated Surfactants Investigation 18 <u>Discussion</u> : Approach for Completing Analyses Needed for the Enterococcus Investigation	9:45 AM	45-56 57-58 60 61 62 63 64-71
OTHER BUSINESS - OPERATIONAL 19 <u>Discussion</u> : History of Wastewater Treatment in the Bay Pulse History 20 <u>Discussion</u> : TIN as the Basis for the Nutrient Surcharge 21 <u>Discussion</u> : Review of the Updated Regulatory Matrix May 2019 Issues Matrix 22 Discussion: Interface of Biosolids Committee with Bay Area Biosolids Coalition 23 Discussion: Responses to the Request for Qualifications/Proposals for Committee Support in FY 20 24 <u>Discussion</u> : Planning for Recognition at the CASA Executive Director's Retirement	11:30 AM	
REPORTS 25 Committee Reports 26 Member Highlights 27 Executive Director Report	12:10 PM	72-75 76-84

28	Regulatory Program Manager Report		85
29	Other BACWA Representative Reports		
	a. RMP Technical Committee	Mary Lou Esparza, Nirmela Arsem	
	b. RMP Steering Committee	Karin North; Leah Walker; Eric Dunlavey	
	c. Summit Partners	Dave Williams; Lori Schectel	
	d. ASC/SFEI	Dave Williams; Amit Mutsuddy; Karin North April 16 ASC-SFEI Board Packet	
	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	Dave Williams	86-88
	g. NACWA Taskforce on Dental Amalgam	Tim Potter	
	h. BAIRWMP	Cheryl Munoz; Linda Hu; Dave Williams May 6 CC meeting materials	
	i. NACWA Emerging Contaminants	Karin North; Melody LaBella	
	j. CASA State Legislative Committee	Lori Schectel	
	k. CASA Regulatory Workgroup	Lorien Fono May 16 Meeting packet	
	l. ReNUWit	Jacqueline Zipkin; Karin North	89-91
	m. RMP Microplastics Liaison	Nirmela Arsem	
	n. AWT Certification Committee	Maura Bonnarens,	
	o. Bay Area Regional Reliability Project	Eileen White,	
	p. WateReuse Working Group	Cheryl Munoz;	
	q. San Francisco Estuary Partnership	Eileen White; Dave Williams	
	r. CPSC Policy Education Advisory Committee	Coleen Henry	
	s. California Ocean Protection Council	Lorien Fono	
	t. Countywide Water Reuse Master Plan	Karin North	
	u. CHARG - Coastal Hazards Adaptation Resiliency Group	Jacqueline Zipkin	
	v. BayCAN	David Williams, Lorien Fono	
30 SUGGESTIONS FOR FUTURE AGENDA ITEMS		12:27 PM	
NEXT MEETING		12:28 PM	
The next regular meeting of the Board is scheduled for June 21, 2019 from 9:00 am to 12:30 pm at SFPUC, 13th Floor, Hetch Hetchy Room, 525 Golden Gate Ave, San Francisco, CA.			
ADJOURNMENT		12:30 PM	



Executive Board Meeting Minutes

April 19, 2019

ROLL CALL AND INTRODUCTIONS

Executive Board Representatives: Lori Schectel (Central Contra Costa Sanitary District); Eric Dunlavey (San Jose); Eileen White (East Bay Municipal Utility District); Jacqueline Zipkin (East Bay Dischargers Authority); Greg Norby (SFPUC).

Other Attendees:

<u>Name</u>	<u>Agency/Company</u>
Amanda Roa	Delta Diablo
Eric Dunlavey	San Jose
Tom Hall	EOA, Inc.
Greg Baatrup	FFSD
Dave Richardson	Woodard & Curran
Alina Constantinescu	Larry Walker & Assoc.
Jim Graydon	Woodard & Curran
Eric Sandler	SFPUC
Jennie Pang	SFPUC
Andrew Damron	Napa San
Holly Kennedy	HDR
Mike Falk	HDR
Brian Henderson	SFPUC
David Williams	BACWA
Lorien Fono	BACWA
Sherry Hull	BACWA

PUBLIC COMMENT

None.

CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER – The Executive Director asked if anyone wished to take an item out of order or if any BACWA Representative wished to present a report or request BACWA direction on an issue out of order. There were none.

CONSENT CALENDAR

1. March 15, 2019, BACWA Executive Board Meeting Minutes – The approved minutes will be posted on the BACWA website.

2. February 2019 Treasurer's Reports and Financial Summary – A Financial Summary Report, along with Treasurer's Reports for February 2019, were included in the Packet. A copy of the FY18 Budget as of February 28, 2019, (67% 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 Jacqueline Zipkin and seconded by Greg Norby. The motion was approved unanimously.

APPROVALS & AUTHORIZATIONS

3. Approval: FY20 BACWA Budget and Workplan – A Board Action Request and the final FY20 Budget and Workplan were included in the Packet. The Executive Director gave an overview of the request noting that the Board had seen the draft Budget and Workplan at the March 15, 2019 meeting and there were two changes to the Budget from what was presented at the March 15th meeting: an increase to the Annual Meeting budget reflecting higher costs for both venue and catering, and a small increase to the Other Communication line item reflecting an increase to the cost of one software program.

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

4. Authorization: BACWA Agreement with Bay Area Biosolids Coalition –A Board Action Request and Support Agreement were included in the Packet. The Executive Director gave an overview of the request.

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

5. Authorization: BACWA Policy on Website – A Board Action Request and Policy were included in the Packet. The Executive Director gave an overview of the request noting that the Board had seen the draft Policy at the March 15, 2019 meeting. The Executive Director also noted that a Board Member has asked about updating photos on the website and asked the Board for input. The Board suggested using other more current photos and obtaining more photos throughout the year. A Board Member noted that there are regulatory requirements for agency websites and suggested that the Policy include a reference to those requirements.

Item 5. A motion to approve, following the inclusion of the above noted reference, was made by Jacqueline Zipkin and seconded by Eileen White. The motion was approved unanimously.

6. Authorization: Executive Director Approval of Agreement with SFEI for Enterococcus Study – A Board Action Request and Consulting Agreement were included in the Packet. The Authorization was pulled from the Agenda. The Executive Director noted that because of an increase to the amount of the agreement it will now be a Chair Approval. The Regulatory

Program Manager gave a status update regarding analytical methods and the Scope of Work. The Authorization will be on a future Executive Board Agenda.

7. Authorization: Chair Approval of Increase to Keough Consulting Agreement for BAPPG Support - A Chair Approval Request, a previously approved Agreement, and an Amendment to the Agreement were included in the Packet. The Executive Director gave an overview of the request.

OTHER BUSINESS-POLICY/STRATEGIC

Agenda Item 8 – Discussion: Nutrients

a. Regulatory

- i. Tentative Order Comment Letter & Submittals – A BACWA Comment Letter to the Regional Water Quality Control Board, along with a [LINK](#) to the Early Actors Template were included in the Packet. The Executive Director gave an overview. The Board thanked the Executive Director for his long term efforts and coordination of Nutrient Watershed Permit negotiations to reach this point.
- ii. Meeting Requirements of the 2nd Watershed Permit
 - (a) Nature Based Solutions Scope of Work – A SOW and proposed budgets from SFEI were included in the Packet. The Executive Director gave an overview noting that the Scoping Plan and Evaluation Plan would be combined into one task item, followed by the project Implementation. Several Board Members, as well as other members, volunteered to provide oversight of the contract when it is established. A Board Member specified that this effort needs to be integrated with the ongoing Operational Landscape Units, project, as well as the recently funded grant work by the San Francisco Estuary Project. A Board Member offered to provide a [LINK](#) to SFEI's Adaptation Atlas.
 - (b) Regional Recycled Water Study Scope of Work & Direction – A proposed Scope of Work was included in the Packet. The Regulatory Program Manager gave an overview noting that consideration of potable reuse projects had been added to the Scoping and Evaluation Plan, as well as recognition that agencies have Recycled Water plans outside of their Master Plans. The Board requested that BACWA choose a consultant via an RFP process. The Recycled Water Committee will provide governance over the project.
 - (c) Group Annual Reporting – The Executive Director gave an overview noting that the 2nd Watershed Permit will require reporting based on a utility's water year vs the fiscal year. In preparation for the next Group Annual Report, previous years of data will need to be recalculated to align with the new water year reporting approach. The reworking of the previous years of data may require a change order with the consultant under contract to

produce the future Group Annual Reports. The Permits Committee will provide governance over the Group Annual Reports.

- iii. Testimony at May 2019 Adoption Hearing – The Executive Director stated that the 2nd Watershed Permit will be scheduled for adoption at the May 8th Water Board meeting. Draft speaking points for the BACWA Chair to deliver at the meeting were provided and input received. Several additional BACWA Members plan to attend and may provide their own comments.
- iv. Planning Subcommittee Meeting #39 Debrief – The Agenda for the Planning Subcommittee Meeting #38 was included in the Packet. The Executive Director noted that the meeting number is incorrect on the Agenda and gave an overview of the meeting. Highlights included the Science Manager's updating of the Science Plan and a discussion on the status of negotiations with USGS and others on how to replace the monitoring work previously done by the USGS once funding for the program is decreased. Updates were also provided on the status of several grant proposals that had been submitted by the NMS Program Coordination Team. A Nutrient Technical Workgroup meeting has tentatively been planned for May 24th.
- b. Technical Work – No agenda item.
- c. Governance Structure –
 - i. Nutrient Strategy Steering Committee Membership Update – A letter from the Regional Water Quality Control Board inviting Deborah Stoliker of the USGS to participate as a Member of the SF Bay Nutrient Management Strategy (NMS) Steering Committee was handed out. The Executive Director gave an overview and noted her acceptance.

Agenda Item 9 - Discussion: Chlorine Residual Basin Plan Amendment Update – Tom Hall of EOA, Inc. gave a presentation noting that during his update on CWIQS there were only twelve MMP's for the region in the past year, none of which were for chlorine residual violations, illustrating that chlorine should not be a regulatory/enforcement priority. He would like to obtain updates from BACWA Agencies on 2018 purchases of chemicals (SBS usage). He stated that the Water Board is considering applying the EPA's chlorine residual objective to shallow, as well as deep water dischargers. In response to a Member's question, he noted that there is currently not a minimum standard for the number of hourly chlorine measurements via SCADA systems that would be averaged for reporting.

Agenda Item 10 – Discussion: Water Board Joint Meeting Debrief – The Agenda and Summary of the March 22, 2019 meeting were included in the Packet. The Executive Director gave an overview.

Agenda Item 11 – Discussion: Water Board Joint Meeting Draft Agenda – The Agenda for the May 20, 2019 meeting was included in the Packet. The Regulatory Program Manager gave an overview and asked the Board for input.

Agenda Item 12 – Discussion: SSS WDR Workshop Debrief – A Save the Date flyer for

Stakeholder Outreach Workshops was included in the Packet. The Regulatory Program Manager gave an overview noting that they are seeking input on 1) cost of compliance; 2) large private sewer systems; 3) data quality in CIWQS; 4) upgrading SSMPs; and 5) incentives for well performing collection systems.

Agenda Item 13 – Discussion: Compounds of Emerging Concern Monitoring Plan – A presentation on the White Paper, along with a [LINK](#) to an Ethoxylated Surfactants RMP Study, were included in the Packet. The Regulatory Program Manager gave an overview of the status of the White Paper and the outstanding issues. She noted that Water Board staff is seeking volunteers to participate in the ethoxylated surfactants study. Since the Water Board’s intent is to have on-going monitoring of POTW effluent of certain CECs that are trending upward, a decision will need to be made on how to allocate the monitoring and pay for the analyses and data compilation. It was suggested that the best approach might be to have BACWA pay SFEI for the data compilation and assessment as well as pay a private lab for the sample analyses with the POTW workload being only to collect the samples and send the samples to the contract lab in sample kit containers provided by SFEI. Comments received seemed to support this approach. For the FY21 budget, the Board will need to decide whether it wants to provide a budget for ongoing CECs monitoring.

Agenda Item 14 – Discussion: Summit Partners Meeting Debrief – A [LINK](#) to the Meeting Packet, along with the Meeting Notes, were included in the Packet. The Executive Director gave an overview noting that Sean McGuire, a new State Water Board member attended, and noted that the biggest issue in front of the State Water Board right now is the Water Fix.

Agenda Item 15 – Discussion: Key Legislation Update – A list of key legislation was included in the Packet, including SB69 and SB332. The Executive Director gave an overview and Board Members noted where CASA and other associations have established “oppose” or “oppose unless amended” position. Board members expressed a desire to carefully watch SB69. There was a discussion that the cost estimates being considered by legislators (\$20B) for with compliance with SB332 are likely low.

Agenda Item 16 – Discussion: BAPPG Legislation Comment Letters – A letter with sixteen signatories in support of AB 1672 (Bloom) Preventing Labeling of Plastic Wipes as Flushable, signed by many stakeholders including the Bay Area Pollution Prevention Group, was included in the Packet. The Executive Director gave an overview.

Agenda Item 17 – Discussion: Toxicity Provisions Update – A [LINK](#) to the Statewide Toxicity Provision was included in the Packet. The Regulatory Program Manager gave an overview noting a September timeframe for adoption. The State Water Board sent a survey to toxicity labs to get a better sense of the problems with requiring three tests to be initiated within 30 days for compliance with the median monthly effluent limit.

Agenda **Item 18** – Discussion: Toxicity Litigation Update – An Email and Memo on the briefing schedule for the SCAP et al vs EPA litigation was included in the Packet. The Executive Director gave an overview noting the appeal is with the Ninth Circuit.

Agenda **Item 19** – Discussion: – Manager's Roundtable Meeting Debrief – The Agenda from the April 5, 2019 meeting was included in the Packet. The Executive Director gave an overview noting that the new Executive Officer, Michael Montgomery, attended the meeting. His priorities are recycling, sea level rise, and climate adaptation.

OTHER BUSINESS-OPERATIONAL

Agenda **Item 20** – Discussion: BACWA Policy on Committees – A Draft Policy on Committees was handed out. The Executive Director gave an overview. The Board asked BACWA staff to consider how the Committee Leadership might provide more updates to the Executive Board.

Agenda **Item 21** - Discussion: BACWA Policy on Conflict of Interest – The Executive Director gave an overview and noted that he found that rather than having a separate Conflict of Interest Policy, many agencies utilize the Code as their policy as it contains all the key issues a policy would touch on. He proposed that to the Board and they agreed.

Agenda **Item 22** – Discussion: Pulse Article on Municipal Wastewater – An email noting the theme and outline for the article was included in the Packet. The Regulatory Program Manager gave an overview of a previous article describing the history of wastewater Treatment in the Bay. BACWA will provide a link to the history in the May Executive Board Handout. The Regulatory Program Manager has provided input on the outline regarding POTWs as resource recovery agencies and the corollary cross media issues.

Agenda **Item 23** – Discussion: PPIC Presentation on Wastewater & Climate – A [LINK](#) to the presentation was included in the Packet. The Executive Director gave an overview of BACWA's involvement. A webcast on the report was scheduled for April 22.

Agenda **Item 24** – Discussion: Retirement of CASA Executive Director – A letter from CASA was included in the Packet. The Executive Director gave an overview and asked the Board if they wished to recognize her prior to her retirement. The Board asked the Executive Director to propose some suggestions.

Agenda **Item 25** – Discussion: AIR Committee RFP for FY20 – The RFP to provide support to the BACWA AIR Committee beginning in FY20 was included in the Packet. The Regulatory Program Manager gave an overview noting that the previous agreement had allowed for a maximum of two annual extensions before requiring a new RFP. The new RFP will allow four annual

extensions. She asked for volunteers for a selection committee and a Board Member volunteered.

Agenda **Item 26** – Discussion: BAPPG Committee RFQ for FY20 – The RFQ to provide Public Education and Outreach to the BACWA BAPPG Committee beginning in FY20 was included in the Packet. The Regulatory Program Manager noted that the RFQ was needed due to the bankruptcy of the previous provider. The previous agreement had allowed for four annual extensions. The new agreement will also allow for four annual extensions. She asked for volunteers for a selection committee and a Board Member volunteered.

Agenda **Item 27** – Discussion: BACWWE General Membership Meeting – A Summary of the April 9, 2019 meeting was included in the Packet. The Executive Director gave an overview noting that BACWA supports the group of twenty-two agencies, mostly BACWA Members. Due to a drop off in the attendance at the remotely taught classes offered by BACWWE, several classes have had to be cancelled over the last two semesters. One of the main concerns is that the BACWWE classes need added marketing efforts since they are separate offerings from the main Solano classes. In order to not differentiate BACWWE classes from the normal slate of classes offered by community colleges, BACWWE is looking to move to a scholarship based program which would include additional community colleges and improved marketing since under the scholarship approach, the normal marketing put on by the community college would also include classes for which BACWWE offered scholarships.

REPORTS

Agenda **Item 28** – Committee Reports – BACWA Committee Reports were included in the Packet.

AIR Committee: A report from the March 26, 2019 meeting was included in the Packet.

BAPPG Committee: A report from the April 3, 2019 meeting was included in the Packet.

Biosolids Committee: No meeting.

Collections Committee: No meeting

Lab Committee: A report from the March 13, 2019 meeting was included in the Packet. The Regulatory Program Manager noted that the Committee has decided to change the frequency of the meetings to every other month, preceding the Permits Committee meeting at EBMUD.

Operations & Maintenance – InfoShare Group: No meeting.

Permits Committee: A report from the April 9 19, 2019 meeting was included in the Packet.

Pretreatment Committee: A report from the March 20, 2019 meeting was included in the Packet.

Recycled Water Committee: No meeting.

Agenda **Item 25** - Discussion: Member Highlights - Executive Board Representatives (Board) were given an opportunity to provide updates from each of the Principal agencies. Non-

principal members were also given an opportunity to report out on behalf of their agencies. No actions were taken on the report-outs.

EBDA: As the BACWA representative to ReNUWIt Advisory Board, the Board Member requested BACWA Member input on what is valuable. Other Board Members commented that they would like to see a focus on research that resulted in practical solutions and results.

EBMUD: No report.

Central Contra Costa County: The Board approved a four-year rate increase of 5.25% for 2 years and 4.75% for 2 years. They hold events called Central San Academy and the public response has been very good.

San Francisco: Their capital improvement program is moving forward. They appreciate the work being done by BACWWE and will inform their employees who are involved in BAYWORK of the progress. The Oceanside permit has been released. Requested comments from any agency that uses service contracts to manage the operation and maintenance of more unique facilities found at POTWs.

San Jose: No report.

Delta Diablo: No report.

Agenda **Item 26** - The **Executive Director's (ED) Report** for March 2019 along with the Board Calendar, and BACWA Action Items, were included in the Packet. It was noted that 91 of 91 action items from FY19 have been completed.

Agenda **Item 27** - The **Regulatory Program Manager (RPM) Report** for March 2019 was included in the Packet.

Agenda **Item 28 - Other BACWA Representative Reports** – BACWA Representative were given an opportunity to provide updates. No actions were taken based on the reports.

- a. RMP-TRC: Mary Lou Esparza, Nirmela Arsem – No report.
- b. RMP Steering Committee: Karin North; Leah Walker; Eric Dunlavey – No report
- c. Summit Partners: Dave Williams; Lori Schectel – No report.
- d. ASC/SFEI: Eileen White; Dave Williams; Amit Mutsuddy; Karin North – No report.
- e. Nutrient Governance Steering Committee: Eric Dunlavey; Eileen White; Lori Schectel; Jacqueline Zipkin – No report.
 - i. Nutrient Planning Subgroup: Eric Dunlavey
 - ii. NMS Technical Workgroup: Eric Dunlavey
- f. SWRCB Nutrient SAG: Dave Williams – No report.
- g. NACWA Taskforce on Dental Amalgam: Tim Potter – No report.
- h. **BAIRWMP:** Cheryl Munoz, Linda Hu, Dave Williams – A Committee Meeting Summary Report from March 25, 2019 was included in the Packet. The Executive Director noted the update on Proposition 84, Round 1.
- i. NACWA Emerging Contaminants: Karin North, Melody La Bella – No report
- j. CASA State Legislative Committee: Lori Schectel – No report.

- k. CASA Regulatory Workgroup – Lorien Fono - No report.
- l. ReNUWIt: Jackie Zipkin; Karin North – No report.
- m. RMP Microplastics Liaison: Nirmela Arsem – No report.
- n. AWT Certification Committee: Maura Bonnarens – No report.
- o. Bay Area Regional Reliability Project: Eileen White– No report
- p. WaterReuse Working Group: Cheryl Munoz – No report.
- q. San Francisco Estuary Partnership – Eileen White; Dave Williams – No report
- r. CPSC Policy Education Advisory Committee – Doug Dattawalker – No report.
- s. California Ocean Protection Council – Lorien Fono – No report.
- t. Countywide Water Reuse Master Plan - Karin North; Pedro Hernandez – No report.
- u. BayCAN: Bay Area Climate Adaptation Network - David R. Williams; Lorien Fono – No report.
- v. CHARG: Coastal Hazards Adaptation Resiliency Group – Jacqueline Zipkin – No report.

Agenda **Item 29 - SUGGESTIONS FOR FUTURE AGENDA ITEMS.** None.

ANNOUNCEMENTS: The next regular meeting of the Board is scheduled for **May 17, 2019 from 9:00 am to 12:30 pm at EBMUD, 2nd Floor Large Training Room, 375 11th St., Oakland, CA.**

To receive a copy of any materials provided to the Board at a BACWA Executive Board meeting contact Sherry Hull at shull@bacwa.org.

The meeting adjourned at 12:17 pm.



MONTHLY FINANCIAL SUMMARY REPORT March 2019

Fund Balances

In FY 19 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 contract staff, its committees, and other administrative needs. The ending fund balance on March 31, 2019 was \$1,407,506 which is significantly higher than the target reserve of \$191,875 which is intended to cover 3 months of normal operating expenses based on the BACWA FY19 Budget. \$202,208 of the ending fund balance is shown on the March Fund & Investments Balance Report as obligated to meet on-going operating line item expenses for BAPPG Committee Support, Legal services, IT services, Board meeting expenses, accounting services and BACWA contract staff support. This leaves an actual unobligated excess funds of \$1,013,423 (i.e. actual fund balance of \$1,205,298 less target reserves) as of March 31, 2019. As the details of the costs of the various regulatory requirements included in the next 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 March 31, 2019 was \$1,969,374 which is significantly higher than the target reserve of \$1,000,000 which was approved by the BACWA Executive Board on December 21, 2018. \$351,625 of the ending balance is obligated to meet line item expenses for completion of the Group Annual Report contract, the Chlorine Residual BPA work, and for technical support. This leaves actual unobligated excess funds of \$617,749 (i.e. actual fund balance of \$1,617,749 less target reserves) as of March 31, 2019. Total Disbursements for FY19 from the CBC Fund include the Nutrient Voluntary Contribution of \$200,000 and the Nutrient Watershed Permit payment of \$880,000. In addition, an unscheduled advance payment of \$200,000 was made in December 2018 towards the FY20 Nutrient Watershed Permit requirement. As the details of the costs of the new regulatory requirements in the 2nd Nutrient Watershed Permit become better defined, any excess CBC funds may 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. If needed, transfers can be made between the BACWA Fund and the CBC Fund in order to ensure adequate funds are available to complete all the work designated to be paid for by these two funds. It is 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 March 31, 2019, 2018 (75% of the FY) are at 103.21% due primarily to timing of invoices, and to higher interest rates. The FY19 BACWA invoices were sent at the end of July 2018 and the end of August 2018 and all invoiced dues and fees have been received.



MONTHLY FINANCIAL SUMMARY REPORT
March 2019

Overall Expenses as of March 31, 2019 (75% of the FY) are at 92.21% due to the timing of the Nutrient Surcharge payments required by the 1st Nutrient Watershed Permit, voluntary contributions to support additional science, and an advance payment for FY20 nutrient science funding.

Those needing additional explanation (i.e. either 10% over or under budget) are:

Administration: This category is 34.65% expended at 75% of the FY due to the timing of invoices.

Meetings: This category is 87.24% expended at 75% of the FY due primarily to timing of invoices.

Communication: This category is 52.66% expended at 75% of the FY due primarily to timing of invoices and lower than budgeted expenditures on website development and maintenance and IT support.

Legal: This category is 12.47% expended at 75% of the FY due to little need for legal support to date.

Committees: This category is 47.77% expended at 75% of the FY due to timing of invoices.

Technical Support: This category is 104.87% expended at 75% of the FY due to the timing of the payments for funding nutrient scientific program.

NOTE: An Alternative Investment in the amount of \$300,000 purchased in December 2018 was called in January 2019. It will be replaced, but LAIF rates continue to be higher than Alternative Investments since the yield curve is negative out to 7 years.



75% of
Budget

<u>BACWA FY19 BUDGET</u>	<u>Line Item Description</u>	<u>FY 2019 Budget</u>	<u>Actuals Mar 2019</u>	<u>Actual % of Budget Mar 2019</u>	<u>Variance</u>	<u>NOTES</u>
REVENUES & FUNDING						
Dues	Principals' Contributions	\$496,837	\$496,835	100.00%	-\$2	FY19: 2% increase. (Diff due to rounding error)
	Associate & Affiliate Contributions	\$182,144	\$183,035	100.49%	\$891	FY19: 2% increase. Assoc: \$8,090; Affiliate: \$1,600. 1 Coll Syst cancelled, 1 new Member
Fees	Clean Bay Collaborative	\$675,000	\$674,250	99.89%	-\$750	Prin: \$450,000; Assoc/Affil: \$225,000
	Nutrient Surcharge	\$800,000	\$799,998	100.00%	-\$2	Prin: \$533,335; Assoc/Affil: \$266,673
	Member Voluntary Nutrient Contributions	\$0	\$0		\$0	
Other Receipts	AIR Non-Member	\$6,800	\$6,800	100.00%	\$0	FY19: 5% increase (Santa Rosa)
	BAPPG Non-Members	\$3,800	\$3,801	100.03%	\$1	FY19: 2% increase (Sta Rosa, Sac Reg'l, Vacaville)
	Other	\$0	\$55,000		\$55,000	Biosolids & Climate Change Research in Agricultural Soils Project (Addl \$30k received in FY18)
Fund Transfer	Special Program Admin Fees	\$5,000	\$5,000	100.00%	\$0	FY19: BACWWE increase in FY19, may include Prop 84 Admin Fees for FY16, FY17, FY18, FY19 when closed out
Interest Income	LAIF	\$20,000	\$36,795	183.98%	\$16,795	BACWA, Legal, & CBC Funds invested in LAIF
	Higher Yield Investments	\$9,000	\$7,708	85.64%	-\$1,292	Alternative Investment Interest (Legal & CBC Funds invested in AltInv)
	Total Revenue	\$2,198,581	\$2,269,222	103.21%	\$70,641	
BACWA FY18 BUDGET						
	<u>Line Item Description</u>	<u>FY 2019 Budget</u>	<u>Actuals Mar 2019</u>	<u>Actual % of Budget Mar 2019</u>	<u>Variance</u>	<u>NOTES</u>
EXPENSES						
Labor						
	Executive Director	\$201,682	\$134,455	66.67%	-\$67,227	2.9% CPI (SF/Oakland/San Jose Metro Area Dec 2017)
	Assistant Executive Director	\$90,526	\$69,734	77.03%	-\$20,792	2.9% CPI (SF/Oakland/San Jose Metro Area Dec 2017)
	Regulatory Program Manager	\$119,815	\$78,453	65.48%	-\$41,362	2.9% CPI (SF/Oakland/San Jose Metro Area Dec 2017)
	Total	\$412,023	\$282,642	68.60%	-\$129,381	
Administration						
	EBMUD Financial Services	\$40,800	\$12,740	31.23%	-\$28,060	FY19: 2% increase
	Auditing Services (Maze)	\$6,426	-\$67	-1.04%	-\$6,493	FY19: \$6,300 Accrued from FY18 to FY19, less \$1,870, \$3,740 & \$623 paid for FY18
	Administrative Expenses	\$7,650	\$3,536	46.22%	-\$4,114	Travel, Supplies, Parking, Mileage, Tolls, Misc.
	Insurance	\$4,590	\$4,393	95.71%	-\$197	FY19: 2% increase
	Total	\$59,466	\$20,602	34.65%	-\$38,864	
Meetings						
	EB Meetings	\$2,550	\$1,473	57.76%	-\$1,077	FY19: 2% increase. Catering, Venue, other expenses
	Annual Meeting	\$10,200	\$9,113	89.34%	-\$1,087	FY19: 2% increase. Catering, Venue, other expenses.
	Pardee	\$6,120	\$5,608	91.63%	-\$512	FY19: 2% increase. Catering, Venue, other expenses
	Misc. Meetings	\$5,100	\$4,717	92.49%	-\$383	FY19: 2% increase. Hol & Comm Chair Lunch, Staff Mtgs, Fin Comm, Summit Ptnrs, CASA, NACWA Tech WS, Low Flow WS
	Total	\$23,970	\$20,911	87.24%	-\$3,059	
Communication						
	Website Hosting (Computer Courage)	\$600	\$1,200	200%	\$600	
	File Storage (Box.net)	\$750	\$720	96%	-\$30	
	Website Development/Maintenance	\$1,500	\$0	0%	-\$1,500	Domains, website changes
	IT Support (As Needed)	\$2,600	\$315	12%	-\$2,285	
	Other Commun (MS, SM, Backup, PollEv)	\$1,500	\$1,425	95%	-\$75	MS Exchange, Survey Monkey, CrashPlanPro, Carbonite, Doodle Polls, PollEv
	Total	\$6,950	\$3,660	52.66%	-\$3,290	
Legal						

EXPENSES						
	Regulatory Support	\$2,601	\$195	7%	-\$2,406	FY19: 2% increase
	Executive Board Support	\$2,091	\$390	19%	-\$1,701	FY19: 2% increase
	Total	\$4,692	\$585	12.47%	-\$4,107	
Committees						
	AIR	\$51,000	\$27,574	54%	-\$23,426	Lunches included in budget but not in Carollo agreement
	BAPPG	\$100,000	\$73,444	73%	-\$26,556	Includes CPSC @ \$10,000 and Pest. Reg Spt. @ \$15,000
	Biosolids Committee	\$3,100	\$206	7%	-\$2,894	Includes WEF Conf
	Collections System	\$1,000	\$0	0%	-\$1,000	
	InfoShare Groups	\$1,200	\$404	34%	-\$796	funds for 2 workgroups (Asset Mgmt & O&M - Asset Mgmt on hiatus)
	Laboratory Committee	\$6,100	\$0	0%	-\$6,100	Includes Tech Conf. & training funds
	Permits Committee	\$1,000	\$774	77%	-\$226	
	Pretreatment	\$7,500	\$1,503	20%	-\$5,997	Includes training funds & Factsheet not expended in FY18
	Recycled Water Committee	\$1,000	\$78	8%	-\$922	
	Misc Committee Support	\$45,000	\$0	0%	-\$45,000	\$10,000 increase in FY19
	Manager's Roundtable	\$1,000	\$111	11%	-\$889	
	Total	\$217,900	\$104,094	47.77%	-\$113,806	
Collaboratives						
	Collaboratives					
	State of the Estuary (SFEP-biennial)	\$20,000	\$0	0%	-\$20,000	Biennial in Odd Fiscal Years. (Paid biennially in odd years for even year conference)
	Arleen Navarret Award	\$0	\$1,000		\$1,000	Biennial in Even Fiscal Years (FY18 Budgeted Amount paid in FY19)
	FWQC (Fred Andes)	\$7,500	\$7,500	100%	\$0	Dues unchanged in FY19
	Stanford ERC (ReNUWit)	\$10,000	\$10,000	100%	\$0	
	Misc	\$5,000	\$8,971	179%	\$3,971	BayCAN FY19 Annual Membership (\$1,500), Cerio Tox Whitepaper (\$6,796), SFEI ED Donation (\$100)
	Total	\$42,500	\$27,471	64.64%	-\$15,029	
Other						
	Unbudgeted Items					
	Other	\$0	\$85,000		\$85,000	Biosolids & Climate Change Research in Agricultural Soils Project (\$30k rec'd in FY18, \$55k rec'd in FY19)
	Total	\$0	\$85,000		\$85,000	
Tech Support						
	Technical Support					
	Nutrients					
	Watershed	\$880,000	\$1,080,000	123%	\$200,000	Includes Adv Funding of FY20 payment. \$200k paid in Dec 2018
	NMS Voluntary Contributions	\$200,000	\$200,000	100%	\$0	
	Additional work under permit	\$100,000	\$12,132	12%	-\$87,868	Increased at Board's request (LimnoTech, HDR add'l SOW's in FY19 - 2 Amendments)
	Opt/Upgrade/Annual Reporting Studies	\$25,000	\$25,652	103%	\$652	FY19: Balance remaining on agreement at end of FY18 (Actual \$25,652.20)
	Member Voluntary Nutrient Contributions	\$0	\$0		\$0	
	Nutrient Workshop(s)	\$20,000	\$0	0%	-\$20,000	Pilot Studies/Plant Review/Innovative Technologies
	General Tech Support	\$51,000	\$30,839	60%	-\$20,161	FY19: 2% increase. EOA ChlResidBPA continues into FY19
	Risk Reduction	\$10,000	\$0	0%	-\$10,000	\$50,000 over 5 years (FY19-FY23) 2 Contracts for \$25,000 each over FY19, 20, & 21
	Total	\$1,286,000	\$1,348,623	104.87%	\$62,623	
	TOTAL EXPENSES	\$2,053,501	\$1,893,588	92.21%	-\$159,913	
	NET INCOME BEFORE TRANSFERS	\$145,080	\$375,634			
	TRANSFERS FROM RESERVES	\$0				
	NET INCOME AFTER TRANSFERS	\$145,080				




Bay Area Clean Water Agencies

A Joint Powers Public Agency

Leading the Way to Protect our Bay

April 24th, 2019

MEMO TO: Bay Area Clean Water Agencies Executive Board

MEMO FROM: Damien Charléty, Treasurer, East Bay Municipal Utility District 

SUBJECT: Ninth Month FY 2019 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, 2018 through March 31, 2019** (nine months of Fiscal Year 2019). 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),
- Water/Wastewater Operator Training (WOT),
- Prop84 Bay Area Integrated Regional Water Mgmt (PRP84)

BACWA Fund Report as of March 31, 2019

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	1,186,598	765,872	544,965	1,407,506	202,208	1,205,298
804	LEGAL RSRV	300,000	-	-	300,000	-	300,000
805	CBC	1,814,647	1,503,350	1,348,623	1,969,374	351,625	1,617,749
	SUBTOTAL 1	3,301,245	2,269,222	1,893,588	3,676,879	553,833	3,123,046
810	WOT	208,214	148,500	5,860	350,854	-	350,854
	SUBTOTAL 2	208,214	148,500	5,860	350,854	-	350,854
811	PRP84	117,907	1,791,393	1,791,393	117,907	-	117,907
	SUBTOTAL 3	117,907	1,791,393	1,791,393	117,907	-	117,907
	GRAND TOTAL	3,627,367	4,209,115	3,690,841	4,145,640	553,833	3,591,807

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	1,186,598	765,872	544,965	1,407,506	12,373	1,419,879	826,652	593,226	26%	-		priority # 3 for allocation
804	LEGAL RSRV	300,000	-	-	300,000	-	300,000	-	-	0%	300,000	AR5	priority # 1 for allocation
805	CBC	1,814,647	1,503,350	1,348,623	1,969,374	-	1,969,374	-	1,669,374	74%	300,000	ME2	priority # 2 for allocation
	SUBTOTAL 1	3,301,245	2,269,222	1,893,588	3,676,879	12,373	3,689,252	826,652	2,262,600	100%	600,000		
810	WOT	208,214	148,500	5,860	350,854	-	350,854	350,854	-	0%	-		pass-through funds, no allocation
	SUBTOTAL 2	208,214	148,500	5,860	350,854	-	350,854	350,854	-	0%	-		
811	PRP84	117,907	1,791,393	1,791,393	117,907	-	117,907	117,907	-	0%	-		pass-through funds, no allocation
815	PRP50	-	-	-	-	-	-	-	-	0%	-		pass-through funds, no allocation
	SUBTOTAL 3	117,907	1,791,393	1,791,393	117,907	-	117,907	117,907	-	0%	-		
	GRAND TOTAL	3,627,367	4,209,115	3,690,841	4,145,640	12,373	4,158,013	1,295,413	2,262,600		600,000		

verification

- (0)

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

Reconciliation to Trial Balance - accrual basis

Per Report above:

General	2,269,222
WOT	148,500
PROP	1,791,393
subtotal	4,209,115

Billings-Pending Receipts

4686	Mem Contrib	-
4687	Transfer	-
4690	Assoc Contrib	-
4696	Other	(55,000)
4731	State Grant	(0)
4732	Grant Retention	(16,597)
subtotal		(71,598)

Trial Balance Revenue Accounts

4411	Interest	(44,503)
4686	Mem Contrib	(1,319,585)
4687	Transfer	(5,000)
4690	Assoc Contrib	(183,035)
4696	Other	(810,599)
4731	State Grant	(1,597,316)
4732	Grant Retention	(177,480)
subtotal		(4,137,518)
Difference		(0)

BACWA Revenue Report as of March 31, 2019

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	BACWA	0408511	Administrative & General	-	-	-	-	-	-	-	-	-
800	BACWA	1011099	BDO Member Contributions	496,837	-	-	-	-	496,835	-	496,835	2
800	BACWA	1011108	BDO Other Receipts	-	-	-	-	-	-	-	-	-
800	BACWA	1011109	BDO Fund Transfers	5,000	-	-	5,000	-	-	5,000	5,000	-
800	BACWA	1011117	BDO- Interest Income from LAIF	20,000	-	-	-	-	-	13,601	13,601	6,399
800	BACWA	1011133	BDO Assoc.&Affiliate Contr	182,144	-	-	-	-	183,035	-	183,035	(891)
800	BACWA	1014251	BDO Non-Member Contr BAPPG	3,800	-	-	-	-	3,801	-	3,801	(1)
800	BACWA	1014252	BDO Non-Member Contr AIR	6,800	-	-	-	-	6,800	-	6,800	-
800	BACWA	1014511	BDO-Alternative Investment Inc	9,000	-	-	-	1,800	-	-	1,800	7,200
800	BACWA	1014514	GBS-Meeting Support-Annual	-	-	-	-	-	-	-	-	-
800	BACWA	1015005	Biosolids&ClimateRsSch-Otr Rcpts	-	-	-	-	-	55,000	-	55,000	(55,000)
BACWA TOTAL				723,581	-	-	5,000	1,800	745,471	18,601	765,872	(42,291)
805	WQA-CBC	1011099	BDO Member Contributions	675,000	-	-	-	-	674,250	-	674,250	750
805	WQA-CBC	1011108	BDO Other Receipts	800,000	-	-	-	-	799,998	-	799,998	2
805	WQA-CBC	1014511	BDO-Alternative Investment Inc	-	-	-	-	5,908	-	-	5,908	(5,908)
805	WQA-CBC	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	23,194	23,194	(23,194)
805	WQA-CBC	1014528	BDO-Voluntary Nutrient Contrib	-	-	-	-	-	-	-	-	-
WQA CBC TOTAL				1,475,000	-	-	-	5,908	1,474,248	23,194	1,503,350	(28,350)
TOTAL				2,198,581	-	-	5,000	7,708	2,219,719	41,795	2,269,222	(70,641)

	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	
810	WOT	1011099	BDO Member Contributions	-	-	7,500	-	-	148,500	-	148,500	(148,500)
810	WOT	1011108	BDO Other Receipts	-	-	-	-	-	-	-	-	-
810	WOT	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	-	-	-
WOT TOTAL				-	-	7,500	-	-	148,500	-	148,500	(148,500)

	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			-	-	1,460,657	-	-	1,791,393	-	1,791,393	(1,791,393)
PROP TOTAL				-	-	1,460,657	-	-	1,791,393	-	1,791,393	(1,791,393)

Grand Total				2,198,581	-	1,468,157	5,000	7,708	4,159,612	41,795	4,209,115	(2,010,534)
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BACWA Expense Detail Report as of March 31, 2019

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	201,682	(16,807)	16,807	-	-	67,227	134,455	-	-	201,682	-
AS-Assistant Executive Directo	1011124	90,526	(7,710)	7,710	-	-	20,792	69,734	-	-	90,526	-
AS-Regulatory Program Manager	1011149	119,815	(9,873)	9,873	-	-	41,362	78,453	-	-	119,815	-
ADMINISTRATION												
AS-EBMUD Financial Services	1011125	40,800	-	-	-	-	28,060	12,740	-	-	40,800	-
AS-Audit Services	1014512	6,426	-	-	-	-	-	1,870	4,363	(6,300)	(67)	6,493
AS-BACWA Admin Expense	1011118	7,650	-	-	602	-	-	-	3,536	-	3,536	4,114
AS-Insurance	1011126	4,590	-	-	-	-	-	-	4,393	-	4,393	197
MEETINGS												
GBS-Meeting Support-Exec Bd	1014513	2,550	(126)	126	-	-	2,075	475	998	-	3,548	(998)
GBS-Meeting Support-Annual	1014514	10,200	-	-	-	-	-	-	9,413	(300)	9,113	1,087
GBS-Meeting Support-Pardee	1014515	6,120	-	-	-	-	-	-	5,608	-	5,608	512
GBS-Meeting Support-Misc	1014516	5,100	-	-	38	-	-	-	4,717	-	4,717	383
GBS- Meeting Support	1011122	-	-	-	-	-	-	-	-	-	-	-
COMMUNICATION												
CAR-BACWA Website Hosting	1014517	750	-	-	600	-	-	-	1,200	-	1,200	(450)
CAR-BACWA File Storage	1014518	1,500	-	-	-	-	-	-	720	-	720	780
CAR-BACWA IT Support	1014519	2,600	-	-	-	-	2,285	315	-	-	2,600	-
CAR-BACWA IT Software	1014520	1,500	-	-	213	-	-	-	1,425	-	1,425	75
CAR-BACWA Website Dev/Maint	1011116	600	-	-	-	-	-	-	-	-	-	600
LEGAL												
LS-Regulatory Support	1011107	2,601	-	-	-	-	2,406	195	-	-	2,601	-
LS-Executive Board Support	1011110	2,091	(152)	152	-	-	1,702	390	-	-	2,091	-
COMMITTEES												
AIR-Air Issues&Regulation Grp	1014253	51,000	(1,862)	1,862	-	-	23,208	26,792	782	-	50,782	218
BC-BAPPG	1011147	100,000	(21,486)	4,220	6,890	-	13,092	45,642	27,802	-	86,536	13,464
BC-Biosolids Committee	1011101	3,100	-	-	-	-	-	-	206	-	206	2,894
BC-Collections System	1011097	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-InfoShare Groups	1011102	1,200	-	-	-	-	-	-	404	-	404	796
BC-Laboratory Committee	1011103	6,100	-	-	-	-	-	-	-	-	-	6,100
BC-Permit Committee	1011098	1,000	-	-	-	-	-	-	774	-	774	226
BC-Pretreatment Committee	1011146	7,500	-	-	1,503	-	-	-	1,503	-	1,503	5,997
BC-Water Recycling Committee	1011100	1,000	-	-	78	-	-	-	78	-	78	922
BC-Manager's Roundtable	1014777	1,000	-	-	-	-	-	-	111	-	111	889
BC-Miscellaneous Committee Sup	1011104	45,000	-	-	-	-	-	-	-	-	-	45,000
COLLABORATIVES												
CAS-Arleen Navaret Award	1012201	-	-	-	-	-	-	-	1,000	-	1,000	(1,000)
CAS-FWQC	1012202	7,500	-	-	-	-	-	-	7,500	-	7,500	-
CAS-Stanford ERC	1011969	10,000	-	-	-	-	-	-	10,000	-	10,000	-
CAS-CWCCG	1011148	-	-	-	-	-	-	-	-	-	-	-
CAS-PSSEP	1011112	20,000	-	-	-	-	-	-	-	-	-	20,000
CAS-Misc Collaborative Sup	1014521	5,000	-	-	-	-	-	-	8,971	-	8,971	(3,971)
BDO-Contract Expenses (PHARM)												
BDO-Contract Expenses (PHARM)	1014551	-	-	-	-	-	-	-	-	-	-	-
BIOSOLIDS & CLIMATE RESEARCH												
Biosolids&ClimateRsch-Otr Rcpts	1015005	-	-	-	-	-	-	-	-	-	-	-
Biosolids&ClimateRsch-CntctExp	1015006	-	-	-	-	-	-	-	85,000	-	85,000	(85,000)
BACWA TOTAL		767,501	(58,016)	40,750	9,924	-	202,209	371,061	180,504	(6,600)	747,173	20,328
TECH SUPPORT												
WQA-CE Addl Work Under Permit	1014254	100,000	-	-	-	-	304,279	12,132	-	-	316,410	(216,410)
WQA-CE-Technical Support	1011127	51,000	(3,567)	3,567	-	-	47,347	30,839	-	-	78,186	(27,186)
WQA-CE CASA Chem of Concern	1011128	-	-	-	-	-	-	-	-	-	-	-
WQA-CE Opt-Upgrade Studies	1014255	25,000	-	-	-	-	-	25,652	-	-	25,652	(652)
WQA-CE Risk Reduction	1014023	10,000	-	-	-	-	-	-	-	-	-	10,000
WQA-CE-Nutrient WS Permit Comm	1014021	880,000	-	-	-	-	-	-	1,080,000	-	1,080,000	(200,000)
WQA-CE-Program Mgmt	1011131	-	-	-	-	-	-	-	-	-	-	-
WQA-CE Voluntary Nutr Contrib	1014529	200,000	-	-	-	-	-	-	200,000	-	200,000	-
Member Voluntary Nutrient Cont	1015014	-	-	-	-	-	-	-	-	-	-	-
Nutrient Workshops	1015015	20,000	-	-	-	-	-	-	-	-	-	20,000
TECH SUPPORT (CBC) TOTAL		1,286,000	(3,567)	3,567	-	-	351,626	68,623	1,280,000	-	1,700,248	(414,248)
GRAND TOTAL		2,053,501	(61,583)	44,317	9,924	-	553,835	439,684	1,460,504	(6,600)	2,447,421	(393,920)
								TOTAL	1,893,588			
WOT												
Administrative Support	1011142	-	-	-	-	5,000	-	-	-	5,000	5,000	(5,000)
BDO Contract Expenses	1011143	-	-	-	260	-	-	-	860	-	860	(860)
		-	-	-	260	5,000	-	-	860	5,000	5,860	(5,860)
GRAND TOTAL (BDO, CBC, WOT)		2,053,501	(61,583)	44,317	10,184	5,000	553,835	439,684	1,461,364	(1,600)	2,453,281	(399,780)

Prop 84 Revenue Report as of March 31, 2019

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,Ot hers	ACTUAL	
811	Prop84BayAreaIntegRegnlWtrMgmt	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1011142	Administrative Support	-	-	48,314	-	-	58,069	-	58,069	(58,069)
811	Prop84BayAreaIntegRegnlWtrMgmt	1011691	Water Efficient Landscape Reba	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1011702	Sears Point Wtln'd & Wtrshd Res	-	-	1,138,500	-	-	1,138,500	-	1,138,500	(1,138,500)
811	Prop84BayAreaIntegRegnlWtrMgmt	1011705	Regional Green Infrastructure	-	-	-	-	-	194,925	-	194,925	(194,925)
811	Prop84BayAreaIntegRegnlWtrMgmt	1011706	Hacienda Ave Green St Improvem	-	-	194,077	-	-	194,077	-	194,077	(194,077)
811	Prop84BayAreaIntegRegnlWtrMgmt	1011707	WQ Improve Flood Mgmt & EP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1011911	Stream Restoration w/Schools i	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012209	Water Efficient LRP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012210	Bay Friendly Landscape TP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012211	Weather Based Irrigation Cntrl	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012212	High Efficiency Toilet & UR	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012213	High Efficiency Toilet & UI	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012214	High Efficiency Clothes Washrs	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012215	Napa Co. Rainwater HP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012216	Conservation Program Admin	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012218	Stream Restoration in North BD	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012219	Flood Infrastructure Mapping T	-	-	49,090	-	-	151,494	-	151,494	(151,494)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012220	Stormwater Improvements & PBP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012221	Richmond Shoreline & San PFP	-	-	18,360	-	-	18,360	-	18,360	(18,360)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012222	Pescadero Integrated FRAH	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012223	Restoration Guidance, San FC	-	-	-	-	-	14,657	-	14,657	(14,657)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012224	SF Estuary Steelhead MP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012225	Watershed Program Admnstrtn	-	-	12,316	-	-	21,311	-	21,311	(21,311)
PROP 84 TOTAL				-	-	1,460,657	-	-	1,791,393	-	1,791,393	(1,791,393)

Prop 84 Expense Detail Report for March 2019

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	-	-	-	48,314	-	-	-	58,069	-	58,069	(58,069)
811	Prop84BayAreaIntegRegnlWtrMgmt	BDO Contract Expenses	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Regional Green Infrastructure	-	-	-	-	-	-	-	194,925	-	194,925	(194,925)
811	Prop84BayAreaIntegRegnlWtrMgmt	Hacienda Ave Green St Improvem	-	-	-	194,077	-	-	-	194,077	-	194,077	(194,077)
811	Prop84BayAreaIntegRegnlWtrMgmt	Sears Point Wtlnd & Wtrshd Res	-	-	-	1,138,500	-	-	-	1,138,500	-	1,138,500	(1,138,500)
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	-	-	-	49,090	-	-	-	151,494	-	151,494	(151,494)
811	Prop84BayAreaIntegRegnlWtrMgmt	Stormwater Improvements & PBP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Richmond Shoreline & San PFP	-	-	-	18,360	-	-	-	18,360	-	18,360	(18,360)
811	Prop84BayAreaIntegRegnlWtrMgmt	Pescadero Integrated FRAH	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Restoration Guidance, San FC	-	-	-	-	-	-	-	14,657	-	14,657	(14,657)
811	Prop84BayAreaIntegRegnlWtrMgmt	SF Estuary Steelhead MP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Stream Restoration in North BD	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	Watershed Program Admnstrtn	-	-	-	12,316	-	-	-	21,311	-	21,311	(21,311)
PRP84 TOTAL			-	-	-	1,460,657	-	-	-	1,791,393	-	1,791,393	(1,791,393)



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 4
FILE NO.: 19-40
MEETING DATE: May 17, 2019

TITLE: Request for Board Approval of BACWA Policies: BAP 1.06 Committees

☐ RECEIPT ☐ DISCUSSION ☐ RESOLUTION ☒ APPROVAL

RECOMMENDED ACTION

Approve the following BACWA Policies: BAP 1.06 Committees

SUMMARY:

Board Policies provide direction to the organization on key administrative and financial issues. The Committee Policy states the Board intends to maintain and fund several core committees which will facilitate the completion of critical work needed to accomplish the BACWA mission. The BACWA Committees are staffed by member agency volunteers and it is the intention of the Board to seek every opportunity to recognize and thank the volunteers for their efforts on behalf of the entire BACWA membership.

The policy was reviewed in draft form at the April 2019 Board meeting and any comments have been incorporated into the final versions which are recommended for adoption.

FISCAL IMPACT

No fiscal impact to BACWA.

ALTERNATIVES

This action does not require consideration of alternatives.

Attachment; BACWA Policies: BAP 1.06 Committees

Approved:

Date: May 17, 2019

Lori Schectel, Chair
BACWA Executive Board



BACWA BOARD POLICIES

POLICY NUMBER: BAP – 1.06

NAME OF POLICY: Committees

DATE APPROVED:

LAST REVISED:

PURPOSE: BACWA accomplishes much of its mission through the work of committees comprised primarily of volunteers from the BACWA member agencies. The purpose of this Policy is to articulate the importance of maintaining active committees, providing the resources to the committees needed to accomplish the work of the organization, and recognition of committee work.

POLICY: BACWA will maintain several core committees which complete work on regulations in a variety of functional areas of interest to the BACWA membership. Functional areas include the following:

- Permitting regulations and issues

- Bay Area Pollution Prevention and Public Education

- Recycled Water regulations and issues

- Collection Systems regulations and issues

- Pretreatment Program regulations and issues

- Air regulations and issues

- Laboratory regulations and issues

- Information sharing dealing with regulations and best practices impacting operations and maintenance

Core committees can be added or deleted by the Board of Directors as the need arises. Each committee should establish a meeting frequency for each fiscal year to allow participants to schedule the meetings on their calendars in advance.

BACWA will provide funding for the committees in the form of an annual budget for routine committee meetings, a special committee activity budget (i.e. seminars, workshops, training sessions, etc.) when activities are identified during the time of annual budget preparation, and a miscellaneous committee fund accessible to all committees to fund unforeseen activities that arise during the course of the fiscal year.

The leadership of the BACWA committees should follow the BACWA succession planning policy to help ensure the on-going viability and productivity of the BACWA committees.

The BACWA Board should seek opportunities to recognize and thank the volunteers for all the work they contribute to the organization. Examples of some opportunities included recognition at the Annual Membership Meeting, annual holiday luncheons, and awards for outstanding individual and committee performance.



EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 5

FILE NO.: 19-41

MEETING DATE: May 17, 2019

TITLE: Request for BACWA Executive Board Approval to Execute Agreement with the San Francisco Estuary Institute (SFEI) for the Completion of a Study of Nature Based Solutions for Reducing Nutrients in an amount not to exceed \$500,000.

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Authorize the execution of an agreement with SFEI to complete a study of nature-based solutions to reduce nutrients in an amount not to exceed \$500,000.

SUMMARY

The 2nd Nutrient Watershed Permit was adopted by the San Francisco Water Board on May 8, 2019. The Permit requires that, individually or in collaboration, the major Dischargers shall develop planning-level costs for nutrient discharge reductions by natural systems. It also states that the BACWA members have identified \$500,000 to conduct the study and the Water Boards feels that is a reasonable amount. The Permit language outlining the content of the study is attached.

In discussions with the Water Board staff they have indicated that BACWA completing the study by contracting with SFEI will provide added value to the study due to the on-going work SFEI is currently undertaking on natural systems associated with their shoreline resiliency program as a means of adapting to climate change.

In anticipation of contracting with SFEI, BACWA requested SFEI to prepare a scope of work, schedule, and budget that would meet the requirement for the study as outlined in the Permit. A scope of work is attached with a contract cost of \$500,000. The Water Board staff has reviewed the scope of work and indicated that it will meet the requirement in the Permit for conducting the study.

Once a contract for the work has been executed, BACWA will identify an internal group to oversee completion of the study and keep the Board apprised on progress.

FISCAL IMPACT

The BACWA 5 Year Plan anticipated spending \$500,000 for the study. The funds needed to complete the study are included in the Nutrient Surcharges for individual agencies that has been provided to the BACWA membership and will be collected over the next five years of the 2nd Nutrient Watershed permit term.

ALTERNATIVES

1. Do not complete this work: This alternative is not recommended since the study is a requirement of the 2nd Nutrient Watershed Permit and the BACWA members are relying on BACWA to complete the study on their behalf.
2. Select another consultant to conduct the work: This alternative is not recommended since SFEI is uniquely qualified to complete the study and the Water Board staff supports SFEI undertaking the study

Attachments:

Agreement 1: SFEI Contract, with Attachment A: Scope of Work

Approved: _____

Lori Schectel, Chair,
BACWA Executive Board

Date: _____

BAY AREA CLEAN WATER AGENCIES PROFESSIONAL SERVICES CONTRACT

This PROFESSIONAL SERVICES CONTRACT, effective 5/17/2019, 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 the San Francisco Estuary Institute ("Consultant"), a 501(c)3 Non-Profit doing business at 4911 Central Ave., Richmond, CA 94904 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 nonemployee 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. BACWA will pay Consultant based on the lump sum amounts for the various tasks shown in the scope of work in Exhibit A, up to a maximum amount payable of \$500,000. Consultant will not exceed the maximum amount payable without obtaining prior written approval from BACWA.
7. Consultant shall submit invoices quarterly (March, June, September, December) with progress made on each task as indicated by a percent of task completed. Payment will be made based on the lump sum for the task and the percentage of the task completed. Invoices shall include the lump sum amount requested and a brief description of the work performed.
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 December 31, 2023. 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: San Francisco Estuary Institute

4911 Central Ave.

Street Address

Richmond, CA 94904

City, State, Zip Code

Click here to enter text.

Tax Identification No.

Consultant Signature

Date

Click here to enter text.

Name, Title

May 17, 2019

BACWA Signature

Date

David R. Williams, Executive Director

Name, Title

Exhibit A

SFEI Scope of Work, Schedule and Budget

1. Task 1: Project Administration and Management

- Within ten (10) working days from the issuance of the notice to proceed, Consultant will provide a workflow diagram for completion of Tasks 2 through 4 of this Scope of Work, with key decision points noted and an associated schedule;
- The Consultant will prepare monthly status reports and participate in as-needed meetings with a dedicated committee from the Bay Area Clean Water Agencies (BACWA), designed to track progress and engage with the Consultant regarding this Project, continuing throughout the term of the contract;
- Bi-annual presentations to either the Nutrient Management Strategy (NMS) Steering Committee, BACWA, or Regional Water Board, from June 2020 to June 2023. Additional engagement may include participation in multi-benefit planning exercises organized by the San Francisco Estuary Partnership, San Francisco Bay Restoration Authority, or others;
- The Consultant will conduct project management activities, including:
 - Supervise, coordinate and monitor project progress and sub-consultants for conformance with best practices and other governing agency requirements;
 - Notify BACWA of any changes in scope or budget as soon as possible and propose actions if necessary to correct these changes;
 - Maintain communication by being available by phone or e-mail and responding in a timely fashion;
 - Maintain project files; and
 - Provide monthly written progress reports and invoices to BACWA.

Schedule:

- Workflow diagram, schedule, and identification of decision points: June 15, 2019
- Biannual presentations: June 2020 to June 2023
- Monthly progress reports and invoices over the duration of the Project, which in anticipated to take place from July 2019 to June 2023.

Budget: \$45,000

2. Task 2: Scoping Plan and Evaluation Plan Development

By November 1, 2019, SFEI shall submit a combined Scoping and Evaluation Plan to BACWA, establishing the methods and approach to evaluating site-specific opportunities and constraints to implementing nature-based strategies for nutrient load reduction at each major Discharger listed in Table 1 of the 2nd Nutrient Watershed Permit (Permit). SFEI proposes the development of a

combined Scoping and Evaluation Plans to minimize redundancy and accelerate the timing of Discharger-specific evaluation efforts.

At a minimum, the scoping elements of the combined Scoping and Evaluation Plan will include the level of work to complete the following for each Discharger facility and subembayment:

- Identification of candidate sites, if any, for potential wetlands treatment systems;
- Identification of candidate sites, if any, for potential wetlands creation or enhancement;
- Identification of candidate sites, if any, for potential horizontal levee creation;
- The situation of all candidate sites within their respective Operational Landscape Unit (OLU), drawing on data synthesized through Phase 1 of SFEI's on-going OLU Project; and
- Schedule to complete, within one year of submitting the joint Scoping and Evaluation Plan, the identification of all candidate sites.

The evaluation section of the joint Scoping and Evaluation Plan shall describe the approach for evaluating candidate sites, including, but not limited to:

- The method and assumptions associated with establishing the basis for screening sites deemed suitable as candidate nature-based treatment systems;
- Estimation of nitrogen (total inorganic nitrogen) and phosphorous (total phosphorus) discharge reductions associated with each project or associated OLU;
- Identification of ancillary adverse effects and ancillary benefits from each project (e.g., removal of emerging contaminants, the creation of habitat, or protection against sea level rise) or associated OLU;
- The approach and assumptions associated with performing cost estimates for candidate sites and alternatives, based on input received in consultation with an engineering firm with relevant experience in the design and implementation of wastewater treatment wetlands in California; and
- Assessment of the feasibility, efficacy, reliability, and cost-effectiveness of each project; and
- Identification of potential challenges to implementing each project (e.g., regulatory barriers).

Additional elements of the Scoping Plan shall include the approach to characterizing the following:

- Outstanding data and steps required to identify potential sites for nature-based nutrient load reduction, where site-specific uncertainty remains (e.g., focused site inspections, interviews, data analysis);
- Approach for integrating the Water Board-funded Phase 2 efforts of the OLU Project, pending Water Board approval. SFEI anticipates Phase 2 of the OLU project to begin in mid- to late-2019. Opportunities to leverage Phase 2 OLU efforts will be documented in a joint internal work plan for Phase 2 of the OLU Project as well as the project described in

this Scope of Work. A joint work plan shall reflect all the elements of this Scope of Work, in consultation with the Regional Advisory Committee (RAC) convened to support the OLU Project;

- Approach to coordinating with existing treatment wetland operators throughout California, and other applicable regions, to obtain information regarding nutrient (N+P) load reduction performance, as well as ancillary benefits/effects of each project (e.g., removal of emerging contaminants, the creation of habitat, sea level rise adaptation, the release of greenhouse gases);
- Literature review of nutrient (N+P) load reduction performance, as well as ancillary benefits/effects of each project (e.g., removal of emerging contaminants, the creation of habitat, sea level rise adaptation, the release of greenhouse gases);
- Opportunities and constraints analysis of implementation, including considerations of environmental constraints (e.g., contamination, sensitive wildlife habitat), regulatory considerations, land use, and land ownership;
- Identification of synergistic and antagonistic effects on OLUs, as a result of implementing each nature-based nutrient load reduction alternative;
- Identification of recommended data needs from existing and candidate wetlands and open-water systems receiving wastewater effluent (e.g., influent/effluent nutrient chemistry, influent/effluent chemistry data for select contaminants of emerging concern, flow rates, physical characteristics, maintenance requirements); and
- Recommended policy recommendations regarding permitting, monitoring, and maintenance, suitable for Regional Water Board review and comment.

Schedule and Deliverables:

- Monthly Status Reports (assuming a start date of July 1, 2019)
- Draft Scoping and Evaluation Plan: October 15, 2019; comments expected by November 7, 2019
- Final Scoping and Evaluation Plan: November 21, 2019

Budget: \$75,000

3. Task 3: Integrated Planning for Multi-Benefit Nutrient Load Reduction Alternatives

This task involves the development of a Scoping and Visioning document suitable for leveraging external funding to integrate disparate efforts regarding the quantification of nutrient load reduction alternatives. Pursuant to the first Nutrient Watershed Permit, Dischargers funded an Optimization and Upgrade Report. The second iteration of the Permit involves two efforts to quantify nutrient reduction alternatives achievable via nature-based solutions (the subject of this scope of services), as well as wastewater recycling. In parallel, SFEI is pursuing the OLU Project, involving multiple phases to assess landscape-scale opportunities for shoreline resiliency.

To facilitate integrated multi-benefit planning initiatives, SFEI will seek key partnerships with regulators, economists, academics, and the private sector to integrate these solutions into alternatives best suited for particular Dischargers and the region at large. Additional funding is

required to pursue this strategy, for the purposes of identifying the optimal mosaic of grey- and green-infrastructure alternatives, including wastewater recycling; as well as developing funding and policy mechanisms to realize this vision.

SFEI envisions developing the outputs of this task in parallel with Tasks 1 and 3, to assist in fundraising and partnership building opportunities as they arise. This task is consistent with one or more of the main NMS management questions.

Schedule:

- Scoping & Visioning Report regarding multi-benefit load reduction alternatives: June 2020

Budget: \$20,000

4. Task 4: Evaluation Plan Implementation

Implementation of the Evaluation Plan shall commence upon approval by the Regional Board of the Scoping and Evaluation Plan (Task 1). Involves SFEI performing, with engineering support, planning-level evaluations of locations potentially suitable for enhancement or conversion to nature-based nutrient load reduction installations (i.e., open water treatment wetlands and horizontal levees).

Phases of this task follow accordingly:

Task 4.1: Discharger Survey

Initial outreach to major Dischargers, in coordination with BACWA, to identify opportunities and constraints to implementation of nature-based systems, on a site-specific basis.

Potential survey questions include:

- Short- and long-term planning efforts for green infrastructure, habitat restoration, sea level rise adaptation;
- Available information regarding land ownership/use of, special studies regarding, and master planning efforts involving lands in proximity to a POTW with potential for conversion to treatment wetland uses;
- Relative interest in, and internal expertise available, to advance nature-based solutions for nutrient load reductions; and
- Information regarding governance-, regulatory-, and policy-based challenges to implementing nature-based nutrient load reductions.

This assumes early BACWA participation and limited commitment from BACWA staff to assist in the dissemination of surveys and collection of data.

Task 4.2: Desk-Based Analysis to Identify Candidate Sites

The first step towards the evaluation of suitable sites considered candidates for enhancement or conversion to nature-based load nutrient load reduction installations is to perform a desk-based

analysis of sites, informed by prior work and work products developed in support of Phase 1 of the OLU Project. Various data sources shall be employed to identify candidate sites, in practicable proximity to each major Discharger, of the following categories of nature-based systems:

- Wetlands treatment systems;
- Wetlands creation or enhancement; and
- Horizontal levee creation.

The OLU(s) associated with each candidate site shall be identified, and a summary of this information shall be provided in the 2020 Annual Report, consistent with Permit requirements, at VI.C.2.a.

Task 4.3: Site-Specific Outreach and Investigation

Following the identification of candidate sites, site-specific outreach will be conducted at up to fifteen (15) major dischargers identified as maintaining significant load reduction potential through the application of nature-based systems. Site visits and interviews with Discharger staff will be conducted to survey candidate sites and gather information to inform suitability, feasibility, planning-level designs, and estimated construction costs.

Site visits are assumed to take place at up to fifteen (15) major Discharger facilities and require up to two (2) days per Discharger. A memo shall document the outcomes and findings from each site-specific investigation, which will inform the identification of targeted site-specific evaluations.

Task 4.4: Site-Specific Evaluations

Following the completion of Tasks 3.1 through 3.4, this Scope of Work assumes detailed evaluations will take place at ten (10) major Dischargers. For each of the ten Dischargers where nature-based systems show the strongest potential for nutrient load reduction, conceptual designs, and planning-level cost estimates shall be provided. Supporting information shall include those elements identified in the Scoping and Evaluation Plan (Task 1). Particular site-specific information includes:

- Opportunities and constraints (e.g., design flow rates, proximity to wastewater source, slopes, land ownership, elevation, and various environmental conflicts)
- Projected nutrient load reduction (i.e., total inorganic nitrogen and total phosphorus), according to the following scales:
 - by project or alternative;
 - by each major Discharger involved; and
 - according to each related OLU.
- Planning-level assessment of the feasibility, efficacy, reliability, and cost-effectiveness of the project, compared to the suite of grey infrastructure solutions identified in the Nutrient Optimization and Upgrade Report, with input from an engineering firm with

experience designing and implementing grey- and green-infrastructure based solutions for the wastewater industry;

- Planning-level cost estimates associated with elements including mobilization, earthwork (cut, fill, placement, compaction), import of rock and other materials, infrastructure improvements (pump stations, pipelines, and discharge infrastructure), trail relocation, and revegetation (seeding and planting);
- Best professional judgment-based assessments, from a contracting engineer with applicable experience and expertise, concerning the relative feasibility, reliability and cost effectiveness of the various alternatives; and
- Readily identified governance issues and possible permitting strategies.

Schedule and Deliverables:

- Annual Status Reports: due June 1 of 2020 through 2023
- Draft Evaluation Report: April 1, 2022
- Response to comments on the Draft Evaluation Report: June 1, 2022
- Final Evaluation Report: June 15, 2022

Budget: \$360,000



EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 6

FILE NO.: 19-42

MEETING DATE: May 17, 2019

TITLE: Request to amend the TDC Environmental, LLC contract in the amount of \$2800.

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Authorize the execution of a Contract Amendment No. 1 to the June 15, 2018 contract with TDC Environmental, LLC for \$30,000 by increasing the upper limit by \$2,800 to \$32,800.

SUMMARY

As a result of the bankruptcy of O'Rourke Inc., the BAPPG Committee has funds remaining in their approved budget for out reach and media support that will not be spent in FY 19. The Committee desires to utilize some of these funds for additional work needed on pesticides to be completed under the existing contract with TDC Environmental, LLC. Board approval is needed to amend the TDC Environmental, LLC contract.

FISCAL IMPACT

Funds are available for this amendment in the BAPPG Committee approved FY 19 budget.

ALTERNATIVES

1. Do not complete this work: This alternative is not recommended since BAPPG will stay within their approved budget and additional work on pesticides is needed.
2. Select another consultant to conduct the work: This alternative is not recommended since TDC Environmental, LLC is already under contract with BACWA to perform pesticide technical work in support of the BAPPG Committee.

Attachments:

Amendment No. 1

Scope of Work

Approved: _____

Lori Schectel, Chair,
BACWA Executive Board

Date: _____

Scope of Work and Budget

- (1) EPA tracking schedule update – As a result of US EPA’s massive rework of its pesticides registration review schedule, several pesticides identified need to be added to the pool for chemicals review. Product is an updated tracking schedule. Budget is \$1000.
- (2) TSCA Reform - Prepare short letter to US EPA TSCA program office management with questions on pre-emption and POTW scientific analysis. Based on work already completed by TDC Environmental, LLC, this letter is recommended by colleagues at other agencies and would be part of a coordinated effort – Budget is \$1200.
- (3) Additional administrative costs to handle rescheduling several of technical calls with collaborators. – Budget is \$600.



BACWA EXECUTIVE DIRECTOR AUTHORIZATION

AGENDA NO.: 7

FILE NO.: 20-01, 02, 03

MEETING DATE: May 17, 2019

TITLE: Executive Director Authorization of Fiscal Year 2020 Amendments to Contracts

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

ACTION

Executive Director Authorization of amendments to contracts to implement the Fiscal Year 2020 BACWA/CBC Budget and Workplan.

SUMMARY

The BACWA Fiscal Year 2020 begins July 1, 2019. 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 will ensure that, as of July 1, 2019 BACWA has Executive Board Legal Support, Regulatory Legal Support, and IT Support. All of these contracts were included in the BACWA FY 2020 workplan and budget and will become effective July 1, 2019. All contracts have a term of one year and will terminate on June 30, 2020.

Contractor	Services	Contract Amount	File Number
Day Carter Murphy	Executive Board Legal Support (as needed)	\$2,133.00	20-01
Downey Brand	Regulatory Legal Support (as needed)	\$2,653.00	20-02
Cayuga Information Systems	IT Support (as needed)	\$2,600.00	20-03

FISCAL IMPACT

The funding for these contracts is consistent with the FY 2020 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. Day Carter Murphy Rate Sheet FY20
2. Downey Brand Rate Sheet FY20
3. Cayuga Information Systems Rate Sheet FY20

Approved:

David R. Williams

David R. Williams, Executive Director
BACWA

Date:

May 17, 2019

Legal/IT rates

Contractor	Services	rate
Day Carter Murphy	Executive Board Legal Support (as needed)	\$380.00/hr
Cayuga Information Systems	IT Support (as needed)	\$90.00/hr

Exhibit B

Downey Brand LLP

2019-20 Hourly Rates for BACWA

Melissa Thorme	\$390 (discounted from standard rate)
Nicole Granquist	\$390 (discounted from standard rate)
Associates/Counsel	\$250-385 (depending on years of experience)

Costs

Transportation, Parking, Lodging, Tolls (for approved travel) - actual cost per receipt
For large copy jobs, regular BW copies - \$0.10 per page; color copies - \$0.20 per page
Postage/Overnight mail service - actual cost
Mileage: current IRS rule rate
Courier: actual cost per receipt
Duplication to CD/DVD: \$5.00 per CD/DVD



BACWA CHAIR AUTHORIZATION REQUEST

AGENDA NO.: 8

FILE NO.: 19-38

MEETING DATE: May 17, 2019

TITLE: Request for BACWA Chair Approval of Agreement with San Francisco Estuary Institute to Provide Enterococcus Study Plan and Report

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Authorize an agreement with San Francisco Estuary Institute for \$5,478.00 to provide support for enterococcus monitoring study planning and reporting for FY19 and FY20.

SUMMARY

In August 2018, the State Water Board adopted new statewide bacteria water quality objectives and implementation options to protect recreational users from the effects of pathogens in California water bodies. The objectives and implementation options are a new part 3 of the Water Quality Control Plan for the Inland Surface Waters, Enclosed Bays (SIP), and Estuaries of California, and as an amendment to the Water Quality Control Plan for Oceans Waters of California (Ocean Plan). The new bacteria objective for all waters where the salinity is greater than 1 ppt more than 5 percent of the time during the calendar year is a six-week rolling geometric mean of enterococci not to exceed 30 cfu/100 mL, calculated weekly, with a statistical threshold value of 110 cfu/100 mL, not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner. The Objectives were approved by the Office of Administrative Law in February 2019 and by EPA in March 2019.

Historically, the Regional Water Board has not granted dilution credit for bacterial objectives in most of BACWA's members' NPDES permits. However, they have indicated they may apply dilution when implementing the new bacterial objectives in permits if it will decrease chlorine dosing for disinfection. To be granted dilution credit in the calculation of the new objectives, the Water Board will need background enterococcus levels in the receiving water to determine the assimilative capacity of the Bay. BACWA is proposing a study to sample the SF Bay for enterococcus. SFEI has developed a Scope of Work to support this effort, and SFPUC has offered in kind support for sampling using their boat, as well as analysis.

This authorization is for SFEI technical support of the enterococcus sampling effort. There also will be a separate contract for analytical services that will need to be approved in order to complete the assimilative capacity study.

FISCAL IMPACT



Funds are available for this agreement within the BACWA FY19 budget approved on April 20, 2018 and will be available within the FY20 budget under line item General Technical Support.

ALTERNATIVES

1. Do not complete this work. This alternative is not recommended since scientific oversight in planning and reporting will add integrity to the receiving water enterococcus sampling and analysis being carried out by BACWA member agencies.
2. Select another consultant to conduct the work. This alternative is not recommended since SFEI, via the RMP, is the lead agency carrying out receiving water monitoring in the San Francisco Region.

Attachments: FY19 & FY20 Agreement with SFEI

Approved: _____

Lori Schectel, Chair
BACWA Executive Board

Date: May 15, 2019

BAY AREA CLEAN WATER AGENCIES

CONSULTING AGREEMENT

TO: Warner Chabot
San Francisco Estuary Institute
4911 Central Ave.
Richmond CA 94804
warnerc@sfei.org
510-746-7396

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 with San Francisco Estuary Institute (SFEI) for FY19 and FY20 to provide Study Planning and Reporting for enterococcus monitoring in San Francisco Bay.

This Agreement covers professional services to be performed by SFEI in order to implement study enterococcus monitoring study planning and reporting. The Agreement will take effect at signing and will expire on June 30, 2020. This work is described in the attached Scope of Work and under the direction of Lorien Fono, BACWA Regulatory Program Manager. The total cost of professional services to be performed by SFEI is not to exceed \$5,478. This contract will be funded by the BACWA Budget under the General Technical Support line item.

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 SFEI for professional and competent services rendered to the date of termination upon delivery of assigned work products to the BACWA.

SFEI shall submit invoices to the BACWA Assistant Executive Director via e-mail. Invoices shall indicate hours associated with each task. EBMUD will pay SFEI within thirty (30) days of receipt and approval of satisfactory SFEI invoices.

E-mail: shulll@bacwa.org

Attachments: SFEI Scope of Work

Approved:

By 
David R. Williams
BACWA Executive Director

By _____
Warner Chabot
San Francisco Estuary Institute

Date: 5/15/19

Date: _____

BACWA EIN: 94-3389334

SFEI EIN: 94-2951373

Enterococci monitoring proposal

Summary: This proposal outlines the scope of work for the San Francisco Estuary Institute (SFEI) to support the Bay Area Clean Water Agencies (BACWA) in determining background concentrations of enterococci in the Bay. SFEI will review existing enterococci monitoring in the Bay, develop a sampling plan, review the data, and write a summary report after sampling is completed.

Estimated cost: \$3,154 to \$5,478

Principal Investigator: Melissa Foley, RMP Program Manager

Proposed deliverables and timeline

Deliverable	Due date
<i>Review existing enterococci data</i>	<i>1 May 2019</i>
<i>Develop sampling plan</i>	<i>1 May 2019</i>
<i>Review new enterococci data</i>	<i>30 June 2019 / 31 January 2020</i>
<i>Write summary report</i>	<i>29 February 2020</i>

Background

BACWA has asked SFEI to assist in the determination of background enterococci concentrations in San Francisco Bay. This testing is of interest because the State Water Resources Control Board approved new Bacterial Objectives for water contact recreation (REC-1), reducing the objective from 35 CFU/100 mL to 30 CFU/100 mL. The U.S. Environmental Protection Agency (USEPA) recently approved these revised guidelines. Beginning in April 2019, the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) will begin implementing the new objectives in NPDES permits as enterococci effluent limits.

Under the current objectives, the SFBRWQCB does not generally apply dilution credit when determining limits, and instead applied the objectives as end-of-pipe limits. However, with the new proposed objectives, they are willing to consider allowing dilution credit to calculate effluent limits for enterococci. In order to determine how to calculate effluent limits with dilution, the SFBRWQCB needs to know the background concentration of enterococci in the Bay.

Scope of proposed work

SFEI will review existing data on enterococci monitoring in San Francisco Bay from open Bay areas, where possible. Enterococci data from beaches and shallow water areas of the Bay (see Heal the Bay report cards [here](#)) are abundant, but may not be representative of the deep channel locations where wastewater treatment plants discharge to the Bay. Existing data will be summarized and used to put additional measurement in context.

Following this data review, SFEI will develop a sampling plan, including sampling locations, number of samples to be collected, and sampling timing. The San Francisco Public Utilities Commission (SFPUC) will coordinate the sampling of the enterococci samples, which will be analyzed by a contract laboratory. One round of sampling will occur during the dry season in 2019, and one during the wet season in late 2019 or early 2020.

SFEI will review the data generated by the contract lab to evaluate if further sampling is required. If the first round of sampling shows enterococci levels are above the new proposed threshold (30 CFU/100 mL) at all or most sampling sites, further sampling will not be required and no summary report will be written (see Budget 1). If enterococci levels are below the proposed threshold at some of the sites, a second round of sampling will be conducted, and SFEI will write a summary report that interprets the enterococci data (see Budget 2).

Budget 1 (for completing a modified scope of work)

Item	Hours	Rate	Total
Review & summarize existing enterococci data	8	\$166	\$1,328
Develop sampling plan	5	\$166	\$830
Coordination with SFPUC and contract lab	4	\$166	\$664
Review new enterococci data	2	\$166	\$332
Write summary report	0	\$156	\$0
		TOTAL:	\$3,154

Budget 2 (for completing the full scope of work)

Item	Hours	Rate	Total
Review & summarize existing enterococci data	8	\$166	\$1,328
Develop sampling plan	5	\$166	\$830
Coordination with SFPUC and contract lab	6	\$166	\$996
Review new enterococci data	4	\$166	\$664
Write summary report	10	\$166	\$1,660
		TOTAL:	\$5,478

Request for Proposals

Bay Area Clean Water Agencies

Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling

Table of Contents

Introduction.....	1
Background.....	1
Project Description.....	2
Provision C.3 - Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling (from rw-2019-0017)	2
Scope of Services	3
Task 1: Combined scoping and evaluation plan	4
Task 1.1 – Scoping Plan.....	4
Task 1.2 - Evaluation Plan	4
Task 2: Analysis.....	4
Task 3: Reporting.....	4
Task 4: Project management and progress updates.....	5
Project Schedule.....	5
Organization and Content of the Proposal	5
Contract Negotiations	7
Proposal Evaluation Criteria	8
Standard Agreement.....	8
Attachment A	1

Introduction

Bay Area Clean Water Agencies (BACWA) seeks the services of a consulting engineering firm or team (Consultant) for a planning level study related to Nutrient Discharge Reduction by Water Recycling (Project) for BACWA member agencies with flows greater than or equal to one million gallons per day (mgd). This Request for Proposal (RFP) includes the information needed for proposal preparation and an attachment identifying participating member agencies. The RFP and attachment describe the scope requirements for the Project.

Background

BACWA is a joint powers agency whose members own and operate publicly-owned treatment works (POTWs) and sanitary sewer systems that collectively provide sanitary services to over 7.1 million people in the nine-county San Francisco Bay Area. BACWA members are public agencies, governed by elected officials and managed by professionals who protect the environment and public health. BACWA was founded, and continues, to assist agencies in carrying out mutually beneficial projects, and to facilitate the development of scientific, economic, and other information about the San Francisco Bay environment and the agencies that work to protect it and public health.

Nutrients in the San Francisco Bay are a major issue for the Bay Area water quality community. Historically, the San Francisco Bay has not been adversely impacted by nutrient loading even though it is nutrient-enriched compared to other estuaries around the country. Nutrient management by BACWA members who discharge to the San Francisco Bay is regulated via the Nutrient Watershed Permit, administered by the San Francisco Bay Regional Water Quality Control Board (Regional Water Board).

The Regional Water Board issued the first Nutrient Watershed Permit (R2-2014-0014) in April, 2014, which represented the first phase of a multi-permit effort. That permit required municipal dischargers to (1) support nutrient receiving water monitoring, modeling, and special studies to characterize the Bay's response to current and future nutrient loads; (2) monitor their effluent to characterize nutrient discharge concentrations and loads; and (3) evaluate opportunities to reduce nutrient discharges through treatment plant optimization and upgrades. The final report on *Potential Nutrient Reduction by Treatment Optimization, Sidestream Treatment, Treatment Upgrades, and Other Means*, in compliance with the first Nutrient Watershed Permit, is available on BACWA's website¹.

The second Nutrient Watershed Permit (R2-2019-0017) was adopted on May 8, 2019, and goes into effect July 1, 2019. In addition to continued monitoring, reporting, and support of scientific

¹ https://bacwa.org/wp-content/uploads/2018/06/BACWA_Final_Nutrient_Reduction_Report.pdf

studies on the impacts of nutrients on the San Francisco Bay, the second Nutrient Watershed Permit includes a requirement to evaluate opportunities to reduce nutrient discharges using wetlands systems, recycling, and other green solutions. The Regional Water Board's goal is to create a complete suite of nutrient reduction strategies to determine cost-effective actions with the most benefits.

This RFP seeks consultant support for the evaluation of potential nutrient discharge reduction by Water Recycling, to satisfy Provision C.3 of the second Nutrient Watershed Permit.

Project Description

BACWA is seeking a consultant to conduct the Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling Project, described in Provision C.3 of the second Nutrient Watershed Permit, and reproduced below. BACWA envisions that the scoping and evaluation plan will be combined into one Task that will be completed and submitted by the December 1, 2019 deadline. The Project entails collecting information from member agencies on recycled water projects that they are considering through existing planning efforts; it does not include identifying new projects. The analysis will include calculating nutrient load reductions associated with these projects, and evaluating their feasibility and cost-effectiveness.

Provision C.3 - Regional Evaluation of Potential Nutrient Discharge Reduction By Water Recycling (From R2-2019-0017)

The major Dischargers listed in Table 1 shall, individually or in collaboration with other regional stakeholders, evaluate options and develop planning-level costs for nutrient discharge reduction by water recycling as described below. These requirements do not apply to the minor Dischargers listed in Table 1.

- a. **Scoping Plan.** By December 1, 2019, the Dischargers shall, individually or in collaboration with regional stakeholders, submit a Scoping Plan describing the level of work proposed to conduct the evaluation. The Scoping Plan shall include, but is not limited to, the level of work to identify opportunities for potential wastewater recycling (e.g., for irrigation) for each Discharger's facility and subembayment.*
- b. **Evaluation Plan and Implementation.** If a Discharger identifies opportunities, it shall proceed with an evaluation for its facility and subembayment. By July 1, 2020, the Discharger shall, individually or in collaboration with regional stakeholders, submit an Evaluation Plan and schedule describing the methods and means for conducting the evaluation for the sites that are identified in the Scoping Plan. The evaluation shall include, but not be limited to, the following tasks:*
 - Description of all treatment plants, treatment plant processes, and service area;*

- *Estimation of nitrogen (total inorganic nitrogen) and phosphorous (total phosphorous) discharge reductions associated with each recycled water opportunity;*
- *Identification of ancillary adverse effects and ancillary benefits from each project (e.g., reduction of natural water resource diversion, reduction of potable water demand, or reduction of chemical fertilizer reliance);*
- *Assessment of the feasibility, efficacy, reliability, and cost-effectiveness of each opportunity; and*
- *Identification of potential challenges to implementing each opportunity (e.g., regulatory barriers).*

The Dischargers shall start implementing the Evaluation Plan tasks for each identified site within 45 days of submittal.

- c. Status Reports.** *By July 1, 2021, and again by July 1, 2022, the Dischargers shall submit, or cause to be submitted, a status report describing the tasks completed, preliminary findings, and tasks yet to be completed for each Discharger that identified water recycling opportunities, highlighting any adaptive changes made to the Evaluation Plan submitted in accordance with task b, above. Status reports may be combined with status reports for Provision VI.C.2, above.*
- d. Final Report.** *By July 1, 2023, the Dischargers shall submit, or cause to be submitted, a Final Report describing the results of their evaluations.*

Scope of Services

BACWA has prepared a scope of services necessary for completion of the Project, which is provided below. This scope of services shall be used as a basis for preparation of the proposal. Additional tasks or modifications to the scope of services that the Consultant feels will produce a more useful and/or cost-effective project should be included in the proposal.

The project is divided into four tasks that are described below:

- Task 1: Combined Scoping and Evaluation Plan
- Task 2: Analysis
- Task 3: Reporting
- Task 4: Project Management and Project Updates

BACWA will supply any information that is requested that is available from the studies associated with compliance the first Nutrient Watershed Permit.

A list of all the participating BACWA Member Agencies is provided in Attachment A.

Task 1: Combined scoping and evaluation plan

By 12/1/19, the consultant shall perform the following:

Task 1.1 – Scoping Plan

- Describe all treatment plants, treatment plant processes, and service area.
- Identify opportunities for potential wastewater recycling (e.g., for irrigation)
 - Review info from the first Permit efforts, issue a new request for information (RFI) for information updates
 - Acquire existing Master Plans and other relevant documents from agencies.
- Identify agencies for whom recycled water is infeasible, or is already maximized, who will not be included in the Study

Task 1.2 - Evaluation Plan

- Explain the RFI on Recycled Water and what that includes.
- Develop approach for potable reuse projects and associated reverse osmosis (RO) concentrate management
- Describe the Master Plans and other materials available for basis of information
- Explain the basis for load reduction calculations
- List examples of adverse/ancillary impacts and adapt language from Watershed Permit #1 Evaluation Plan
- Present Scoping and Evaluation Plan to the Regional Board

Task 2: Analysis

- Briefly Review master plan concepts
- Meet with plant/agency staff as needed to understand their RW Master Plans as well as updates, and other relevant materials.
- Summarize recycled water plans, level of certainty, and associated nutrient load reductions

Task 3: Reporting

- Individual Plant Summaries
 - Existing RW flows and nutrient loads removed
 - Findings:
 - Summary of the RW concepts, and potential future flows and nutrient loads removed
 - Distribution map
 - Summary of existing cost estimates from master plans, converted to dollars per gallon
 - Identification of potential challenges to implementing identified projects
- Overall summary
 - Summary of current recycled water flows and nutrient loads removed
 - Summary of future recycled water flows and nutrient loads removed, with level of certainty
 - Summary and analysis of ancillary adverse effects and ancillary benefits from types of projects (e.g., reduction of natural water resource diversion, reduction of potable water demand, or reduction of chemical fertilizer reliance);
 - Summary of the feasibility, efficacy, reliability, and cost-effectiveness of types of recycled water projects to reduce nutrient loads
 - Summary of potential challenges to implementing opportunities (e.g., financing, regulatory barriers).

Task 4: Project management and progress updates

- Bimonthly updates to the BACWA Recycled Water Committee
- Semi-annual updates to the BACWA Executive Board
- Presentation of findings to the Regional Water Board, including annual progress updates
- Project management activities

Project Schedule

The project shall be completed based on the major milestones as provided below.

Major Milestone	Date
Notice to Proceed	8/09/19
Submit Scoping and Evaluation Plan to Regional Water Board	12/01/19
Status Updates to Regional Water Board	July 1, 2021, and by July 1, 2022
Final Report	By July 1, 2023

Organization and Content of the Proposal

Section	Page Limit	Contents
Cover Letter	None	Transmittal
1	None	Identification of Proposer
2	1	Project Overview
3	5	Project Approach
4	3	Project Team and Qualifications
5	3	Project Experience
6	None	Project Schedule
7	None	Level of Effort
8	None	Fee Estimate (Separate)
9	None	Exceptions to Contract Terms and Conditions
A	2 per staff person	Resumes of Key Staff

Section 1: Identification of Proposer

Clearly list the following information for your firm: company name, address, phone number, fax number, and main contact person with title and email address.

Section 2: Project Overview (maximum 1 page)

Provide a description of the project.

Section 3: Project Approach (maximum 5 pages)

(Note: If accepted by BACWA, this Section (or a mutually agreed upon, modified version) will be inserted into the Consulting Services Contract between BACWA and the selected Proposer/Consultant.)

Use the information provided in this RFP to provide a detailed description of your approach and proposed tasks for completing the desired services. Describe the tasks that you see as necessary to complete the work of this RFP, meet the BACWA's goals and objectives, and satisfy the requirements of the Agreement.

Describe how you will provide the requested services and how you will flexibly staff the project given the various tasks. Describe how your firm's and sub-consultant's project members will interface with one another, if applicable. Outline the methods and controls by which your firm will manage and complete the tasks as described in this RFP.

Discuss the specific tasks that you may require from BACWA staff and participating agencies. Explain how your firm's staff and BACWA will interface.

Section 4: Project Team and Qualifications (maximum 3 pages)

Describe the proposed team organization (include an organizational chart); the specific role of key staff members; and how BACWA will be involved with the proposed team. Specifically list the names and titles of the firm's key staff that will participate on the project and indicate the portion of the time that key staff will be available to work on the subject project. Describe prior projects where key team members have worked together. Describe the manner in which key team members interfaced with each other and with the owners of prior projects. For each key project team member describe their level of experience with similar projects (include resumes in the Proposal Appendix).

If sub-consultants will make up part of the project team, indicate the role and responsibility of each sub-consultant; how the sub-consultant will be managed; and how the sub-consultant will interface with BACWA. Provide the following information for sub-consultants: company name, address, phone number, fax number, and main contact person. Include an organizational chart showing how the project team will be managed.

Section 5: Project Experience (maximum 3 pages)

Describe the length of time that the firm has provided the services requested in this RFP and prior clients that have received such services. Summarize recent experience gained from other projects that are specifically relevant to the subject project.

*Include five (3) references for relevant and related projects over the last five (5) years. The references shall include the following: owner name; contact person with email and phone number; project name; date of project commencement and completion; project location; contract amount; brief project description; and a description of the services provided by your firm.

Section 6: Project Schedule

Include a proposed project schedule listing major milestones for the project from project kick-off, through and including, interim milestones and final deliverables.

Section 7: Level of Effort and Fee Proposal

Include a spreadsheet that details the Proposer's/Consultant's Estimated Work Effort and fees. The Estimated Work Effort shall list the number of hours with employee title/category that will be devoted to each task and/or subtask described in the Scope of Work (Approach to the Work) submitted by the Proposer/Consultant. The Level of Effort and Fee proposal shall specifically include the following:

- a. An itemized list of all tasks required for the completion of the Work (i.e. Project Management, Site Visit, Final Report, etc.).
- b. A list of all involved personnel (name, title, and/or employee category) with proposed hours and hourly rate for each.
- c. Indicate the use of any sub-consultants (if applicable). Include the sub-consultant's name, employee names with titles and/or employee categories, labor hours, and cost.
- d. Include all required costs required to make a complete project, i.e. labor hours, technology charges, etc. in an itemized format.
- e. Indicate the overhead and profit rates as a percentage of labor.
- f. Indicate the markup on sub-consultants and all other costs.
- g. Indicate the overall not-to-exceed total cost for the work.

Note that BACWA anticipates that the Level of Effort for the Project will not exceed **\$150,000.**

Section 9: Exceptions to Contract Terms and Provisions

Clearly indicate any exceptions to BACWA's RFP and/or Contract documents. Any exceptions or changes will require review by BACWA's Legal Counsel and are subject to Board review and approval. Any changes may delay the project if not identified with the submission of this proposal.

Appendix A: Resumes of Key Staff (maximum 2 pages per staff person)

Provide resumes of key staff, including subconsultants.

Contract Negotiations

Proposals should contain estimated labor hours allocated to all the tasks in this RFP, including the level of seniority of staff assigned to each task.

Proposal Evaluation Criteria

Criteria	Points
Project approach –	30
Expertise of proposed team in nutrient discharge reduction and recycled water planning	15
Principal in Charge/Project Manager – Availability and responsiveness	25
Relevant firm experience with recycled water planning in the Bay Area and nationwide	10
Level of Effort – Appropriate distribution of labor resources	15
Proposed Schedule	5
Total	100

Standard Agreement

Proposal Costs

The cost for developing the proposal shall be the sole responsibility of the Proposer. BACWA shall not be responsible for any costs to develop proposals.

Proposals to Remain Open

The Proposer shall guarantee its proposal for a period of ninety (90) calendar days from the proposal due date.

Withdrawal of Proposal

Proposals may be withdrawn at any time prior to date/time established in this RFP for receipt of Proposals and only by written request for the withdrawal of the Proposal filed with BACWA. The request shall be executed by the Proposer or its duly authorized representative. The withdrawal of the Proposal does not prejudice the right of the Proposer to file a new Proposal. Proposals will not be received after the specified due date and time, and no Proposal may be withdrawn after the specified due date and time established in this RFP.

Owner's Right Reserved

The RFP does not commit BACWA to award an Agreement. BACWA, at its sole discretion, reserves the right to accept or reject any or all Proposals received, to waive any informality in a Proposal, to interview any and all firms submitting Proposals, to negotiate with any qualified Proposer, to amend the RFP prior to the Proposal due date, or to cancel the RFP in part or

completely. All Proposals will become the property of BACWA. If any proprietary information is contained in the Proposal, it should be clearly identified.

BACWA may contact any Consultant to clarify a response and/or contact any of the Consultant's references during the evaluation and review period. BACWA will make a selection based upon the Evaluation Criteria which establishes the greatest overall value of the professional services to BACWA.

Execution of the Agreement

Upon final selection of a Consultant, staff will issue a Notice of Award and Agreement documents to the Consultant for signature. The Consultant selected for the Work shall enter into an Agreement with BACWA and furnish the required insurance certificates with endorsements within fourteen (14) calendar days after receipt of the Agreement and Notice of Award.

Questions and Other Requests for Information

All questions and requests for information regarding this RFP or the Project shall be directed in writing, via email, to David R. Williams at dwilliams@bacwa.org. Questions shall be submitted by June 9, 2019 and answers will be distributed to all Proposers by June 13, 2019.

Attachment A

A listing of all BACWA Member Agencies that are required to participate in the Regional Evaluation of Potential Nutrient Discharge Reduction by Water Recycling is provided in Table A - 1.

Table A - 1. BACWA Member Agency Discharger Info

Discharger	Facility Name	Facility Address
American Canyon, City of	Wastewater Treatment and Reclamation Facility	151 Mezzetta Court American Canyon, CA 94503
Benicia, City of	Benicia Wastewater Treatment Plant	614 East Fifth Street Benicia, CA 94510
Burlingame, City of	Burlingame Wastewater Treatment Plant	1103 Airport Boulevard Burlingame, CA 94010
Central Contra Costa Sanitary District	Central Contra Costa Sanitary District Wastewater Treatment Plant	5019 Imhoff Place Martinez, CA 94553
Central Marin Sanitation Agency	Central Marin Sanitation Agency Wastewater Treatment Plant	1301 Andersen Drive San Rafael, CA 94901
Delta Diablo	Delta Diablo Wastewater Treatment Plant	2500 Pittsburg-Antioch Highway Antioch, CA 94509
East Bay Dischargers Authority (EBDA); Cities of Hayward and San Leandro; Oro Loma Sanitary District; Castro Valley Sanitary District; Union Sanitary District; East Bay Regional Parks District; Livermore-Amador Valley Water Management Agency; Dublin San Ramon Services District; and City of Livermore	EBDA Common Outfall	EBDA Common Outfall 14150 Monarch Bay Drive San Leandro, CA 94577
	Hayward Water Pollution Control Facility	
	San Leandro Water Pollution Control Plant	
	Oro Loma/Castro Valley Sanitary Districts Water Pollution Control Plant	
	Raymond A. Boege Alvarado Wastewater Treatment Plant	
	Hayward Marsh	
	Livermore-Amador Valley Water Management Agency Export and Storage Facilities	
	Dublin San Ramon Services District Wastewater Treatment Plant	
	City of Livermore Water Reclamation Plant	
East Bay Municipal Utility District	East Bay Municipal Utility District, Special District No. 1 Wastewater Treatment Plant	2020 Wake Avenue Oakland, CA 94607
Fairfield-Suisun Sewer District	Fairfield-Suisun Wastewater Treatment Plant	1010 Chadbourne Road Fairfield, CA 94534
Las Gallinas Valley Sanitary District	Las Gallinas Valley Sanitary District Sewage Treatment Plant	300 Smith Ranch Road San Rafael, CA 94903
Millbrae, City of	Water Pollution Control Plant	400 East Millbrae Avenue Millbrae, CA 94030

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Discharger	Facility Name	Facility Address
Mt. View Sanitary District	Mt. View Sanitary District Wastewater Treatment Plant	3800 Arthur Road Martinez, CA 94553
Napa Sanitation District	Soscol Water Recycling Facility	1515 Soscol Ferry Road Napa, CA 94558
Novato Sanitary District	Novato Sanitary District Wastewater Treatment Plant	500 Davidson Street Novato, CA 94945
Palo Alto, City of	Palo Alto Regional Water Quality Control Plant	2501 Embarcadero Way Palo Alto, CA 94303
Petaluma, City of	Municipal Wastewater Treatment Plant	3890 Cypress Drive Petaluma, CA 94954
Pinole, City of	Pinole-Hercules Water Pollution Control Plant	11 Tennent Avenue Pinole, CA, 94564
Rodeo Sanitary District	Rodeo Sanitary District Water Pollution Control Facility	800 San Pablo Avenue Rodeo, CA 94572
San Francisco (San Francisco International Airport), City and County of	Mel Leong Treatment Plant, Sanitary Plant	Bldg. 924 Clearwater Drive San Francisco, CA 94128
San Francisco (Southeast Plant), City and County of	Southeast Water Pollution Control Plant	750 Phelps Street San Francisco, CA 94124
San Jose and Santa Clara, Cities of	San Jose/Santa Clara Water Pollution Control Plant	700 Los Esteros Road San Jose, CA 95134
San Mateo, City of	City of San Mateo Wastewater Treatment Plant	2050 Detroit Drive San Mateo, CA 94404
Sausalito-Marin City Sanitary District	Sausalito-Marin City Sanitary District Wastewater Treatment Plant	1 East Road Sausalito, CA 94965
Sewerage Agency of Southern Marin	Sewerage Agency of Southern Marin Wastewater Treatment Plant	450 Sycamore Avenue Mill Valley, CA 94941
Silicon Valley Clean Water	Silicon Valley Clean Water Wastewater Treatment Plant	1400 Radio Road Redwood City, CA 94065
Sonoma Valley County Sanitation District	Municipal Wastewater Treatment Plant	22675 8th Street East Sonoma, CA 95476
South San Francisco and San Bruno, Cities of	South San Francisco and San Bruno Water Quality Control Plant	195 Belle Air Road South San Francisco, CA 94080
Sunnyvale, City of	Sunnyvale Water Pollution Control Plant	1444 Borregas Avenue, Sunnyvale, CA 94089
U.S. Department of Navy (Treasure Island)	Treasure Island Wastewater Treatment Plant	1220 Avenue M San Francisco, CA 94130
Vallejo Flood and Wastewater District	Vallejo Flood and Wastewater District Wastewater Treatment Plant	450 Ryder Street Vallejo, CA 94590
West County Agency; West County Wastewater District; City of Richmond; and Richmond Municipal Sewer District	West County Agency Combined Outfall	2910 Hilltop Drive Richmond, CA 94806
	West County Wastewater District Treatment Plant	
	Richmond Municipal Sewer District Water Pollution Control Plant	

Lorien Fono

From: Lorien Fono
Sent: Wednesday, May 15, 2019 11:09 AM
To: Lorien Fono
Subject: FW: TRC BPA - EB Meeting Schedule Change

From: Tom Hall <twhall@eoainc.com>
Sent: Tuesday, May 14, 2019 9:26 AM
To: David Williams <dwilliams@bacwa.org>; Lorien Fono <lfono@bacwa.org>
Cc: Jackie Zipkin <jzipkin@ebda.org>
Subject: RE: TRC BPA - EB Meeting Schedule Change

I unfortunately was asked to participate in a SCVWD RO concentrate management meeting on Friday 5/17 from 8 am to 1 pm so can't make the EB meeting. I will be at the 5/20 meeting to give an update.

I've been communicating with Richard Looker at the RWB and think we're pretty much on the same page about how to proceed. He was still waiting to hear back from his supervisors about how much if any "clean-up" they want to include regarding updating the bacterial objectives in this TRC BPA work.

I've edited the three BP tables to add the TRC WQOs and clarifying that they are to be implemented as water quality based effluent limitations (i.e. with dilution credit).

I've edited a list of dischargers from the NWP to indicate estuarine, marine, or freshwater discharge and added in three non-tidal Napa River dischargers and one other. I included which were shallow and deepwater discharges. I added which use chlorine vs UV based on review of individual permits and retained a column for design flows.

I'm summarizing the info I've received so far on FY 18/19 SBS actual or proposed purchases. I'm about half-way through editing the BPA staff report per Richard's notes and comments. The CEQA checklist should be pretty straight-forward to edit since the only real impacts are beneficial (reduced SBS dosages).

Overall it's proceeding well. On Monday we can see what Tom et al have to say about the bacteria objectives. And any reaction to O&G.

Thanks. Tom

From: Lorien Fono <lfono@bacwa.org>
Sent: Monday, May 06, 2019 11:21 AM
To: Tom Hall <twhall@eoainc.com>; David Williams <dwilliams@bacwa.org>
Cc: Jackie Zipkin <jzipkin@ebda.org>
Subject: RE: TRC BPA Table 4-2; O&G?

Tom, thanks for this update. I think the Board would need to hear what the advantage would be for us to support a bacterial BPA prior to making any decisions, particularly since the new objectives are directly implementable. This will be on the agenda for both our 5/17 Executive Board meeting, as well as our 5/20 meeting with the Regional Water Board. Will you be able to attend both of those?

From: Tom Hall <twhall@eoainc.com>
Sent: Friday, May 3, 2019 1:12 PM
To: David Williams <dwilliams@bacwa.org>
Cc: Lorien Fono <lfono@bacwa.org>; Jackie Zipkin <jzipkin@ebda.org>
Subject: TRC BPA Table 4-2; O&G?

Hi –

I recently sent Richard Looker the simple edits needed to BP Tables 3-3, 3-4, and 4-2 for the TRC BPA. Afterwards, I was looking more closely at Table 4-2 and remembering that we had worked with the RWB staff as part of the 2004 BPAs to make a very minor change to the Settleable Solids footnotes such that those effluent limits no longer applied to secondary treatment and above plants. As you know SS was only a relevant parameter way back in the days when there was only primary treatment.

O&G The same facts and logic for SS also apply to the O&G limits in Table 4-2. I checked the CIWQS MMP query output that I downloaded for 1/1/2010 – 3/31/2019 for all of Region 2. There were ZERO O&G violations reported with MMPs. This is another outdated parameter providing useless data that should be changed to not apply to WWTPS. See Table 4-2 where I propose adding a simple new footnote ‘g’ to accomplish this (all my changes have yellow highlights).

g These effluent limitations apply to all non-sewage treatment facilities.

With this footnote, the O&G limits would still apply to industries and other pertinent treatment facilities. This change could be included in the TRC BPA under a category of “Minor staff-initiated changes” or something to that effect (i.e. the clean-up type changes that Tom M. supported that they could/should include in their BPAs at one of our last BACWA/RWB joint meetings).

BACTERIA WQOs I reminded Richard that I haven’t heard back from them about what if anything related to the new SWB Bacterial WQO changes that they want to include in this TRC BPA. This and related bacterial work were deleted from my original draft proposed scope when the budget needed to be pared back from \$250k to \$100k in December 2017. The SOW does include a placeholder Optional Future Task 9. Supplemental RWB BPA Assistance for 100 hours to assist with “unexpected data collection or analysis requirements” that would need separate approvals.

It’s the RWB’s call (Xavier Fernandez is the new Naomi) how and when they want to do the work. The new SWB bacterial WQOs are directly implementable (following EPA approval March 22) as we’ve seen in the Palo Alto permit. The BP Section 4.5.5.1 (edited excerpt attached) also already allows for the Bacterial WQOs in Table 4-2A to be implemented as WQBELs as was done for EBDA in 2012. So this is mainly clean-up work so that the BP enterococcus WQOs would not be inconsistent (35 CFU/100 mL) with the SWB WQOs (30 CFU/100 mL). The freshwater E. Coli WQOs would also need to be added to BP Tables 3-1 and 4-2A. The new SWB statistical threshold values (STV) would also need to be added to those tables. Otherwise, not a lot of other “technical” changes needed.

It might be quicker (for BACWA) to support two focused BPAs closely in succession that could possibly be adopted at the same RWB hearing. The TRC BPA is much better thought through at this point. However, it’s harder to point to the benefits of reducing chlorine doses (in addition to SBS) via dilution based bacterial WQOs when that’s not the topic of analysis in the TRC BPA.

I’d suggest some brainstorming with Tom M. to develop the best path forward. I’m pretty sure he’d support the proposed minor change to the O&G footnotes. He probably needs to confer some more with Xavier and Bill about the bacteria BPA options. I’d be happy to participate in any meetings.

Appreciate any comments/input. Tom

Tom Hall, Ph.D.

Managing Environmental Engineer

EOA, Inc.

1410 Jackson Street

Oakland, CA 94612

(510) 832-2852 x110

twhall@eoainc.com



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Executive Board Special Meeting Agenda

SF Bay Regional Water Board / BACWA Executive Board Joint Meeting

Monday May 20, 2019, 10am to 12pm

SF Bay Water Board, 1515 Clay Street, St. 1400 Oakland, CA

ROLL CALL AND INTRODUCTIONS – 10:00

PUBLIC COMMENT – 10:05

DISCUSSION/OTHER BUSINESS- 10:10

Topic	Goal	Time
1. Nutrients	<ul style="list-style-type: none">• Debrief from Nutrient Watershed Permit adoption hearing• Next steps for NBS and recycled water regional studies• Update on House hearing on USGS budget	10:15
2. Chlorine Residual Basin Plan Amendment	<ul style="list-style-type: none">• BACWA Update on progress	10:35
3. Bacterial Objectives	<ul style="list-style-type: none">• BACWA's update on enterococcus sampling effort	10:55
4. Requests for Collection Systems information during permit reissuance	<ul style="list-style-type: none">• Discussion of recent requests for Collection Systems information in Permit Reissuance Letters	11:05
4. State Water Board Climate Change Census	<ul style="list-style-type: none">• Discussion of proposed census – any update?	11:15
5. CECs	<ul style="list-style-type: none">• BACWA participants in ethoxylated surfactants studies	11:20
6. Wetlands	<ul style="list-style-type: none">• Update from Water Board on progress• EPA interpretation of groundwater/NPDES issue – implications for horizontal levees	11:30
7. Toxicity	<ul style="list-style-type: none">• Update on meetings with Staff and Board members, including workshops on June 3 and June 24• Update on adoption	11:45

ADJOURNMENT

Agenda item 13

The Regional Water Board is asking for more robust Collection Systems reporting during the Report of Waste Discharge. The requested information is included in SSMPs, as required by the SSS WDR.

Language excerpted from NPDES Permit Reissuance letter sent to FSSD:

Collection System Management. Document asset management to ensure proper operation and maintenance of the collection system. Describe past actions from the previous order term and planned actions for the next permit term that include (1) the rehabilitation rate of sewer pipe and manholes; (2) the inspection rate of sewer pipe with closed-circuit TV; (3) routine and hot-spot cleaning rates of sewer pipe; (4) root control efforts; (5) smoke testing programs; (6) public outreach activities to reduce wipes and fats, oils, and grease from entering the collection system; and (7) private sewer lateral ordinances or incentive programs for the service area.

Lorien Fono

From: Ila Shimabuku <ilas@sfei.org>
Sent: Friday, May 10, 2019 4:23 PM
To: bay-rmp-microplastic@sfei.org
Subject: [RMP Microplastic WG] May 22 Meeting Agenda Package & Materials for Review
Attachments: 20190522 MPWG Agenda Package.pdf; Wastewater Chapter 05-09-2019.docx; Stormwater Chapter 05-10-2019.docx; Microplastic Strategy Update 05-05-2019.docx; PLEASE COMPLETE - Release for MP Production Film.pdf

Dear Colleagues,

The Microplastic Workgroup meeting is just around the corner (May 22nd here at SFEI). In preparation for the meeting, we have attached the following:

- **Agenda Package:**
 - The meeting agenda - Please note call-in information on the top of the agenda if you plan to view the conference remotely. The draft minutes from last year's meeting are also attached.
 - Three special study ideas for 2020 for your review - Two are in the RMP special study format; the third is formatted as a requested for State SEP funding (a different pool of funds). We will discuss funding further at the meeting.
- Chapters from the final deliverable for the Moore Foundation (due at the end of the summer) - We have attached the draft wastewater and stormwater chapters as separate Word documents to allow reviewers to track their changes. We anticipate having a draft fish chapter to you next week as well as an outline for the surface water chapter with key figures and text.
- The Microplastic Strategy Update - This is an update to the 2017 Microplastic Strategy document based on new findings from our study. It includes a Multi-Year Plan, and has also been attached as a separate Word document to allow for tracked changes.
- A film release form - As you may remember from last year, we prepared a 3 minute short describing the project and presented it at the meeting. We are preparing a longer feature (10 to 12 minutes) of the results of the project. To this end, the film crew (Plus M Productions) would like some footage of a meeting in action to show the collaborative nature of our work. They will be filming the meeting from 10:45 to 12:00. If you are attending the meeting, we will need you to give us a signed release before you go into the meeting room.
Please fill this out in advance of the meeting.

Lastly, we are expecting a FULL HOUSE. I have 40 people who have already indicated that they will be attending the meeting in person. Ila sent out an email on Monday (May 6th) to these 40 individuals confirming their attendance. If you did not receive this email and are planning on attending, please RSVP to me (meg@sfei.org) or Ila (ila@sfei.org) ASAP so we can be assured that we have a chair (and lunch) for you. Unfortunately, due to the high turnout, we will be unable to accommodate walk-ins day of the meeting.

We are really looking forward to this meeting and discussing the results with all of you.

All the best,
Meg and the Microplastics Team

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Ila Shimabuku
Environmental Analyst
San Francisco Estuary Institute

Draft Agenda
Second Wastewater Stakeholder Meeting on Proposed Toxicity Provisions
Tuesday, May 7, 11:00 – 12:30
CalEPA Building - Meeting Room 1510
Conference Line 916-227-1132 (no passcode required)

1. Updated Timeline for Response to Comments and Future Workshops
 - a. June 3 Workshop
 - b. June 24 Roundtable
 - c. July 2/3 Board Workshop
2. Issues from Previous Meeting and Responses
 - a. Regional Board discretion on the use acute testing in addition to chronic testing
 - b. Language encouraging reduced frequency of monitoring during a TRE
 - c. Use of prior (pre-plan) compliance data for reduced monitoring frequency
 - d. MMEL and “calendar month” alternatives (**see attachment**)
 - e. Flexibility in use of Instream Waste Concentration (IWC) and dilution
 - f. Changes in approach to determination of reasonable potential (RP)
 - i. Use of 10% effect versus 25%
 - ii. Automatic RP for plants over 5 MGD
 - g. Refinement of economic analysis
3. Use of the ceriodaphnia dubia reproduction endpoint
 - a. Alternative approach for provisions
 - b. Presentation/Interaction with ELTAC and ELAP and Lab Survey
4. Next Steps: CASA meetings with Board Members to discuss remaining issues

Special Study Proposal: Ethoxylated Surfactants in Ambient Water, Margin Sediment, and Wastewater

Summary: Ethoxylated surfactants are nonionic surfactants that are widely used in industrial and household products, including cleaning products. Previous Bay studies have focused on nonylphenols (NPs) and key nonylphenol ethoxylates (NPEs), which have been ubiquitously detected in Bay water, sediment, and bivalve samples. Currently, NPs and NPEs are classified by the RMP as Moderate Concern compounds. Additionally, preliminary results from a 2016 RMP special study of Bay water samples via non-targeted analysis suggest that Bay samples contain a broad, complex mixture of ethoxylated surfactants in addition to NPEs. These compounds have not been targeted for monitoring in the Bay.

This proposed study will analyze a broad suite of ethoxylated surfactants in three Bay matrices: ambient water, sediment, and wastewater. Analysis of ethoxylated surfactants in stormwater is being proposed in a complementary 2019 Special Study proposal. This study would provide information to help determine whether ethoxylated surfactants should be classified as Moderate Concern contaminants. The data will also guide development of a monitoring and management strategy for this class of contaminants that has been prioritized by ECWG.

Estimated Cost: \$123,200

Oversight Group: ECWG

Proposed by: Diana Lin and Rebecca Sutton (SFEI), and Lee Ferguson (Duke University)

PROPOSED DELIVERABLES AND TIMELINE

Deliverable	Due Date
Task 1. Coordinate sampling protocol with wastewater treatment facilities	April 2019
Task 2. Complete wastewater effluent sample collection	August 2019
Task 3. 2019 Status and Trends Water Cruise	August 2019
Task 4. Laboratory method development	July 2019
Task 5. Complete laboratory analysis of samples	January 2020
Task 6. QA/QC and data management	February 2020
Task 7. Preliminary results presentation for ECWG meeting	April 2020
Task 8. Draft manuscript and summary for managers	August 2020
Task 9. Final manuscript and summary for managers	January 2021

Background

Ethoxylated surfactants are a broad class of nonionic surfactants with a wide range of potential consumer and industrial applications, including cleaning products, pesticide formulations, textile and paper processing, paints and coatings, with very high volume consumptions on the order of millions of kilograms per year. Nonylphenol ethoxylates (NPEs), a family within the broader class of alkylphenol ethoxylates, are used in industrial and household laundry detergents, although voluntary phase-outs may have reduced this particular use significantly (Maruya 2015, EPA 2010). However, demand for NPEs is driven by growth in industrial and institutional cleaning, paints, and agrochemical sectors (DTSC 2018).

Ethoxylated surfactants are manufactured by reacting a hydrophobic alkyl chain (for example AP for alkylphenol) with ethylene oxide to form a hydrophilic ethylene oxide chain (EO) of varying lengths, e.g., AP_nEO, where n refers to the length of the EO group. The ethoxylation process forms mixtures of compounds with varying chain lengths, which are usually described by only the main or average compound's ethylene oxide length. Longer-chain ethoxylates can degrade to shorter-chain products, for example, nonylphenol diethoxylates (4-NP2EO) to nonylphenol monoethoxylates (4-NP1EO) to nonylphenol (NP).

Nonylphenols are persistent in the aquatic environment, moderately bioaccumulative, and extremely toxic to aquatic organisms (USEPA 2010). A small set of NPE and NP compounds, specifically 4-NP, 4-NP1EO, 4-NP2EO, have been analyzed in Bay surface water, sediments, bivalves, small fish, and aquatic bird eggs (Klosterhaus et al. 2013). Currently, NPs and NPEs are classified as Moderate Concern compounds. Although NP concentrations in the Bay are well below most toxicity thresholds, previously measured concentrations in the surface water were above concentrations that impacted barnacle settlement in a laboratory study (Billinghurst et al. 1998). NPEs and their degradation product are estrogenic and can impact the growth, reproduction, and development of fish and aquatic invertebrates at low concentrations (DTSC 2018). And of particular concern is that studies have also shown the potential for synergistic effect of alkylphenols and alkylphenol ethoxylates in combination with other contaminants such as pesticides, which could elicit estrogenic effects on fish (Schlenk et al. 2012) at concentrations measured in the Bay.

Importantly, preliminary results from a non-targeted analysis of Bay water and effluent samples reveal the ubiquitous presence of a much larger class of ethoxylated surfactants than monitored via previous targeted analysis of NPEs (L. Ferguson, personal communication). This means that there are many additional ethoxylated surfactants present in Bay water that have never been the subject of targeted monitoring in the Bay. The qualitative data from this non-targeted analysis suggests that residential wastewater effluent may not be the only pathway for ethoxylated surfactants to the Bay, and that stormwater discharges may also be an important pathway. Therefore, ambient Bay concentrations for this broader class of ethoxylated surfactants may be higher than previously anticipated.

Moreover, the Department of Toxic Substance Control's (DTSC) Safer Consumer Products program is proposing to list NPEs in laundry detergent as a Priority Product under its Safer Consumer Products regulation due to concerns for the contaminants' persistence and toxicity in the aquatic environment (DTSC 2018). Data from this study may provide useful findings to support DTSC's evaluation by supplying more current monitoring data on the presence of NPEs and other ethoxylated surfactants in wastewater effluent, as well as ambient water and sediment concentrations.

Given the potentially wide range of sources of ethoxylated surfactants, analysis of a broad set of ethoxylated surfactants in Bay samples would provide information to determine whether ethoxylated surfactants should be classified as Moderate Concern contaminants. At the spring ECWG meeting (April 12-13, 2018), stakeholders and experts expressed strong support for a study of ethoxylated surfactants in the Bay. This proposal will analyze a broad suite of ethoxylated surfactants, including previously identified alkylphenol and alcohol ethoxylates in Bay water, sediment, and wastewater. Funding for the stormwater analysis is being proposed in a separate, complementary study of contaminants of emerging concern in stormwater. The two studies will allow comparison of the wastewater effluent pathway and the stormwater runoff pathway, and support a more complete answer to study questions listed in Table 1.

Study Objectives and Applicable RMP Management Questions

Table 1. Study objectives and questions relevant to RMP ECWG management questions.

Management Question	Study Objective	Example Information Application
1) Which CECs have the potential to adversely impact beneficial uses in San Francisco Bay?	<p>Compare new ethoxylated surfactant occurrence data with toxicity information reported in the scientific literature.</p> <p>Evaluate future monitoring needs and toxicity data gaps.</p>	<p>What are current concentrations of ethoxylated surfactants in Bay water and sediment?</p> <p>Which newly identified contaminants merit further monitoring?</p> <p>Do findings suggest ethoxylated surfactants should be classified as high, moderate, low, or possible concern within the RMP's tiered framework?</p>
2) What are the sources, pathways and loadings leading to the presence of individual CECs or groups of CECs in the Bay?	Investigate the influence of different pathways based on ethoxylated surfactant concentrations in wastewater effluent vs. stormwater, as well as patterns in ambient Bay sample locations (e.g., comparison of ambient water and sediment concentrations near stormwater vs. wastewater discharges).	Do sites influenced by different pathways show different patterns of contamination?

3) 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?	Compare ethoxylated surfactant profiles in pathways vs. ambient samples.	Which ethoxylated surfactants appear to be persistent and bioaccumulative in the Bay?
4) Have the concentrations of individual CECs or groups of CECs increased or decreased in the Bay?	Compare ethoxylated surfactant concentrations with previous monitoring data for a limited number of analytes.	Have concentrations of nonylphenol and nonylphenol ethoxylates in the Bay increased or decreased from previous measurements?
5) Are the concentrations of individual CECs or groups of CECs predicted to increase or decrease in the future?	Compare detected ethoxylated surfactant analytes in wastewater and stormwater to those subject to proposed management actions.	Will management actions targeting nonylphenol ethoxylates in wastewater have an effect on the main pathways entering the Bay?
6) What are the effects of management actions?	N/A	N/A

Approach

Ambient Water Sampling

Bay water sample collection will take place in the summer of 2019 as part of the RMP's regular Status and Trends water monitoring cruise. Grab samples of ambient Bay water will be collected at all 22 Bay sites. A second field replicate will be collected at two sites and a field blanks will be collected at two sites for a total of 26 samples (22 field samples + 2 field replicates + 2 field blanks). The expected sample volume required is about 2.5 L per sample.

South Bay Margin Sediment

Margin sediment samples were collected from the RMP margin sediment sampling cruise in South Bay and Lower South Bay in the Summer 2017. Samples from 14 sites were archived for future analysis using clean protocols for alkylphenol ethoxylate analysis. Samples were collected using a Van Veen sediment grab. A field blank and two duplicates were also collected and archived. These locations include wastewater and stormwater influenced sites, as well as sites without clear influence that may serve as "background sites."

Wastewater Effluent

Eight volunteering wastewater treatment facilities will be targeted for study. An ideal group of participants will include regionally diverse facilities using secondary treatment as well as more advanced treatment; those facilities with larger discharges to the Bay will be particularly valuable. 24-hour composites of final effluent will be collected using automated sampling equipment regularly in use at the facility. It is expected that on-site sampling equipment that is regularly in use and constantly flushed with final treated effluent will have lower risk of contamination from cleaning detergent residue. A blank will also be collected at each site in order to detect contamination from the facility setting. A replicate from two facilities will be collected to evaluate variability in wastewater effluent. If collection of a 24-hour composite

without contamination is determined not to be feasible, then a grab sample may be collected during peak flow instead. The expected sampling volume required for analysis is about 300 mL per sample.

Stormwater

A total of 50 stormwater samples (including field duplicates and field blanks) will be characterized over two years in a separately proposed 2-year study. The analyte list will include ethoxylated surfactants using similar analytical methods. Sites will be selected based on multiple factors including: 1) greater relative urban land use in the watershed, with an emphasis on proximity to roadways; 2) unique land uses associated with potential contaminant sources, such as airports; and 3) reduced sample collection costs due to existing sample collection underway as part of other studies. Site selection will be informed by our conceptual model of sources of ethoxylated surfactants to stormwater, which includes outdoor use and automotive cleaners, lubricants and other fluids, as well as pesticides, plastics, paints, and many other products.

Analytical Method

Bay water, sediment, and final wastewater effluent will be analyzed for ethoxylated surfactants by the Ferguson laboratory of Duke University, using mixed-mode high-performance liquid chromatography with electrospray mass spectrometry, modified from methods published previously (Ferguson et al., 2001) to include a broader range of ethoxylated surfactants in addition to the alkylphenol ethoxylates. The analyte list is expected to include the following surfactant families: nonylphenol ethoxylates, octylphenol ethoxylates, and C9, C10, C12, C13, C14, and C16 alcohol ethoxylates. Analytes for each family will include compounds with a broad range of ethoxylate chains, typically ranging from 1 – 20. Isotopically labeled standards are only available for a few of these analytes (i.e., the nonylphenol ethoxylates); however, the uncertainty in precision associated with quantitation was deemed acceptable by the ECWG for screening purposes. The expected analytical method detection limits for analytes are expected to be at least in the 1 - 40 ng/g range depending on the ethoximer for sediment, and in the 1 - 50 ng/L range for water. These detection limits are below reported effects concentration in water in the 1 µg/L range (Billingham et al., 1998), and in the range of reported PNEC for NPs in freshwater sediment (WHO 2004). Water and effluent samples are expected to be analyzed as total water (unfiltered).

Data Interpretation

This study would establish a baseline for ethoxylated surfactant concentrations in sediment, water, effluent, and stormwater (covered by a separate ECWG study). The measured concentrations of a broad suite of ethoxylated surfactants in Bay water and sediment will be used to determine the risk tier category of this broad class of contaminants. Comparison to published toxicity thresholds will help determine whether alkylphenol ethoxylates should continue to be classified as Moderate Concern. This study may also identify new ethoxylated surfactants that have not previously been targeted for analysis in the Bay; an evaluation of these ethoxylated surfactants compared to available thresholds will allow for classification in the tiered risk framework for CECs. Observed increase or decrease in NPEs previously monitored in ambient waters may indicate whether voluntary management actions are having the intended effect. Additionally, comparison of contaminant profiles in pathways versus

ambient samples may indicate degradation or persistence of specific contaminants, particularly within an ethoxylate family.

This study will also provide insights regarding contaminant profiles in pathways, as well as at margin sediment sites influenced predominantly by wastewater effluent or stormwater runoff. Understanding the sources and pathways of ethoxylated surfactants can inform what management decisions may be effective in reducing future concentrations.

Budget

Budget Justification

Project Staff

Ambient water sampling field costs are minimal because samples will be collected during the RMP's 2019 Status and Trends water sampling cruise, and 26 staff hours is allocated to cover additional time needed to plan, collect, and ship samples during the water sampling cruise. Sediment sampling field costs are minimal because samples have already been collected and archived. An additional ten staff hours are allocated to retrieve and ship samples. The largest field cost is associated with collecting wastewater effluent samples from eight participating facilities. Most of the sampling collection costs are based on staff hours needed to collect wastewater effluent samples from 8 participating facilities (developing sampling plan, coordinate sample collection, sample collection, sample shipment).

Data Management Costs

Data services will include QA/QC review and upload to CEDEN.

Analysis and Reporting

Preliminary results will be reported to and reviewed by ECWG. Preparation of draft manuscripts for publication in a peer-reviewed journal will be led by the analytical partner. After the manuscripts are complete, RMP staff will produce a summary document for managers that describes the results and their implications for stakeholders.

Laboratory Costs

Analytical costs are expected to be around \$500/sample for ambient water and wastewater effluent samples, and \$1,000/sample for sediment samples. Twenty-six ambient water samples (22 sites + 2 duplicates + 2 blanks), 18 wastewater effluent samples (8 sites + 8 field blanks + 2 duplicates), and 17 sediment samples (14 sites + 2 field duplicates + 1 field blank) are planned.

Direct Costs

Direct costs include equipment, travel reimbursement, and shipping costs. Shipping costs are estimated to be \$300/cooler and twelve cooler shipments needed to ship field samples, and an additional eight shipments needed to ship cleaned empty sample containers from the laboratory. One cooler shipment is estimated for the sediment samples, three coolers for wastewater samples (18 x 500 mL bottles), and eight coolers for the for the ambient water samples (26 x 2.5 L bottles).

The following budget represents estimated costs for this proposed special study (Table 2). Efforts and costs can be scaled back by reducing the number of sites sampled.

Table 2. Proposed Budget.

Expense	Estimated Hours	Estimated Cost
Labor		
Sample Collection	240	29,500
Data Technical Services		24,700
Analysis and Reporting	140	22,000
Subcontracts		
Name of contractor		
Ferguson/ Duke U.		38,000
Direct Costs		
Equipment		2,000
Travel		1,000
Shipping		6,000
Grand Total		123,200

Reporting

Deliverables will include: a) preliminary results presentation during the ECWG spring 2020; b) draft manuscript¹ that serves as RMP technical reports, due fall 2020; c) a summary for managers describing the results and their implications, due fall 2020; and d) additions to other RMP publications such as the Pulse.

¹ The draft manuscript will be distributed to RMP stakeholders for review by email, not published on the website, so as to not jeopardize publication of the manuscript in a peer-reviewed journal.

References

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Maruya KA, Dodder NG, Tang C, Lao W, Tsukada D. 2015. Which coastal and marine contaminants are truly emerging? *Environ Sci Pollut Res* 22:1644-1652.

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WHO (World Health Organization). 2004. Integrated Risk Assessment: Nonylphenol Case Study. International Programme on Chemical Safety, WHO, Geneva, Switzerland.
WHO/IPCS/IRA/12/04. www.who.int/ipcs/methods/Nonylphenol.pdf

Committee Request for Board Action: None**26 attendees, representing 18 member agencies.****Presentation on Santa Rosa fire recovery**

Joe Schiavone, Deputy Director of Santa Rosa Water and Sewer Operations provided a [presentation](#) on the 2017 fires and the City's response, including:

- Statistics
- Timelines
- Specific impacts to the community
- How the fire impacted the distribution/collection systems
- Water infrastructure damage

Lessons Learned

- The importance of planning
- Knowing the plan must change/adapt
- Fatigue and impact on staff
- Communication – internal and interagency
- Operating without SCADA

FEMA

- Recognizing the massive federal bureaucracy
- Understanding some agencies ask for more
- Fire caused contamination is not normal
- Educating FEMA with the help of regulators
- The value of an accurate DDD
- Documentation – Forms, Contracts, Language Requirements
- What will they pay for
- The reimbursement process

SSS WDR Update (Paul Causey)

General: Audience of 30 people in the room and several more who attended the video conference session by phone. In attendance was one representative from the California Coastkeeper Alliance.

Diana Messina and Armando Martinez began by presenting background on the WDR revisions processes and procedures and statistical data from the CIWQS sanitary sewer overflow data. Diana indicated that the next revisions of the WDR should be expected to be operation for at least ten years from the adoption by the SWRCB and that the primary focus of the revisions to the WDR would be reduction of spill volumes going forward, as Category 1 overflows are continuing to be large volumes, and enforcement on poorly performing agencies under the WDR. They indicated that the presentations from the meeting would be available to anyone interested following the meeting. Diana also identified five areas they were hoping to receive input on during the stakeholder meeting as follows:

1. Costs to comply with the order.
2. Regulation of large private sewer systems - greater than one mile possibly
3. Improvement of data quality - in CIWQS
4. SSMP Requirement upgrades and enhanced enforcement
5. Potential regulatory incentives for well performing systems

They indicated that the WDR revisions would be guided by several SWRCB guiding policy statements as follows:

- Resolution 2013-0029 Reducing Cost of Compliance
- Resolution 2016-0010 Human Rights to Water
- Resolution 2017-0012 Comprehensive Response to Climate Change
- 2017 Water Quality Enforcement Policy
- Resolution 2018-0032 Open Data Portal

They indicated their intention to restart the Data Review Group as they recognize there are many issues with the integrity of the CIWQS data that needs to be evaluated and updated. In addition, they feel that there needs to be better clarity on the reporting into CIWQS - better drop downs and more detailed lists of choices for specific questions for all categories of overflow. In addition, we discussed the possibility of creating better comparability between agencies such as agencies with and without laterals, small versus large, etc.

As to the process, they expect to have a draft in late fall (Armando Martinez will be the permit writer, followed by SWRCB hearings, followed by possible adoption in 2020. Diana stressed that once a draft is submitted that the only changes that can be made must come from public or written comments received during the comment period. This means they cannot add anything new to the permit WDR that is not originally identified in the draft. The public comment period will be from 30 to 45 days following release of the draft WDR. Finally they are not expecting to change any current laws or institute any legislative action which would impact sanitary sewer systems. All changes and modifications will be based on existing water code.

Some of the highlights from the question and answer period from the attendees and those on the webinar for the second half of the stakeholder workshop as follows:

- How much does it cost agencies to report minor spills? (Note: We would love some real cost data to evaluate and respond to this.)
- **Private System Questions:** SWRCB staff would like help in identifying private systems. The WDR for private systems would be a separate order and would not be included in the public system WDR. There I also some question about how to handle prison systems and federal systems as private. There were comments about not impacting or expecting oversight of private systems by current agency enrollees.
- **CIWQS Questions:** How is the current data in CIWQS useful? Who uses it how? What data is of no use and could be eliminated? Could lower lateral information be more apparent and easier to compare agencies with similar responsibilities? What additional drop down fields would be helpful in CIWQS? Should current drop downs be evaluated?
- **Spill Volumes:** Suggestion that the ratio of current spills to current volumes transmitted should be evaluated. Total volume spilled divided by number of spills
- Minor spill reporting - might be attached for well performing facilities - they are seriously considering this possibility
- **Audits:** There was a discussion of audit timing and requirements 2, 3, or less discussed no consistent recommendation other than do not eliminate these - suggestion made to tie to fiscal year for audit. Statement made that audits are important and some agencies would still do even if time schedule extended or reduced. Suggestion of 10 year term for SSMP revisions and just audits at regular intervals.
- Possible requirement for volume estimation method as mandatory field for completion in CIWQS
- WDR will not require mandatory staff certification - they do see a tie into to reduce SSOs and volumes with certified employees- might be one criteria for a well performing agency
- **Resiliency and Asset Management:** Resiliency and asset management will be important additions to the WDR - how to require implementation discussed and what do these terms mean and imply. Want all agencies to implement resiliency evaluations and asset management at some level - want to see governing board directives around these concepts at least
- Well performing agencies discussion
 - Concern with possible backsliding by agencies if implemented
 - How long must an agency comply to be eligible
 - What criteria will apply for different types of agencies - laterals, pump stations, etc? How do they impact performance evaluation
 - Should not be just year to year but over extended time periods
 - Should be classed on continuous improvement of what? Volumes spilled, volumes recovered, volumes not to surface waters?
 - Leading and lagging indicators - trend lines overtime time - five years, ten years or what time frame?
 - What is the end goal her? What is a poor system in comparison?
 - Purpose to bring all enrolled agencies to proper level of performance thru continuous improvement
 - Goals to encourage agency compliance not enforcement - poor performing agencies to see worthwhile to improve
 - How would drought or intense rain impact well performance history
- No discussion of private lateral reporting beyond current voluntary

Finally, they stated that there would be no notes or minutes from the stakeholder workshops but they are keeping extensive notes and all questions and comments from the attendees. They also asked anyone interested in the future of this regulation to sign-up through LYRIS to assure prompt notification of future actions and information from the SWRCB process.

Collection System Reporting during NPDES Permit Reissuance

FSSD provided language that the Regional Water Board included in their NPDES permit reissuance letter, requesting that they provide information in their report of waste discharge that is available in their SSMP. The committee agreed it is a concern that SSS WDR issues continue to creep into NPDES permits. This issue will be raised at the next meeting with Regional Water Board Staff on May 20.

Next Collection System Committee Meeting

The committee will be transitioning to a quarterly schedule. Our next committee meeting will be held on July 25, 2019.

Committee Request for Board Action: none

22 attendees representing member 10 agencies (including 2 on phone)

Presentation on PFAS Analysis and Best Practices

Karla Buechler, Eurofins, provided a [presentation](#) coving the chemistry and analytical challenges associated with PFAS. Key concerns are the ubiquity of the chemical class, leading to high levels of potential contamination, as well as its unusual chemical and physical characteristics. There is no standard method for PFAS in wastewater, so analytical labs have modified the drinking water method. Often, effluent concentrations are higher than influent concentrations due to biodegradation of precursors.

Enterococcus monitoring

BACWA is funding a study of background levels of enterococcus in the San Francisco Bay. The data will be used in calculations for WQBELs for enterococcus, so it is important that the method detection limit be as low as feasible. Agencies using Enterolert see low level interference, even with filtration. Diluting the sample mitigates the interference, but increases the detection limit. One member mentioned that she knows a lab in San Francisco that can do membrane filtration, which can get a limit of less than 2 MPN/100ml.

Quality Assurance Plans for Field Tests

New NPDES permits include language stating that agencies shall implement a Quality Assurance-Quality Control Program for any onsite field tests. SASM requested guidance on how to satisfy this provision. The Regional Water Board is interested in providing some oversight for tests that are not required to be certified by ELAP. The consensus was to set up SOPs based on instrument manufacturers' recommendations.

Methods and Equipment Database

Chis Francis is taking the lead on developing a database on methods and equipment used by POTW labs around the Bay Area. He sought feedback on the level of detail that is appropriate for the database. He will distribute templates through the Google Group to members, and enter the information received into the database he develops.

Nutrient Watershed Permit

Lorien Fono gave a quick update on the Nutrient Watershed Permit Tentative Order, as well as BACWA's comment letter, which was generally supportive, but requested clarification on some of the provisions and monitoring and reporting. The consultant will distribute an updated data sheet for collecting data for the Group Annual Report.

Audits

There was a discussion about recent audits, and one auditor watched staff physically conduct the analysis. One member mentioned that their auditor's checklist did not match Standard Methods requirements for that analysis.

Recruitment

NapaSan is recruiting summer interns. DSRSD is recruiting a chemist.

Next meeting: June 11, 2019

Operations and Maintenance Infoshare Group Report to BACWA Board

Committee Meeting on: 04/24/19
Executive Board Meeting Date: 5/17/19
Committee Chairs: Kevin Dickison and Joaquin
Gonzales

Committee Request for Board Action: None

11 attendees representing 5 member agencies

Highlights of New Items Discussed and Action Items

Tour of Sunnyvale WPCP Construction

Bryan Berdeen gave a summary of the history of the Sunnyvale Water Pollution Control Plant (WPCP). The WPCP started the process of reconstruction of dilapidated facilities, some originally constructed in 1956. Today, following the WPCP Clean Water program master plan, the WPCP is systematically building new, and updating existing facilities. In this first phase the WPCP is building a new headworks, raw sewage pump station and primary sedimentation tanks. The Sunnyvale WPCP is also going to pilot test the anaerobic digestion of food waste with the goal of offsetting purchased natural gas for onsite power production and to reduce cost associated with the diversion of food waste from landfills as required by AB 1826 and SB 1383.

The group then toured the construction site.



Chlorine dosing to meet enterococcus limits

Attendees were asked whether they would increase chlorine dosing to meet the new, more stringent limits. They were also asked if they would reduce chlorine dosing if their limits were increased – for example, if they were calculated using dilution credit. One agency responded that they aim for such a high residual, that it wouldn't make a difference. Another agency responded that they would adjust their dosing to match the bacterial limit.

Next Meeting: July 24, 2019, City of Livermore WRP.

Executive Director's April 2019 Report

NUTRIENTS:

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

- Coordinated with the NMS Science Manager on presentations, meetings, and key issues on nutrients.
- Conducted follow-up discussions with the WB staff and SFEI on the scope of work and cost for the Nature Based Solutions Study which will be required by the 2nd Nutrient Watershed Permit
- Attended the meeting of the Nutrient Management Strategy Planning Subcommittee and provided in-kind services on minute preparation.
- Coordinated with the HDR Project Manager on a potential scope of work for the Regional Recycling Report required under the 2nd Watershed Permit.
- Met with SFEI to discuss the scope of work for the Nature Based Solution Study.

BACWA BOARD MEETING AND CONFERENCES:

- Worked with staff in preparing for the April Board Meeting.
- Conducted the monthly agenda review with the Chair of BACWA
- Held the monthly Board meeting for April
- Continued to track all action items to completion

ASC/SFEI:

- As the Chair of the Governance Committee, coordinated with the SFEI Executive Director on committee activities.
- Attended the April quarterly Board meeting of ASC/SFEI

COLLECTION SYSTEM COMMITTEE:

- Coordinated with the RPM on planning for the next Collection System Committee meeting and attended the April Meeting
- Coordinated with BACWA staff on the collaborative effort amongst CASA, SCAP and BACWA on continuing to inform the SWRCB on issues with the proposed SSS WRD.

FINANCE:

- Reviewed the monthly BACWA financial reports with the AED.
- Presented the final FY 20 Budget and Workplan to the Board which was then approved
- Worked with the AED to prepare for closing of FY 19 and invoicing for FY 20.

INFO SHARE COMMITTEE:

-Attended the April meeting on the construction of the new Sunnyvale plant and toured the plant.

PERMIT COMMITTEE:

- Coordinated with the RPM for items to agendaize for the next Permit Committee meeting.
- Coordinated with partners in the SCAP lawsuit on challenging the validity of use on the TST in permits
- Participated in conference calls to plan for conducting a sampling and analysis effort for enterococcus in order to demonstrate the dilution available in the Bay which will impact permit limits.

BAPPG COMMITTEE:

- Worked with the AED and Committee leadership to redirect funds for outreach after a vendor claimed bankruptcy
- Coordinated with the RPM on the next steps for preparation of the CEC White Paper.
- Participated in a conference call with SFEI to discuss the next meeting of the Emerging Contaminant Working Group and attended the meeting.
- Participated in a conference call with the RMP on ethoxylated surfactants and the opportunity to use this emerging contaminant as a case study for future sampling efforts by BACWA.

COLLABORATIONS:

- Coordinated with CASA Regulatory Program Manager and Executive Director on regulatory issues of mutual concern.
- Worked with the Bay Area Biosolids Coalition Steering Committee in securing a contract for BACWA to assist with the administration of the Coalition's activities.
- Continued serving as contract administrator for a research effort with UC Merced.
- Coordinated with CASA and CVCWA on the next steps in effecting changes to the Coast Keeper's bill on ocean acidification.
- Coordinated with the BAIRWMP Coordinating Committee on the next round of IRWM Prop 1 funding

WOT:

- Planned for and conducted a meeting of the general membership of BACWWE to discuss the future of the program.
- Participated in discussions with the Executive Committee and Solano Community College on the Fall 2019 class schedule.

MANAGER'S ROUNDTABLE

- Planned for and conducted the quarterly Bay Area Manager's Roundtable Meeting. Special guest was the new Executive Officer of the Water Board

ADMINISTRATION:

- Planned for and conducted the monthly BACWA staff meetings 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.
- Coordinated with the AED to plan activities and review duties, schedules, and priorities.
- Developed and responded to numerous emails and phone calls as part of the conduct of BACWA business on a day-to-day basis.
- Coordinated with ABAG on the finalization of the Prop 84 invoices

MISCELLANEOUS MEETINGS/CALLS:

- BACWA Chair and Committee Chairs on items that arose during the month
- Water Board staff on coordinating the nutrient activities
- Other misc calls and inquiries regarding BACWA activities
- participated in coordination calls with the HDR project manager
- Responded to Board members requests for information



BACWA ACTION ITEMS

Number	Subject	Task	Responsibiity	Deadline	Status
Action Items from April 19, 2019 BACWA Executive Board Meeting					
2018.4-99	CASA ED retirement	Plaque? Resolution?	ED	4/30/2019	complete
2018.4-98	Pulse History	Add to May EB handout	RPM	4/30/2019	complete
2018.4-97	Committee Hot Topics reports to Board	Add to future Agendas	ED/RPM/AED	5/6/2019	complete
2018.4-96	Adoption Hearing	Provide speaking points to BACWA Chair (add BACWA contribution, recycling). Reach out to EPA?	ED	4/30/2019	complete
2018.4-95	Nature Based Solution Oversight	Reach out to Agencies for participation	ED/RPM	6/30/2019	complete
2018.4-94	Recycled Water Study	Create RFP for Consultant provider	RPM	6/30/2019	complete
2018.4-93	Website Policy	Add reference to regulatory requirements for Agency websites	ED	4/30/2019	pending
2018.4-92	BACWA Website	Swap out photo, add photos in future	AED/RPM	4/30/2019	Ongoing
Action Items Remaining from Previous BACWA Executive Board Meetings					
FY19:	<u>97</u> of <u>99</u> Action Items completed				
FY18:	<u>66</u> of <u>66</u> Action Items completed				
FY17:	<u>90</u> of <u>90</u> Action Items completed				



BACWA BOARD CALENDAR
May 2019 to April 2020

DATE	AGENDA
<p>5/17/2019</p> <p>Monthly Board Mtg Items due: 5/10 Schectel, Mitsuddy, White, Zipkin, Henderson Williams; Fono; Hull</p>	<p><u>Consent</u></p> <p>Previous Board Meeting Minutes Monthly Financial Report</p> <p><u>Authorizations & Approvals</u></p> <p>Approval: SFEI NBS SOW, TDC amendment, Committee Policy Authorization (ED): Legal & IT Support Amendments FY20</p> <p><u>Other Business - POLICY/STRATEGIC</u></p> <p>Discussion: Water Board Jt Mtg Planning Discussion: BAAQMD meeting planning Discussion: NMS update</p> <p><u>Other Business - OPERATIONAL</u></p> <p><u>Reports</u></p> <p>Committee Reports (Committee Chairs) Board Reports (Executive Board) ED Report (ED) RPM Report (RPM) Other BACWA Representative Reports</p>
<p>5/20/2019</p> <p>Joint Meeting - Water Board Schectel, Mitsuddy, White, Zipkin, Henderson Williams; Fono</p>	<p><u>Other Business: Discussions</u></p>
<p>6/21/2019</p> <p>Monthly Board Mtg Items due: 6/14 Schectel, Mitsuddy, White, Zipkin, Henderson Williams; Fono; Hull</p>	<p><u>Consent</u></p> <p>Previous Board Meeting Minutes Monthly Financial Report</p> <p><u>Authorizations & Approvals</u></p> <p>Approval: FY20 Agreements Approval: Officers: Chair & Vice-Chair FY20 Approval: Confirm BACWA Rep to ASC/SFEI Jt Board</p> <p><u>Other Business - POLICY/STRATEGIC</u></p> <p>Discussion: Nutrient Removal through BAC in RO Concentrate Discussion: Update on CASA Climate Change Program</p> <p><u>Other Business - OPERATIONAL</u></p> <p>Discussion: BAAQMD Annual Meeting Draft Agenda Discussion: CPSC Update Discussion: Update on Silicon Valley Food Waste Program</p> <p><u>Reports</u></p> <p>Committee Reports (Committee Chairs) Board Reports (Executive Board) ED Report (ED) RPM Report (RPM)</p>

Other BACWA Representative Reports

<p>7/19/2019</p> <p>Monthly Board Mtg Items due: 7/12 Schectel, Mitsuddy, White, Zipkin, Henderson Williams; Fono; Hull</p>	<p><u>Consent</u> Previous Board Meeting Minutes Monthly Financial Report</p> <p><u>Authorizations & Approvals</u> Approval: Annual Nutrient WS Payment Approval: FY20 Agreements Approval: BACWA Biennial Conflict of Interest Code Review</p> <p><u>Other Business - POLICY/STRATEGIC</u> Discussion: Water Board Jt Mtg Draft Agenda Discussion: Draft Agenda Pre-Pardee Technical Seminar Discussion: Risk Reduction Update Discussion: RMP & NMS Update (Phil Trowbridge/David Senn)</p> <p><u>Other Business - OPERATIONAL</u> <u>Discussion:</u> Options for Supporting the Bay Area Biosolids Coalition</p> <p><u>Reports</u> Committee Reports (Committee Chairs) Board Reports (Executive Board) ED Report (ED) RPM Report (RPM) Other BACWA Representative Reports</p>
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<p>8/16/2019</p> <p>Monthly Board Mtg Items due: 8/9 Schectel, Mitsuddy, White, Zipkin, Henderson Williams; Fono; Hull</p>	<p><u>Consent</u> Previous Board Meeting Minutes Monthly Financial Report</p> <p><u>Authorizations & Approvals</u> Approval:</p> <p><u>Other Business - POLICY/STRATEGIC</u> Discussion: Water Board Jt Mtg Debrief Discussion:</p> <p><u>Other Business - OPERATIONAL</u> <u>Discussion:</u></p> <p><u>Reports</u> Committee Reports (Committee Chairs) Board Reports (Executive Board) ED Report (ED) RPM Report (RPM) Other BACWA Representative Reports</p>
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<p>8/16/2019</p> <p>Pre-Pardee Seminar Schectel, Mitsuddy, White, Zipkin, Henderson Williams; Fono; Hull</p>	<p>No Board Actions Permitted</p>
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<p>8/?/2019</p> <p>Joint Meeting - Water Board Schectel, Mitsuddy, White, Zipkin, Henderson Williams; Fono</p>	<p><u>Other Business: Discussions</u></p>
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<p>9/26-27/2019</p>	<p>No Board Actions Permitted</p>
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Pardee Technical Seminar

Schectel, Mitsuddy, White, Zipkin, Henderson

Williams; Fono; Hull

10/18/2019 Consent**Monthly Board Mtg**

Items due: 10/11

Schectel, Mitsuddy, White, Zipkin, Henderson

Williams; Fono; Hull

Previous Board Meeting Minutes

Monthly Financial Report

Authorizations & Approvals

Approval:

Other Business - POLICY/STRATEGIC

Discussion: Pardee Debrief & Survey

Discussion: Water Board Jt Mtg Draft Agenda

Other Business - OPERATIONAL**Reports**

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

11/15/2019 Consent**Monthly Board Mtg**

Items due: 11/8

Schectel, Mitsuddy, White, Zipkin, Henderson

Williams; Fono; Hull

Previous Board Meeting Minutes

Monthly Financial Report

Authorizations & Approvals

Approval: Adoption of FY19 Annual Reports

Other Business - POLICY/STRATEGIC

Discussion: Water Board Jt Mtg Debrief

Discussion: ReNEWit Industrial Advisory Board Meeting Debrief

Other Business - OPERATIONAL

Discussion: Annual Meeting Planning

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

12/?/2019**Joint Meeting - Water Board**

Schectel, Mitsuddy, White, Zipkin, Henderson

Williams; Fono

Other Business: Discussions**12/20/2019 Consent****Monthly Board Mtg**

Items due: 12/13

Schectel, Mitsuddy, White, Zipkin, Henderson

Williams; Fono; Hull

HOLIDAY & COMMITTEE**LEADER APPRECIATION****LUNCH**

Previous Board Meeting Minutes

Monthly Financial Report

Authorizations & Approvals**Other Business - POLICY/STRATEGIC**

Discussion:

Discussion: Update on CASA Climate Change Program

Other Business - OPERATIONAL

Discussion: Annual Meeting Agenda

Discussion: Budget Schedule & Key Issues

Reports

Committee Reports (Committee Chairs)
Board Reports (Executive Board)
ED Report (ED)
RPM Report (RPM)
Other BACWA Representative Reports

1/?/2020

Annual Members Mtg

Schectel, Mitsuddy, White, Zipkin, Henderson
Williams; Fono; Hull

Service & Leadership Recognition
RMP & NMS Update
EPA, CWRCB, RWCB, Air Dist,

2/21/2020

Monthly Board Mtg

Items due: 2/8

Schectel, Mitsuddy, White, Zipkin, Henderson
Williams; Fono; Hull

Consent

Previous Board Meeting Minutes
Monthly Financial Report

Authorizations & Approvals

Approval:

Other Business - POLICY/STRATEGIC

Discussion: Joint Meeting Debrief

Other Business - OPERATIONAL

Discussion: FY2019 Budget Planning - 1st Draft of FY21 Budget

Discussion: Annual Meeting Debrief

Reports

Committee Reports (Committee Chairs)
Board Reports (Executive Board)
ED Report (ED)
RPM Report (RPM)
Other BACWA Representative Reports

3/15/2020

Monthly Board Mtg

Items due: 3/8

Schectel, Mitsuddy, White, Zipkin, Henderson
Williams; Fono; Hull

Consent

Previous Board Meeting Minutes
Monthly Financial Report

Authorizations & Approvals

Other Business - POLICY/STRATEGIC

Discussion: Water Board Jt Mtg Debrief

Discussion: Update on CASA Climate Change Program

Other Business - OPERATIONAL

Discussion: Second Draft of FY20 Budget

Discussion: Draft BACWA Policy on Website

Reports

Committee Reports (Committee Chairs)
Board Reports (Executive Board)
ED Report (ED)
RPM Report (RPM)
Other BACWA Representative Reports

3 or 4/?/2020

Joint Meeting - Water Board

Schectel, Mitsuddy, White, Zipkin, Henderson
Williams; Fono

Other Business: Discussions

<p>Monthly Board Mtg Items due: 4/12 Schectel, Mitsuddy, White, Zipkin, Henderson Williams; Fono; Hull</p>	<p>4/19/2020 Consent</p> <p>Previous Board Meeting Minutes Monthly Financial Report</p> <p><u>Authorizations & Approvals</u></p> <p>Approval: FY20 Budget</p> <p><u>Other Business - POLICY/STRATEGIC</u></p> <p>Discussion: Draft Agenda Water Board Jt Mtg</p> <p><u>Other Business - OPERATIONAL</u></p> <p>Discussion: Update on BAAQMD Regulations Discussion: Update on regional and statewide biosolids issues Discussion: NBWA Conference Debrief</p> <p><u>Reports</u></p> <p>Committee Reports (Committee Chairs) Board Reports (Executive Board) ED Report (ED) RPM Report (RPM) Other BACWA Representative Reports</p>
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***CURRENTLY UNSCHEDULED &
SIGNIFICANT***

Suggestions for Monthly Meeting Guest Speakers/Presenters



Regulatory Program Manager's Report to the Board April 2019

NUTRIENTS: Participated in meeting on Nature Based Systems Scope of Work with SFEI. Updated draft Recycled Water Study scope of work with HDR. Communicated with member agencies about Tentative Order.

BACWA BULLETIN: Drafted and distributed April Bulletin.

COLLABORATIONS: Participated in CASA RWG Water Committee calls. Participated in NACWA Quarterly State and Regional Call. Viewed PPIC webcast on Managing Wastewater in a Changing Climate.

CECs: Prepared for and attended emerging contaminants working group meeting. Reviewed materials and developed presentation on POTW sampling. Discussed POTW sampling with RMP leads and Regional Water Board staff.

TOXICITY: Communicated with other Statewide POTW representatives to plan next meeting with State Water Board staff.

BACTERIAL OBJECTIVES: Discussed Enterococcus sampling plan parameters with Regional Water Board staff. Identified laboratory to do analysis via membrane filtration. Worked with SFEI to update SOW and developed CAR for SFEI support.

COMMITTEE SUPPORT:

AIR – Drafted Board report. Posted RFP for committee support.

BAPPG – Updated baywise.org. Posed RFQ for outreach support. Communicated with prospective consultants. Drafted meeting notes and Board report.

Collection Systems – Drafted agenda and attended meeting. Followed up on permit reissuance letter language pertaining to collection systems.

Laboratory – Planned for and participated in meeting. Drafted Board report for March meeting. Reviewed committee survey results.

O&M Infoshare – Drafted agenda and attended April meeting. Planned July meeting.

Permits – Drafted agenda and Board Report, attended meeting.

Executive Board – Prepared for meeting, contributed to handout and attended meeting. Reviewed and edited meeting minutes and action items. Drafted summary of March joint meeting with Water Board. Drafted agenda for May joint meeting with Regional Water Board.

ADMINISTRATION/STAFF MEETING – Met with BACWA staff to plan Executive Board meeting, and discuss BACWA operations. Managed committee Google Groups. Updated documents on website.

MEETINGS ATTENDED:

Staff meeting (4/8), Permits Committee (4/9), Call with RMP CEC leads (4/9), RMP ECWG meeting (4/11 and 4/12), Laboratory Committee (4/17), NBS Scope of Work meeting with SFEI (4/17), Executive Board meeting (4/19), PPIC Webcast (4/22), O&M Infoshare meeting (4/24), Collection Systems Committee Meeting (4/25), NACWA Quarterly State and Regional Call (4/30).

Lorien Fono

From: Lorien Fono
Sent: Wednesday, May 15, 2019 11:26 AM
To: Lorien Fono
Subject: FW: Biostimulatory/BioIntegrity Technical Products Update
Attachments: TechDocSummary.pdf

From: Maxfield, Jessie@Waterboards <Jessie.Maxfield@waterboards.ca.gov>
Sent: Tuesday, April 30, 2019 12:43 PM
To: Maxfield, Jessie@Waterboards <Jessie.Maxfield@waterboards.ca.gov>
Subject: Biostimulatory/BioIntegrity Technical Products Update

Good Afternoon Members of the Stakeholder Advisory Group and Regulatory Advisory Group:
Attached is a summary of the Biostimulatory/BioIntegrity Science Advisory Panel's review and recommendations on SCCWRP's technical products as well as SCCWRP's response to these recommendations. We appreciate your input and contributions to these products.

Expect to hear from us again as new draft biostimulatory products become available for review and final bioIntegrity products are posted to the program [website](#).

We are not planning to schedule any additional meetings until Fall of 2019. In the meantime, we will be reaching out to sector leads and working with them as we prepare draft policy provisions. If you are interested in becoming a sector lead (or need to know who your current sector lead is), please contact me, Jessie Maxfield, at jessie.maxfield@waterboards.ca.gov or (916)341-5484.

Stay tuned for any additional updates and do not hesitate to reach out if you have any questions. Thank you all for your time and continued interest in this project.

-Jessie



Biostimulatory/Bio Integrity Technical Products Update

The Science Advisory Panel (SAP), formed to provide ongoing advice and peer review of the science plan and products developed by technical consultants in support of the Biostimulatory and Biointegrity Policy for wadeable streams, recently completed a detailed review of three biointegrity and three biostimulatory draft manuscripts and reports. The products and the SAP written reviews are all available on the Waterboard's program website:

[Link to Stakeholder Advisory Group \(SAG\) page where you can find draft technical documents](#)

[Link to SAP page where you can find SAP Reports](#)

Below are the six technical products the SAP reviewed:

Biointegrity Products:

1. A Non-predictive Algal Index for Complex Environments (Also known as 'Algal Stream Condition Index' or ASCI), Theroux et al. in review
2. Development of Benthic Macroinvertebrate and Algal Biological Condition Gradient Models for California Wadeable Streams, Paul et al. in review
3. Prioritizing Management Goals for Stream Biological Integrity Within the Developed Landscape Context, Beck et al., in review

Biostimulatory Products:

4. Scientific Foundation for Assessment of Biostimulatory Impacts to California Estuaries, Enclosed Bays, and Inland Water Bodies, Sutula SCCWRP Technical Report 871
5. Synthesis of Biostimulatory Impacts on California Wadeable Streams, Sutula et al. SCCWRP Technical Report 1048
6. Eutrophication Thresholds Protective of Biological Integrity, Mazor et al., in prep

Review, Recommendations, and Response

Biointegrity Products

SAP Review Summary: Overall, the SAP found that the biointegrity tools (ASCI, channels in developed landscapes geographic information system (GIS) model, and biological condition gradient model) were developed using state-of-the art approaches and with robust data sets.

SAP Recommendations: Panel recommendations for these tools and the manuscripts describing them could be put into two categories:

- Additional analyses recommended to better understand and document performance (ASCI, Theroux et al. in prep)
- Changes to the manuscript to clarify terminology, intended purpose, etc. (channels in developed landscapes, Beck et al. in review; biological condition gradient model, Paul et al. in prep).

Tech Team Response: In response to SAP feedback, the Technical Team is conducting additional analyses to support the provisional ASCI and associated manuscript. Additionally, the Team has made revisions to the Beck et al. and Paul et al. manuscripts, both of which are either in review for publication or undergoing final co-author review prior to submittal.

Biostimulatory Products

SAP Review Summary: Overall, the SAP found that the biostimulatory products provided a solid foundation of science for Water Board staff to consider in developing the policy, though additional refinements are suggested. Because these technical products need to be aligned as policy provisions are developed, additional analyses and revisions to the reports and manuscript are planned over the next 18 months.

SAP Recommendations/Tech Team Response: The SAP recommendations are being considered as Policy development work proceeds over the next 18 months. In general, these revisions will entail the following:

- The scientific foundation document (TR871) will be refined over the next 6 months to include improved conceptual models, additional eutrophication indicators, improved description of biostimulatory sources and pathways, and description of causal analyses, in particular how multiple stressors (including biostimulatory) can impact biointegrity.
- The biostimulatory stress-response models described in Mazor et al. (in prep) will be refined per panel recommendations over the next 18 months, in tandem with policy development.
- The synthesis of biostimulatory impacts on wadeable streams document (TR1048) will be refined over the next 18 months to include improved conceptual models and literature review, update to synthesis of biostimulatory thresholds to include Mazor et al. (in prep) refined models and SAP-suggested grey literature.

Lorien Fono

From: Lorien Fono
Sent: Wednesday, May 15, 2019 11:22 AM
To: Lorien Fono
Subject: FW: Invoice from ReNUWIt/Bay Area One Water Network (Invoice#: BAOW201910)

From: Kara Elizabeth Baker <Kara.Baker@stanford.edu>
Sent: Tuesday, April 23, 2019 5:42 PM
To: David Williams <dwilliams@bacwa.org>
Cc: Shamealle Bostic <sbostic@stanford.edu>; Sherry Hull <shull@bacwa.org>; Richard G. Luthy <luthy@stanford.edu>
Subject: Re: Invoice from ReNUWIt/Bay Area One Water Network (Invoice#: BAOW201910)

Hi David,

BACWA's support for the workshop being contingent on the workshop going forward is completely reasonable. If the workshop does not materialize for any reason, we will refund \$15k to BACWA.

In terms of an update on funding commitments to date:

- EPA at \$50k
- One city at \$10k
- Nine agencies/cities at \$5k
- One agency at \$2,500

Including BACWA at \$15k, that brings us to \$122,500, so all looks promising that we will be able to put on the two workshops in 2019/early 2020.

Best regards,
Kara

Kara Baker
Research & Industrial Liaison Officer – NSF ERC for ReNUWIt
Stanford University
Y2E2 Bldg, Room 119
473 Via Ortega
Stanford, CA 94305-4020
Phone: 650.725.2172

From: David Williams <dwilliams@bacwa.org>
Date: Monday, April 22, 2019 at 9:39 AM
To: Kara Elizabeth Baker <Kara.Baker@stanford.edu>
Cc: Shamealle Bostic <sbostic@stanford.edu>, Sherry Hull <shull@bacwa.org>
Subject: RE: Invoice from ReNUWIt/Bay Area One Water Network (Invoice#: BAOW201910)

Kara, below in italics is my email to Dick Luthy regarding BACWA's support for the Workshop. We would be interested in knowing how the funding commitments are

going for the Workshops. Also I didn't specifically state this to Dick, but should the funding needed to put on the Workshops not materialize and the Workshop not held, BACWA would request a refund of the \$15k. Can you please confirm that is your understanding as well. thanks

David R. Williams
Executive Director
Bay Area Clean Water Agencies (BACWA)
Cell: 925-765-9616
Email: dwilliams@bacwa.org

From: Kara Baker <Kara.Baker@stanford.edu>
Sent: Tuesday, April 16, 2019 9:11 PM
To: David Williams <dwilliams@bacwa.org>
Cc: sbostic@stanford.edu
Subject: Invoice from ReNUWIt/Bay Area One Water Network (Invoice#: BAOW201910)

Dear David,

Thank you for your commitment to continuing discussion on a Bay Area One Water Network. We look forward to working with you this year and in the years ahead to achieve the promise of more robust solutions to our water supply challenges in the Bay Area.

Enclosed is an invoice for Bay Area Clean Water Agencies's Bay Area One Water Network contribution for 2019.

Thank you in advance for your participation and please let me know if you have any questions in the meantime.

Invoice Overview:

Invoice # : BAOW201910
Date : 16 Apr 2019
Amount : \$15,000.00

Best regards,

Kara Baker
Research & Industrial Liaison Officer

[ReNUWIt](#) at Stanford University | T 650.725.2172 | C 650.380.1770 | kara.baker@stanford.edu | Y2E2 Bldg., 473 Via Ortega Room 119, Stanford University, CA 94305-4211

The Board would be willing to contribute \$15k in support of the decentralized system workshop. We would like a seat at the table as the agenda is being developed and the planning for the workshop is completed. Jackie would be our representative. Also, we would like to be kept abreast of how the funding for the workshop is progressing.

David R. Williams
Executive Director

Bay Area Clean Water Agencies (BACWA)

Cell: 925-765-9616

Email: dwilliams@bacwa.org

From: Richard G. Luthy <luthy@stanford.edu>

Sent: Monday, March 18, 2019 8:47 AM

To: Jacqueline Zipkin <JZipkin@ebda.org>; David Williams <dwilliams@bacwa.org>

Cc: Richard G. Luthy <luthy@stanford.edu>; David Sedlak <sedlak@berkeley.edu>; Kara Elizabeth Baker <Kara.Baker@stanford.edu>; Sasha Harris-lovett <sharrislovett@berkeley.edu>

Subject: Bay Area One Water Network support

Jackie and Dave: Is there anything I should know or provide regarding your discussions on Friday?

Thank you. Dick

Richard G. Luthy

Silas H. Palmer Professor, Department Civil and Environmental Engineering, and

Director, Engineering Research Center for Re-inventing the Nation's Urban Water Infrastructure [renuwit.org]

Street address: Room 191, Yang & Yamazaki Environment & Energy Building, 473 Via Ortega

Stanford University, Stanford, California 94305-4020

[email: luthy@stanford.edu](mailto:luthy@stanford.edu) telephone: 650-721-2615 fax: 650-725-9720

Research Group