



Executive Board Meeting
AGENDA
Friday, December 15, 2017, 9:00 a.m. – 12:30 p.m.
EBMUD Treatment Plant, Lab Library
2020 Wake Ave., Oakland, CA

Agenda Item

Time

Pages

ROLL CALL AND INTRODUCTIONS	9:00 AM	
PUBLIC COMMENT	9:03 AM	
CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER	9:04 AM	
CONSENT CALENDAR 1 November 17, 2017, BACWA Executive Board Meeting Minutes 2 October 2017 Treasurer's Reports	9:05 AM	3-9 10-20
APPROVALS & AUTHORIZATIONS 3 <u>Approval</u> : Board Approval of EOA, Inc Chlorine Residual Basin Plan Amendment 4 <u>Approval</u> : Board Approval of Amendment to Proposition 84 Grant Agreement	9:06 AM	21-31 32-40
OTHER BUSINESS - POLICY/STRATEGIC 5 <u>Discussion</u> : Nutrients a. Regulatory i. Optimization/Upgrade Study Update ii. Facility Report Sign-Off Letter iii. Sea Level Rise Risk Planning b. Technical Work i. Advance of Science Funding from 2nd Watershed Permit c. Governance Structure i. Planning Subcommittee Meeting #29 Debrief ii. Steering Committee Meeting #15 Debrief 6 <u>Discussion</u> : Joint Meeting with the Water Board Debrief 7 <u>Discussion</u> : Microplastics a. Ocean Litter Protection Strategy b. SFEI Microplastics Abstracts 8 <u>Discussion</u> : SFPUC Biosolids Resources Update 9 <u>Discussion</u> : Regulatory Focus for Annual Meeting Presentations 10 <u>Discussion</u> : CMSA Tentative Order CMSA TO	9:10 AM	41-44 45 46-49 50-56 57-59 60-65 66-69
OTHER BUSINESS - OPERATIONAL 11 <u>Discussion</u> : AQPI Presentation CANCELLED 12 <u>Discussion</u> : Annual Meeting Planning 13 <u>Discussion</u> : Annual Meeting: Questions for Poll Everywhere 14 <u>Discussion</u> : Arleen Navarret Award Update 15 <u>Discussion</u> : BACWA Rep for CPSC Policy Education Advisory Committee 16 <u>Discussion</u> : Survey Results - BACWA Membership Satisfaction Comments 17 <u>Discussion</u> : BAPPG RFQ Update 18 <u>Discussion</u> : Upgrade BACWA Website for Mobile	10:45 AM	70-71 72-84 85 86-87
REPORTS 19 Committee Reports 20 Member Highlights 21 Executive Director Report 22 Regulatory Program Manager Report	12:10 PM	88-99 100-109 110

23 Other BACWA Representative Reports <ul style="list-style-type: none"> a. RMP TRC b. RMP Steering Committee c. Summit Partners d. ASC/SFEI e. Nutrient Governance Steering Committee f. SWRCB Nutrient SAG g. SWRCB Focus Group – Bacterial Objectives h. SWRCB Focus Group – Mercury Amendments to the State Plan i. Nutrient Technical Workgroup j. NACWA Taskforce on Dental Amalgam k. BAIRWMP l. NACWA Emerging Contaminants m. CASA State Legislative Committee n. CASA Regulatory Workgroup o. ReNUWit p. RMP Microplastics Liaison q. AWT Certification Committee r. Bay Area Regional Reliability Project s. WateReuse Working Group u. San Francisco Estuary Partnership 	<div style="text-align: right;">EcoAtlas</div> <div style="text-align: right;"> Rod Miller Karin North; Leah Walker; Jim Ervin Dave Williams; Laura Pagano Laura Pagano; Jim Ervin; Dave Williams Jim Ervin; Mike Connor Dave Williams Lorien Fono; Amy Chastain Tim Potter; Laura Pagano; David Williams Eric Dunlavy Tim Potter Cheryl Munoz; Linda Hu; Dave Williams Karin North; Melody LaBella Lori Schectel Lorien Fono Mike Connor; Karin North Nirmela Arsem Maura Bonnarens, Roger Bailey; Mike Connor Cheryl Munoz; Eileen White; Dave Williams; Lorien Fono </div>		
24 SUGGESTIONS FOR FUTURE AGENDA ITEMS		12:27 PM	
NEXT MEETING The next regular meeting of the Board is scheduled for February 16, 2017 from 9:00 am to 12:30 pm at SFPUC, Hetch Hetchy Room, 525 Golden Gate Ave., San Francisco, CA. The BACWA Annual Members' Meeting is scheduled for January 19, 2018 from 8:30 am to 3:00 pm at the Scottish Rite Center, 1547 Lakeside Drive, 3rd Floor Banquet Room, Oakland, CA.		12:28 PM	
ADJOURNMENT		12:30 PM	

ROLL CALL AND INTRODUCTIONS

Executive Board Representatives: Jim Ervin (San Jose); Lori Schectel (Central Contra Costa Sanitary District); Laura Pagano (SFPUC); Mike Connor (East Bay Dischargers Authority); Eileen White (East Bay Municipal Utility District).

Other Attendees:

<u>Name</u>	<u>Agency/Company</u>
Amanda Roa	Delta Diablo
Andy Gunther	Center for Ecosystem Management & Restoration
Aren Hansen	Brown & Caldwell
Doug Dattawalker	Union San
Eric Dunlavey	San Jose
Jim Graydon	Woodward & Curran
Karin North	City of Palo Alto
Randy Schmidt	CCCSD
Robert Wilson	City of Petaluma
Simret Yigsaw	San Jose
Tom Hall	EOA, Inc.
David Williams	BACWA
Lorien Fono	BACWA
Sherry Hull	BACWA

PUBLIC COMMENT

None.

CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER – Item 8, Scope of Work for Chlorine Residual Basin Plan Amendment, was moved up on the agenda.

CONSENT CALENDAR

1. September 15, 2017, BACWA Executive Board Meeting Minutes – The approved minutes will be posted on the BACWA website.
2. August and September 2017 Treasurer's Reports and Financial Summary – A Financial Summary Report was included in the Packet. A copy of the FY17 Budget as of September 30, 2017, (25% 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. The Executive Director noted that the Funds Report includes a report on the Alternative Investments and, because those investments are less liquid than previous investments, a report on BACWA liquidity in also provided.

Consent Calendar items 1 and 2: A motion to approve was made by Mike Connor and seconded by Laura Pagano. The motion was approved unanimously.

APPROVALS & AUTHORIZATIONS

3. Approval: Adoption of FY17 Audited & Annual Reports – A Board Authorization Request, a link to the FY17 Audited Financial Reports, along with the FY17 BACWA Annual Report, was included in the Packet. The Executive Director gave an overview.

Items 3: A motion to approve was made by Mike Connor and seconded by Laura Pagano. The motion was approved unanimously.

4. Authorization: Chair Authorization for Amendment to the EOA, Inc Agreement on Chlorine Residual BPA - A signed Chair Authorization Request, a previously signed Executive Director Authorization Request and 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 5** – Discussion: Climate Change Impacts in the Bay Area – The Executive Director introduced Andrew Gunther, Ph.D., founder of the Center for Ecosystem Management and Restoration (CEMAR), and noted that Dr. Gunther had received the Jean Auer Award at the State of the Estuary Conference in October 2017. Dr. Gunther gave a presentation beginning with the history of the atmospheric sciences, and the basics of our understanding of climate change due to carbon dioxide emissions. He showed graphs illustrating different scenarios of temperature increases and sea level rise. In response to a question from the Board on how he would prioritize future actions in the wastewater community, he suggested that agencies' long-term decisions should be made based on the risk assessment related to sea level rise, and will include moving facilities away from shorelines. Dr. Gunther suggests this [LINK](#) for more information.

Agenda **Item 6** – Discussion: Nutrients

a. Regulatory

- i. Permit Language for Regional Study – The Executive Director gave a presentation on the process of developing permit language for non-grayscape nutrient removal alternatives, and asked the Board for input. Board members suggested the inclusion of replenishment of ground water, including as part of IPR projects; an exploration of the installation of oyster beds, horizontal levies, salt pond management for improved oxygen results; a list of regulatory hurdles; and resiliency by design. There was a discussion about level of effort for the project. The nutrient strategy team will be convened to further consider proposed permit language.
- ii. Permit Language for Banking Nutrient Reduction Credits – The Executive Director gave an overview of a proposed approach for developing nutrient reduction credits,

and asked for Board input. Board members suggested an emphasis on the absence of future penalties (i.e., not requiring further load reductions by an early-acting agency) vs. providing credits for early actions to decrease nutrient loads; and the exploration of other incentives for early actions. The Nutrient Strategy Team will convene to further discuss possible strategies.

- iii. Debrief from CMG Meeting – A Draft letter for Agency Acceptance of the Plant-Specific Findings for the Nutrient Optimization and Upgrade Study was included in the Packet. The Executive Director gave an overview of the letter and plans to provide a copy of the letter to member general managers. A Board member asked that some changes to the language be put on the agenda for the joint meeting with the Water Board staff in December.
 - iv. 3rd Annual Group Report – A [LINK](#) to the 3rd Annual Group Report was included in the Packet. The Executive Director gave an overview. Key findings were that both flows and nutrient loads were at their highest measured levels since monitoring began in 2012. A Board member asked to share BACWA’s work on the Optimization and Upgrade Studies, especially on costs, with CASA’s Regulatory Workgroup Water Committee. The Board agreed and asked to be copied on any correspondence.
- b. Technical Work -
- i. Assessment Framework – A [LINK](#) to the Scientific Basis to Assess Nutrient Impacts on San Francisco Bay Beneficial Uses Report (Scientific Basis Report), and a [LINK](#) to the journal article entitled *Novel analyses of long-term data provide a scientific basis for chlorophyll-a thresholds in San Francisco Bay*, were included in the Packet.
- c. Governance Structure –
- i. Debrief on Planning Subcommittee Meeting #28 – The Minutes from the October 20, 2017 meeting was included in the Packet. The Executive Director gave an overview of the discussion on funding of the Science Plan. Also of note was a discussion of a new model called the General Additive Model that utilizes a statistical approach to analyzing impairment indicators to assess the condition of a waterbody. The Science Manager will have access to the model for free which could inform the Science Plan.

Agenda Item 7 – Discussion: Impact of Rule 11-18 – Central Contra Costa Sanitation Agency gave a presentation on their experience of the impact of changes to Rule 11-18. The Agency decided to do a baseline health risk assessment in order to plan their response to Rule 11-18, to develop best available data, to identify potential problems and pollutants for which there may be inexpensive fixes prior to completion of the risk reduction plan, and to provide documentation for any potential future disputes. No results are available yet.

Agenda Item 8 – Discussion: Scope of Work for Chlorine Residual Basin Plan Amendment – A revised scope of work was included in the Packet. The Executive Director gave an overview of the changes, noting that he had worked with the consultant to arrive at the current scope, and requested Board input. *A motion to approve the current scope was made by Laura Pagano and seconded by Jim Ervin. The motion was approved unanimously.* The final scope is contingent

upon review and input from the Water Board staff.

Agenda **Item 9** – Discussion: Debrief from Ocean Litter Prevention Strategy Meeting – The Regulatory Program Manager gave an overview. The meeting was primarily NGO's discussing macrolitter that ends up in the ocean. The POTW position remains that the best solutions will be pollution prevention based on science. BACWA will continue to participate and will work with the other wastewater association to comment on OPC's priorities and the updated strategy document, once available.

Agenda **Item 10** – Discussion: Letter of Support for Measure AA Grant for San Leandro Wetlands Project – A Draft Support Letter was included in the Packet. The Executive Director gave an overview of the letter and asked if there was any Board input. The supported the letter.

Agenda **Item 11** – Discussion: Pardee Debrief & Participant Survey – The Pardee Survey was included in the Packet. The Executive Director gave an overview.

Agenda **Item 12** – Discussion: ReNEWIt Industrial Advisory Board Meeting Debrief – The two BACWA Members gave an overview of the meeting. The group is beginning to think of the long-term future of funding.

Agenda **Item 13** – Discussion: SAF-MBR Kickoff Meeting Debrief – A flyer from Silicon Valley Clean Water was included in the Packet. The Regulatory Program Manager gave an overview noting that it is the largest pilot of this technology in the world. SAF-MBR decreases biosolids generation, and increases the methane produced for cogeneration, on a smaller footprint compared to traditional activated sludge. It produces a high-quality effluent that is ideal feed water for an RO process aimed at potable reuse. SAF-MBR has no impact on nutrient concentrations, which would still need to be removed from RO concentrate.

Agenda **Item 14** – Discussion: Wastewater Technology Alliance Fact Finding Debrief – The Program for the fact-finding trip to Denmark was included in the Packet. The Executive Director gave an overview and other BACWA Members who attended noted energy efficiencies, lower costs, and simultaneous nitrification and denitrification.

Agenda **Item 15** – Discussion: CMSA Tentative Order – A Joint Agency Comment Letter sent to the RWQCB on October 23, 2017 was included in the Packet. The Executive Director gave an overview. The adoption hearing has been moved to January 2018 and the item will be on the December BACWA Board Meeting Agenda.

Agenda **Item 16** – Discussion: SFEP PSL Report – A LINK to the SFEP Sewer Lateral Ordinances was included in the Packet. The Executive Director gave an overview and will monitor the issue. The Board suggested that BACWA request provide future wastewater-related reports to BACWA for review prior to publication.

Agenda **Item 17** – Discussion: Sediment Quality Provisions – A LINK to the SWRCB Sediment Quality Provisions page was included in the Packet. The Regulatory Program Manager gave an overview of the issue. The State Water Board recently drafted Phase 3, which is an assessment framework for linking human health impacts from consuming sportfish to sediment impairment. The results will inform the direction of SFEI sediment studies. The issue is on the Agenda for the Joint meeting with the Water Board.

Agenda **Item 18** – Discussion: Draft Agenda for Joint Meeting with the Water Board – A Draft Agenda was included in the Packet. The Executive Director gave an overview.

OTHER BUSINESS-OPERATIONAL

Agenda **Item 19** – Discussion: Annual Meeting Planning – A Draft Program for the meeting was included in the Packet. The Executive Director gave an overview and asked for Board input. Several suggestions for changes were made and the Executive Director will bring back the final agenda to the Board at the December Board meeting.

Agenda **Item 20** – Discussion: BAPPG RFP for Communications and Pesticide Regulatory Advocacy – The Executive Director gave an overview of the issue. Several BAPPG representatives suggested that the Committee has very limited resources and an RFP would be a waste of time and resources considering how few consultants can provide the necessary support. The Board suggested that a one-page Request for Qualifications be prepared by BACWA staff instead. It was also suggested that the BACWA Contract Policy be updated to only require competitive selection every five years for small contracts. The BAPPG representatives also requested that once the RFQ is completed the length of the new agreement be extended to five years.

Agenda **Item 21** – Discussion: Arleen Navarret Award Update – The Assistant Executive Director gave an update on the status of nominations. BACWA has received three nominations that will be reviewed by the Selection Committee which consists of two Board Members and a previous winner of the Award. The Nominee and the BACWA Board will be notified of the Selection Committee's decision on December 11, 2017 and the Award will be presented at the BACWA Annual Members' Meeting on January 19, 2018.

REPORTS

Agenda **Item 22** – Committee Reports – BACWA Committee Reports were included in the Packet.

AIR Committee: A Report from the September 27, 2017 meeting was included in the Packet.

BAPPG: A Report from the October 4, 2017 meeting was included in the Packet. BAPPG will now host a new pesticides subgroup that will review pesticide regulatory advocacy comment letters.

Biosolids Committee: A Report from the October 19, 2017 meeting was included in the Packet.

Collections Committee: No meeting.

InfoShare - Asset Management: A Report from the August 16, 2017 meeting was included in the Packet.

InfoShare – Operations & Maintenance: No meeting.

Lab Committee: A Report from the October 11, 2017 meeting was included in the Packet.

Permits Committee: A Report from the September 12, October 17, and November 14, 2017 meetings was included in the Packet. The next meeting will be joint with the CASA Regulatory Workgroup on December 14. EPA staff will attend.

Pretreatment Committee: A Report from the October 17, 2017 meeting was included in the Packet.

Recycled Water Committee: No meeting.

Agenda **Item 23** - 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: Reminded the Board that there is a search for a new General Manager going on.

EBMUD: No report.

Central Contra Costa: No report.

San Francisco: No report.

San Jose: No report.

Sunnyvale: No report.

Palo Alto: Scientists from the Nutrient Management Strategy will be giving a presentation in Palo Alto on November 20. All are invited to attend.

Delta Diablo: No report.

Petaluma: No report.

Union San: No report.

Agenda **Item 24** - The **Executive Director's (ED) Report** for August, September, and October 2017, along with the Board Calendar, and BACWA Action Items, were included in the Packet. It was noted that all 21 action items from FY18 have been completed. Also included in the Packet with the Executive Director's report was an email from the Department of Homeland Security regarding FY17 Bay Area Utilities Regional Resiliency Assessment Program, three DHS handouts, along with a LINK to a DHS document on the Program designed to identify vulnerabilities. The Board suggested they might attend a Board meeting in the future.

Agenda **Item 25** - The **Regulatory Program Manager (RPM) Report** for August, September, and October 2017 was included in the Packet.

Agenda **Item 26** - **Other BACWA Representative Reports** – BACWA Representative were given an opportunity to provide updates. No actions were taken based on the reports.

- a. RMP-TRC: Rod Miller; Laura Pagano – No report.
- b. RMP Steering Committee: Karin North; Leah Walker; Jim Ervin – No report.
- c. Summit Partners: Dave Williams; Laura Pagano – No report.
- d. ASC/SFEI: Laura Pagano; Dave Williams; Karin North – The Executive Director noted that SFEI is moving toward obtaining support from foundations and to that end will be hiring a development manager to pursue foundation funds.
- e. Nutrient Governance Steering Committee: Jim Ervin; Mike Connor – No report.
- f. SWRCB Nutrient SAG: Dave Williams – No report.
- g. SWRCB Focus Group – Bacterial Objectives: Lorien Fono; Amy Chastain – No report.
- h. SWRCB Focus Group – Mercury Amendments to the State Plan: Tim Potter; Dave Williams; Laura Pagano – No report
- i. Nutrient Technical Workgroup: Eric Dunlavey – No report.
- j. NACWA Taskforce on Dental Amalgam: Tim Potter – No report.
- k. BAIRWMP: Cheryl Munoz, Linda Hu, Dave Williams – No report.
- l. NACWA Emerging Contaminants: Karin North, Melody La Bella – No report
- m. CASA Statewide Pesticide Steering Committee: Melody La Bella – No report.
- n. CASA State Legislative Committee: Lori Schechel – No report.
- o. CASA Regulatory Workgroup – Lorien Fono - No report.
- p. RMP Microplastics Liaison: Nirmela Arsem – No report.
- q. ReNUWIt: Mike Connor; Karin North – No report.
- r. AWT Certification Committee: Maura Bonnarens – No report.
- s. Bay Area Regional Reliability Project: Roger Bailey; Mike Connor – No report
- t. WateReuse Working Group: Cheryl Munoz – No report.

Agenda Item 27 - **SUGGESTIONS FOR FUTURE AGENDA ITEMS.** None.

ANNOUNCEMENTS:

The next regular meeting of the Board is scheduled for **December 15, 2017 from 9:00 am – 12:30 pm** at the **EBMUD Treatment Plant, Lab Library, 2020 Wake Ave., Oakland, CA.** A **Holiday Lunch is scheduled to follow from 12:30 pm to 2:00 pm.**

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 12:48 pm.



MONTHLY FINANCIAL SUMMARY REPORT October 2017

Fund Balances

In FY 18 BACWA has three operating funds (BACWA, Legal, and CBC) and two pass-through funds for which BACWA provides only contract administration services (WOT & Prop 84).

BACWA Fund: This fund provides the resources for BACWA staff, its committees, and other administrative needs. The ending fund balance on October 31, 2017 was \$1,605,155 which is significantly higher than the target reserve of \$160,000 which is intended to cover 3 months of normal operating expenses. \$463,814 of the ending fund balance is shown on the October 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 staff support (including \$31,082 that was carried forward into FY18). This leaves an actual unobligated excess fund balance of \$1,141,341 as of October 31, 2017. As the details of what regulatory requirements will be included in the next Nutrient Watershed Permit, 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 October 31, 2017 was \$1,835,951 which is significantly higher than the target reserve of \$400,000. \$145,552 of the ending balance is obligated to meet line item expenses for completion of the Optimization/Upgrade Studies contract, the Risk Reduction contracts, and for technical support. This leaves an actual unobligated excess fund balance of \$1,690,399 as of October 31, 2017. Total Disbursements for FY18 from the CBC Fund include the annual payment of \$880,000 to SFEI for the Nutrient Watershed Permit commitment plus the additional \$200,000 approved by the Board. As the details of what regulatory requirements will be included in the next Nutrient Watershed Permit, 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. Transfers are made from the BACWA Fund and/or the CBC Fund to balance the Annual Budget if expenses exceed revenues and vice versa. It is therefore important to achieve the anticipated revenues and not exceed the budgeted expenses on an annual basis in order to maintain the BACWA and CBC Fund balances at the levels projected in the 5 Year Plan.

Revenues as of October 31, 2017 (33% of the FY) are at 97%. The FY18 BACWA invoices were sent at the end of July 2017 and the end of August 2017, and 97% of the invoices have been paid before the end of October. The interest revenue reported through October 2017 includes \$5,788 interest from the investment of Funds in LAIF for the 4th quarter of FY17.



MONTHLY FINANCIAL SUMMARY REPORT
October 2017

Overall Expenses as of October 31, 2017 (33% of the FY) are at 60% due primarily to timing of the Watershed Permit Commitment payment. Those needing additional explanation are:


Administration: This category is 15% expended at 33% of the FY due primarily to timing of invoices.

Meetings: This category is 11% expended at 33% of the FY due primarily to timing of invoices.

Communications: This category is 16% expended at 33% of the FY due primarily to timing of invoices.

Legal: This category is 11% expended at 33% of the FY due primarily to no need for regulatory legal support.

Tech Support: This category is 75% expended at 33% of the FY due to timing of payment of the Watershed Permit Commitment, and to the timing of invoices for the Optimization/Upgrade obligations.

						
				33% of Budget		
<u>BACWA FY18 BUDGET</u>	<u>Line Item Description</u>	<u>FY 2018 Budget</u>	<u>Actuals Oct 2017</u>	<u>Actual % of Budget Oct 2017</u>	<u>Variance</u>	<u>NOTES</u>
REVENUES & FUNDING						
Dues	Principals' Contributions	\$487,095	\$487,095	100%	\$0	FY18: 2% increase.
	Associate & Affiliate Contributions	\$178,573	\$156,102	87%	-\$22,471	FY18: 2% increase. Assoc: \$8,090; Affiliate: \$1,600 (\$197 over budget)
Fees	Clean Bay Collaborative	\$675,000	\$679,303	101%	\$4,303	Prin: \$450,000; Assoc/Affil: \$225,000
	Nutrient Surcharge	\$800,000	\$761,042	95%	-\$38,958	Prin: \$533,335; Assoc/Affil: \$266,673
	Voluntary Nutrient Contributions	\$30,000	\$30,000	100%	\$0	FY18: Palo Alto (\$30k)
Other Receipts	Other Receipts	\$0	\$0		\$0	Carry forward of Passthrough funds for Pharm Study into FY18 (\$23,100)
	AIR Non-Member	\$6,477	\$6,477	100%	\$0	2% increase.
	BAPPG Non-Members	\$3,774	\$3,774	100%	\$0	2% increase.
	Other	\$0	\$0		\$0	
Fund Transfer	Special Program Admin Fees	\$2,550	\$0	0%	-\$2,550	FY18: 2% increase (WOT only)
Interest Income	LAIF	\$12,000	\$11,914	99%	-\$86	BACWA, Legal, & CBC Funds invested in LAIF
	Higher Yield Investments	\$10,000	\$1,763	18%	-\$8,237	Alternative Investment Interest
	Total Revenue	\$2,205,469	\$2,137,470	97%	-\$67,999	
<u>BACWA FY18 BUDGET</u>	<u>Line Item Description</u>	<u>FY 2018 Budget</u>	<u>Actuals Oct 2017</u>	<u>Actual % of Budget Oct 2017</u>	<u>Variance</u>	<u>NOTES</u>
EXPENSES						
Labor						
	Executive Director	\$195,998	\$32,666	17%	-\$163,332	3.5% CPI (SF/Oakland/San Jose Metro Area Dec 2016)
	Assistant Executive Director	\$87,975	\$29,604	34%	-\$58,371	3.5% CPI (SF/Oakland/San Jose Metro Area Dec 2016)
	Regulatory Program Manager	\$116,438	\$37,074	32%	-\$79,364	3.5% CPI (SF/Oakland/San Jose Metro Area Dec 2016)
	Total	\$400,411	\$99,344	25%	-\$301,067	
Administration						
	EBMUD Financial Services	\$40,000	\$4,304	11%	-\$35,696	
	Auditing Services (Maze)	\$6,300	-\$672	-11%	-\$6,972	FY18: \$6,200 Accrued from FY17 to FY18, less \$1,832 paid for FY17 in July 2017.
	Administrative Expenses	\$7,500	\$986	13%	-\$6,514	Travel, Supplies, Parking, Mileage, Tolls, Misc.
	Insurance	\$4,500	\$4,278	95%	-\$222	
	Total	\$58,300	\$8,896	15%	-\$49,404	
Meetings						
	EB Meetings	\$2,500	\$508	20%	-\$1,992	Catering, Venue, other expenses
	Annual Meeting	\$10,000	\$1,000	10%	-\$9,000	Catering, Venue, other expenses. (Deposit to hold venue + deposit to hold caterer)
	Pardee	\$6,000	\$130	2%	-\$5,870	Catering, Venue, other expenses
	Misc. Meetings	\$5,000	\$852	17%	-\$4,148	Holiday Lunch, Committee Chair Lunch, Staff Mtgs, Finance Comm, Summit Partners, CASA, NACWA, Toxicity WS
	Total	\$23,500	\$2,490	11%	-\$21,010	
Communication						
	Website Hosting (Computer Courage)	\$600	\$600	100%	\$0	
	File Storage (Box.net)	\$750	\$0	0%	-\$750	
	Website Development/Maintenance	\$1,200	\$0	0%	-\$1,200	Domains, website changes
	IT Support (As Needed)	\$2,600	\$68	3%	-\$2,532	
	Other Commun (MS, SM, Code42, PollEv)	\$1,100	\$335	30%	-\$765	MS Exchange, Survey Monkey, CrashPlanPro (2)
	Total	\$6,250	\$1,003	16%	-\$5,247	

FY 2018
BACWA BUDGET

EXPENSES						
Legal						
	Regulatory Support	\$2,550	\$0	0%	-\$2,550	2% increase.
	Executive Board Support	\$2,050	\$510	25%	-\$1,540	2% increase.
	Total	\$4,600	\$510	11%	-\$4,090	
Committees						
	AIR	\$50,000	\$6,603	13%	-\$43,397	FY18: Agrmt with Carollo for \$50,000. RPM lunches will also be included, but not in budget.
	BAPPG	\$100,000	\$38,630	39%	-\$61,370	FY18: Includes CPSC @ \$10,000 and Pest. Reg Spt. @ \$15,000
	Biosolids Committee	\$3,100	\$265	9%	-\$2,835	Includes WEF Conf
	Collections System	\$1,000	\$0	0%	-\$1,000	
	InfoShare Groups	\$1,200	\$140	12%	-\$1,060	Funds for 2 workgroups (Asset Mgmt & O&M)
	Laboratory Committee	\$6,000	\$0	0%	-\$6,000	Includes Tech Conf & Training
	Permit Committee	\$1,000	\$0	0%	-\$1,000	
	Pretreatment	\$7,000	\$0	0%	-\$7,000	Includes Training & Factsheet
	Recycled Water Committee	\$1,000	\$0	0%	-\$1,000	
	Misc Committee Support	\$35,000	\$7,142	20%	-\$27,858	Carollo Rule 11-18
	Manager's Roundtable	\$1,000	\$191	\$0	-\$809	New line item in FY18
	Total	\$206,300	\$52,971	26%	-\$153,329	
Collaboratives						
	Collaboratives					
	State of the Estuary (biennial)	\$0	\$0		\$0	Biennial in Odd Years. (Paid biennially in odd years for even year conference)
	Arleen Navarret Award	\$1,000	\$0		-\$1,000	Biennial in Even Years
	FWQC (Fred Andes)	\$7,500	\$0	0%	-\$7,500	
	Stanford ERC (ReNUWit)	\$10,000	\$0	0%	-\$10,000	
	CWCCG	\$0	\$0		\$0	
	Misc	\$3,000	\$5,000	167%	\$2,000	FY18: Includes \$5,000 to PPIC approved by Board Sept, 2017
	Total	\$21,500	\$5,000	23%	-\$16,500	
Other	Unbudgeted Items					
	Passthrough	\$0	\$23,100		-\$23,100	Passthrough for Pharm Study; bal at end of FY17: \$23,100
	Other	\$0	\$0		\$0	Misc Expense Items Not Budgeted
		\$0	\$23,100		\$0	
Tech Support	Technical Support					
	Nutrients					
	Watershed	\$880,000	\$880,000	100%	\$0	
	NMS Voluntary Contributions	\$0	\$200,000		\$200,000	FY18: \$200,000 add'l funds approved by Board August 2017
	Additional work under permit	\$100,000	\$0	0%	-\$100,000	FY18: Increased at Board's request
	Opt/Upgrade/Annual Reporting Studies	\$372,298	\$26,304	7%	-\$345,994	FY18: Balance remaining on agreement at end of FY16 less FY17 budgeted amount
	Nutrient Program Coordination	\$50,000	\$0	0%	-\$50,000	
	Voluntary Nutrient Contributions	\$30,000	\$0	0%	-\$30,000	FY18: Palo Alto (\$30k)
	General Tech Support	\$50,000	\$4,568	9%	-\$45,432	
	Risk Reduction	\$0	\$7,975		\$7,975	FY18: CIEA extended to 9/30/17 - \$9,853.69 remaining at 7/1/17
	Total	\$1,482,298	\$1,118,847	75%	-\$363,451	
	TOTAL EXPENSES	\$2,203,159	\$1,312,161	60%	-\$890,998	
	NET INCOME BEFORE TRANSFERS	\$2,310	\$825,309			
	TRANSFERS FROM RESERVES	\$0				
	NET INCOME AFTER TRANSFERS	\$2,310				

CHECK ON BACWA LIQUIDITY THRESHHOLD

	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>	<u>FY19 July</u>	<u>Aug</u>	<u>Sept</u>	<u>Oct</u>	BUDGET Totals FY 18	EST BUDGET Totals FY19
BEGINNING UNOBLIGATED FUND BALANCE	\$3,741,106	\$4,198,876	\$4,656,647	\$4,563,050	\$4,469,453	\$4,375,856	\$4,282,259	\$4,188,662	\$4,095,065	\$4,001,468	\$3,909,778	\$4,365,396	\$3,741,014		
Average Monthly Revenues	\$551,367	\$551,367	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$547,308	\$547,308	\$547,308	\$2,205,469	\$2,189,233
Average Monthly Expenditures (Less Large one time Expenses)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$91,690)	(\$91,690)	(\$91,690)	(\$91,690)	\$1,123,159	\$1,100,282
Less Large Expenditures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$1,080,000)	\$0		
NET AVAILABLE FOR INVESTMENT	\$4,198,876	\$4,656,647	\$4,563,050	\$4,469,453	\$4,375,856	\$4,282,259	\$4,188,662	\$4,095,065	\$4,001,468	\$3,909,778	\$4,365,396	\$3,741,014	\$4,196,632		
NEW INVESTMENTS															
Higher Yield (non-liquid)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)		
MATURITIES/Called															
Higher Yield (non-liquid)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
AVAILABLE LIQUID FUNDS	\$3,293,876	\$3,751,647	\$3,658,050	\$3,564,453	\$3,470,856	\$3,377,259	\$3,283,662	\$3,190,065	\$3,096,468	\$3,004,778	\$3,460,396	\$2,836,014	\$3,291,632		
TARGET AVAILABLE LIQUID FUNDS	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok		



Bay Area Clean Water Agencies

A Joint Powers Public Agency

Leading the Way to Protect our Bay

December 1, 2017

MEMO TO: Bay Area Clean Water Agencies Executive Board
MEMO FROM: D. Scott Klein, Controller, East Bay Municipal Utility District
SUBJECT: Fourth Month FY 2018 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, 2017 through October 31, 2017** (four months of Fiscal Year 2018). 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),
- Air Issues and Regulation Group (AIR),
- Water/Wastewater Operator Training (WOT),
- Prop84 Bay Area Integrated Regional Water Mgmt (PRP84)

BACWA Fund Report as of October 31, 2017

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	1,140,008	658,462	193,315	1,605,155	463,814	1,141,341
804	LEGAL RSRV	300,000	-	-	300,000	-	300,000
805	CBC	1,505,790	1,449,007	1,118,847	1,835,951	145,552	1,690,399
802	AIR	-	-	-	-	-	-
	SUBTOTAL 1	2,945,799	2,107,470	1,312,162	3,741,106	609,366	3,131,741
810	WOT	109,916	123,000	23,096	209,820	-	209,820
	SUBTOTAL 2	109,916	123,000	23,096	209,820	-	209,820
811	PRP84	117,907	2,055,741	-	2,173,648	-	2,173,648
	SUBTOTAL 3	117,907	2,055,741	-	2,173,648	-	2,173,648
	GRAND TOTAL	3,173,622	4,286,210	1,335,258	6,124,574	609,366	5,515,208

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	1,140,008	658,462	193,315	1,605,155	38,366	1,643,521	611,872	1,031,649	46%	-	n/a	priority # 3 for allocation	
804	LEGAL RSRV	300,000	-	-	300,000	-	300,000	-	-	0%	300,000	AR5	priority # 1 for allocation	
805	CBC	1,505,790	1,449,007	1,118,847	1,835,951	-	1,835,951	-	1,230,951	54%	605,000	6F5,G64, ME2	priority # 2 for allocation	
802	AIR	-	-	-	-	-	-	-	-	0%	-	n/a	This fund is gone	
	SUBTOTAL 1	2,945,799	2,107,470	1,312,162	3,741,106	38,366	3,779,472	611,872	2,262,600	100%	905,000			
810	WOT	109,916	123,000	23,096	209,820	-	209,820	209,820	-	0%	-		pass-through funds, no allocation	
	SUBTOTAL 2	109,916	123,000	23,096	209,820	-	209,820	209,820	-	0%	-			
811	PRP84	117,907	2,055,741	-	2,173,648	-	2,173,648	2,173,648	-	0%	-		pass-through funds, no allocation	
815	PRP50	-	-	-	-	-	-	-	-	0%	-		pass-through funds, no allocation	
	SUBTOTAL 3	117,907	2,055,741	-	2,173,648	-	2,173,648	2,173,648	-	0%	-			
	GRAND TOTAL	3,173,622	4,286,210	1,335,258	6,124,574	38,366	6,162,939	2,995,339	2,262,600		905,000			

verification

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

Reconciliation to Trial Balance - accrual basis

Per Report above:

General	2,107,470
WOT	123,000
PROP	2,055,741
subtotal	4,286,210

Billings-Pending Receipts

4686	Mem Contrib	37,697
4687	Transfer	-
4690	Assoc Contrib	22,524
4696	Other	38,966
4731	State Grant	-
4732	Grant Retention	228,416
subtotal		327,603

Trial Balance Revenue Accounts

4411	Interest	(13,677)
4686	Mem Contrib	(1,327,095)
4687	Transfer	-
4690	Assoc Contrib	(178,626)
4696	Other	(810,259)
4731	State Grant	(2,055,741)
4732	Grant Retention	(228,416)
subtotal		(4,613,813)
Difference		-

BACWA Revenue Report as of October 31, 2017

FUND #	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	
800	BACWA	1011099	Principal's Contributions	487,095	-	-	-	-	487,095	-	487,095	-
800	BACWA	1011133	Assoc.& Affiliate Contr	178,573	-	22,539	-	-	156,102	-	156,102	22,471
800	BACWA	0408511	Administrative & General	-	-	-	-	-	-	-	-	-
800	BACWA	1014251	Non-Member Contributions (BAPPG)	3,774	-	-	-	-	3,774	-	3,774	-
800	BACWA	1011109	Fund Transfers	2,550	-	-	-	-	-	-	-	2,550
800	BACWA	1011117	BDO- Interest Income from LAIF	12,000	-	-	2,063	-	-	5,014	5,014	6,986
800	BACWA	1011108	BDO Other Receipts	-	-	-	-	-	-	-	-	-
800	BACWA	1014252	BDO Non-Member Contr AIR	6,477	-	-	-	-	6,477	-	6,477	-
800	BACWA	1014511	BDO-Alternative Investment Inc	10,000	-	-	-	-	-	-	-	10,000
800	BACWA	1014550	BDO-Other Receipts (PHARM)	-	-	-	-	-	-	-	-	-
BACWA TOTAL				700,469	-	22,539	2,063	-	653,448	5,013	658,462	42,007
802	LEGAL	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	-	-	-
LEGAL TOTAL				-	-	-	-	-	-	-	-	-
805	WQA-CBC	1011099	BDO Member Contributions	675,000	-	24,556	-	-	679,303	-	679,303	(4,303)
805	WQA-CBC	1011108	BDO Other Receipts	800,000	-	30,994	-	-	761,042	-	761,042	38,958
805	WQA-CBC	1011117	BDO- Interest Income from LAIF	-	-	-	4,064	-	-	6,900	6,900	(6,900)
805	WQA-CBC	1014511	BDO-Alternative Investment Inc	-	908	-	-	1,763	-	-	1,763	(1,763)
805	WQA-CBC	1014528	BDO-Voluntary Nutrient Contrib	30,000	-	-	-	-	-	-	-	30,000
WQA CBC TOTAL				1,505,000	908	55,550	4,064	1,763	1,440,345	6,901	1,449,007	55,992
TOTAL				2,205,469	908	78,089	6,126	1,763	2,093,793	11,914	2,107,470	98,000

	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	-	-	17,000	-	-	123,000	-	123,000	(123,000)
810	WOT	1011108	BDO Other Receipts	-	-	-	-	-	-	-	-	-
810	WOT	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	-	-	-
WOT TOTAL				-	-	17,000	-	-	123,000	-	123,000	(123,000)

	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			-	-	-	-	-	2,055,741	-	2,055,741	(2,055,741)
PROP TOTAL				-	-	-	-	-	2,055,741	-	2,055,741	(2,055,741)

Grand Total				2,205,469	908	95,089	6,126	1,763	4,272,534	11,914	4,286,210	(2,080,741)
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BACWA Expense Detail Report as of October 31, 2017

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	195,998	-	-	-	-	163,332	32,666	-	-	195,998	-
AS-Assistant Executive Directo	1011124	87,975	(6,818)	6,818	-	-	58,371	29,604	-	-	87,975	-
AS-Regulatory Program Manager	1011149	116,438	(21,285)	21,285	-	-	79,364	37,074	-	-	116,438	-
ADMINISTRATION												
AS-EBMUD Financial Services	1011125	40,000	(4,304)	4,304	-	-	35,696	4,304	-	-	40,000	-
AS-Audit Services	1014512	6,300	-	-	-	-	6,300	1,842	3,686	(6,200)	5,628	672
AS-BACWA Admin Expense	1011118	7,500	-	-	386	-	-	-	986	-	986	6,514
AS-Insurance	1011126	4,500	-	-	-	-	-	-	4,278	-	4,278	222
MEETINGS												
GBS-Meeting Support-Exec Bd	1014513	2,500	-	-	-	-	753	247	261	-	1,261	1,239
GBS-Meeting Support-Annual	1014514	10,000	-	-	-	-	-	-	1,000	-	1,000	9,000
GBS-Meeting Support-Pardee	1014515	6,000	-	-	-	-	-	-	130	-	130	5,870
GBS-Meeting Support-Misc	1014516	5,000	-	-	-	-	-	-	852	-	852	4,148
GBS- Meeting Support	1011122	-	-	-	-	-	-	-	-	-	-	-
COMMUNICATION												
CAR-BACWA Website Hosting	1014517	750	-	-	-	-	-	-	600	-	600	150
CAR-BACWA File Storage	1014518	1,200	-	-	-	-	-	-	-	-	-	1,200
CAR-BACWA IT Support	1014519	2,600	(68)	68	-	-	2,533	68	-	-	2,600	-
CAR-BACWA IT Software	1014520	1,100	-	-	93	-	-	-	335	-	335	765
CAR-BACWA Website Dev/Maint	1011116	600	-	-	-	-	-	-	-	-	-	600
LEGAL												
LS-Regulatory Support	1011107	2,550	-	-	-	-	2,550	-	-	-	2,550	-
LS-Executive Board Support	1011110	2,050	(510)	510	-	-	1,540	510	-	-	2,050	-
COMMITTEES												
AIR-Air Issues&Regulation Grp	1014253	50,000	(3,207)	3,207	211	-	43,608	6,392	211	-	50,211	(211)
BC-BAPPG	1011147	100,000	(16,487)	16,487	229	-	48,304	27,696	10,934	-	86,934	13,066
BC-Biosolids Committee	1011101	3,100	-	-	265	-	-	-	265	-	265	2,835
BC-Collections System	1011097	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-InfoShare Groups	1011102	1,200	-	-	-	-	-	-	140	-	140	1,060
BC-Laboratory Committee	1011103	6,000	-	-	-	-	-	-	-	-	-	6,000
BC-Permit Committee	1011098	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-Pretreatment Committee	1011146	7,000	-	-	-	-	-	-	-	-	-	7,000
BC-Water Recycling Committee	1011100	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-Managers Roundtable	1014444	1,000	-	-	191	-	-	-	191	-	191	809
BC-Miscellaneous Committee Sup	1011104	35,000	(5,157)	5,157	-	-	21,464	7,142	-	-	28,606	6,394
COLLABORATIVES												
CAS-Arleen Navaret Award	1012201	1,000	-	-	-	-	-	-	-	-	-	1,000
CAS-FWQC	1012202	7,500	-	-	-	-	-	-	-	-	-	7,500
CAS-Stanford ERC	1011969	10,000	-	-	-	-	-	-	-	-	-	10,000
CAS-CWCCG	1011148	-	-	-	-	-	-	-	-	-	-	-
CAS-PSSEP	1011112	-	-	-	-	-	-	-	-	-	-	-
CAS-Misc Collaborative Sup	1014521	3,000	-	-	-	-	-	-	5,000	-	5,000	(2,000)
BDO-Contract Expenses (PHARM)												
BDO-Contract Expenses (PHARM)	1014551	-	-	-	-	-	-	23,100	-	-	23,100	(23,100)
BACWA TOTAL		720,861	(57,836)	57,836	1,376	-	463,814	170,645	28,870	(6,200)	657,129	63,732
TECH SUPPORT												
WQA-CE Addl Work Under Permit	1014254	100,000	-	-	-	-	57,000	-	-	-	57,000	43,000
WQA-CE-Technical Support	1011127	50,000	-	-	1,372	-	-	-	4,568	-	4,568	45,432
WQA-CE CASA Chem of Concern	1011128	-	-	-	-	-	-	-	-	-	-	-
WQA-CE Opt-Upgrade Studies	1014255	372,298	(26,304)	26,304	-	-	88,552	26,304	-	-	114,856	257,442
WQA-CE Risk Reduction	1014023	-	(9,854)	-	7,975	-	-	-	7,975	-	7,975	(7,975)
WQA-CE-Nutrient WS Permit Comm	1014021	880,000	-	-	200,000	-	-	-	1,080,000	-	1,080,000	(200,000)
WQA-CE-Program Mgmt	1011131	50,000	-	-	-	-	-	-	-	-	-	50,000
WQA-CE Voluntary Nutr Contrib	1014529	30,000	-	-	-	-	-	-	-	-	-	30,000
TECH SUPPORT (CBC) TOTAL		1,482,298	(36,158)	26,304	209,347	-	145,552	26,304	1,092,543	-	1,264,399	217,900
GRAND TOTAL (BACWA)		2,203,159	(93,994)	84,140	210,723	-	609,366	196,949	1,121,413	(6,200)	1,921,528	281,631
							Total	1,312,162				
WOT												
Administrative Support	1011142	-	-	-	-	-	-	-	-	-	-	-
BDO Contract Expenses	1011143	-	-	-	22,750	-	-	-	23,096	-	23,096	(23,096)
		-	-				-	-	23,096	-	23,096	(23,096)
Page 48 of 110												
GRAND TOTAL (BDO, CBC, WOT)		2,203,159	(93,994)	84,140	233,473	-	609,366	196,949	1,144,509	(6,200)	1,944,624	258,535

Prop 84 Revenue Report as of October 31, 2017

DEPTID	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	Prop84BayAreaIntegRegnlWtrMgmt	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1011142	Administrative Support	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1011691	Water Efficient Landscape Reba	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1011705	Regional Green Infrastructure	-	-	-	-	-	157,589	-	157,589	(157,589)
811	Prop84BayAreaIntegRegnlWtrMgmt	1011706	Hacienda Ave Green St Improvem	-	-	-	-	-	1,746,693	-	1,746,693	(1,746,693)
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	1012219	Flood Infrastructure Mapping T	-	-	-	-	-	30,239	-	30,239	(30,239)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012220	Stormwater Improvements & PBP	-	-	-	-	-	8,010	-	8,010	(8,010)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012221	Richmond Shoreline & San PFP	-	-	-	-	-	21,114	-	21,114	(21,114)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012222	Pescadero Integrated FRAH	-	-	-	-	-	45,905	-	45,905	(45,905)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012223	Restoration Guidance, San FC	-	-	-	-	-	7,308	-	7,308	(7,308)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012224	SF Estuary Steelhead MP	-	-	-	-	-	28,355	-	28,355	(28,355)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012225	Watershed Program Admnstrtn	-	-	-	-	-	10,528	-	10,528	(10,528)
PROP 84 TOTAL				-	-	-	-	-	2,055,741	-	2,055,741	(2,055,741)

Prop 84 Expense Detail Report for October 2017

DEPTID	DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
				ENC	PV	DA	JV	ENC	PV	DA	JV		
811	Prop84BayArealIntegRegnIWtrMgmt	BDO Fund Transfers	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Administrative Support	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	BDO Contract Expenses	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Regional Green Infrastructure	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Water Efficient LRP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Bay Friendly Landscape TP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Weather Based Irrigation Cntrl	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	High Efficiency Toilet & UR	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	High Efficiency Toilet & UI	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	High Efficiency Clothes Washrs	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Napa Co. Rainwater HP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Conservation Program Admin	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Flood Infrastructure Mapping T	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Stormwater Improvements & PBP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Richmond Shoreline & San PFP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Pescadero Integrated FRAH	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Restoration Guidance, San FC	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	SF Estuary Steelhead MP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnIWtrMgmt	Watershed Program Admnstrtn	-	-	-	-	-	-	-	-	-	-	-
PRP84 TOTAL			-	-	-	-	-	-	-	-	-	-	-



BACWA BOARD AUTHORIZATION REQUEST

AGENDA NO.: 3

FILE NO.: 18-26

MEETING DATE: Dec. 15, 2017

TITLE: Agreement with EOA, Inc. for technical assistance needed to support the Regional Water Board's adoption of a chlorine residual Basin Plan Amendment.

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Approve an agreement with EOA, Inc to do work associated with this project.

SUMMARY

The current Basin Plan has a 0.0 mg/l instantaneous chlorine residual limit. Over the years this has resulted in several permit violations by BACWA members due, in many cases, to very short term spikes in chlorine residual in the effluent which has negligible environmental impact. In attempts to not violate the instantaneous limit, operators often overdose with a dechlorinating agent. This results in a significant increase in chemical costs plus excess chemical discharges, which exert an oxygen demand, to the Bay.

BACWA has been working with the Regional Water Board to develop a scope of work that would lead to a Basin Plan Amendment which would modify the instantaneous chlorine residual limit in order to reduce the amount of wasted resources spent on excess chemical purchases and chemical discharges to the Bay. A scope of work has been reviewed with the Regional Water Board.

The estimated cost for the scope of work is below \$100,000, which, based on BACWA's contracting policy, allows for sole sourcing a contractor if appropriate. Based on EOA's long history of working to understand and find alternatives to the instantaneous limit, EOA was selected to conduct the work. Staff is now requesting approval by the BACWA Executive Board for an agreement with EOA in a not to exceed amount of \$99,500.00 for completing the scope of work. The contract would begin on December 15, 2017 and expire on June 30, 2019.

FISCAL IMPACT

For FY18, the agreement will be funded by the Additional Work under Permit budget line item in the approved FY18 BACWA budget. The budget for that line item is \$100,000.00.

ALTERNATIVES

No alternatives were considered since EOA is uniquely qualified to complete the work and their selection complies with the BACWA contracting policy.

Attachments:

Agreement

Approved:

Date:

Jim Ervin, BACWA Chair

BAY AREA CLEAN WATER AGENCIES PROFESSIONAL SERVICES CONTRACT

This PROFESSIONAL SERVICES CONTRACT, effective **December 15, 2017**, 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 EOA (“Consultant”), a corporation doing business at **1410 Jackson Street, Oakland, CA 94612**, for professional services as described in Exhibit A attached hereto. In consideration of the mutual covenants, stipulations and agreements, the parties agree as follows:

Description and Standard of Services to be Performed

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

Payment for Services

6. BACWA will pay Consultant based on the rates in Exhibit B, up to a maximum amount payable of **\$99,500.00**. Consultant will not exceed the maximum amount payable without obtaining prior written approval from BACWA.
7. Consultant shall submit invoices monthly. Invoices shall include the hours charged by each employee, a brief description of the work performed, and a description of costs for which Consultant seeks reimbursement and which are specified in Exhibit B.
8. Payments under this Contract will be due thirty (30) days after BACWA’s receipt of invoices. BACWA may withhold from any progress or final payment any damages, backcharges or claims incurred or anticipated by BACWA to the extent caused by Consultant.

Document Ownership and Retention

9. Consultant will maintain all financial records relating to this Contract in accordance with generally accepted accounting principles and for at least three years following termination of this Contract. Consultant will grant BACWA and its representatives access upon request to all such records and all other books, documents, papers, drawings, and writings of Consultant that refer or relate to this Contract.

- 10.** All drawings, specifications, reports, programs, manuals, and other work product of Consultant that result from this Contract (“Work Product”) will be considered the exclusive property of BACWA. Consultant agrees that it will not use, disclose, communicate, publish or otherwise make available to third parties any products, analyses, data, compilations, studies, proposals, technical or business information, and any other information related to the Services provided to BACWA without BACWA’s prior written approval.

Indemnification

- 11.** To the fullest extent allowed by law, Consultant will indemnify, hold harmless, reimburse and defend BACWA, its Member Agencies, and each of their officers, directors, employees and agents from, for and against any and all claims, demands, damages, losses, expenses, liabilities and penalties, including but not limited to reasonable attorneys’ and expert witnesses’ fees, arising out of or relating to the Services but only to the extent caused by the negligent or other wrongful acts or omissions of Consultant or any person or entity for whose acts or omissions any of them are responsible, or by the failure of any such party to perform as required by this Contract.

Insurance

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

Assignment

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

Independent Contractor

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

Termination of Contract; Suspension of Services

15. This contract shall automatically terminate on **June 30, 2019**. 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 – Budget Summary Table/Estimated Timing

Exhibit C – 2018 Fee Schedule

CONSULTANT: EOA, Inc.

1410 Jackson Street

Street Address

Oakland, CA 94612

City, State, Zip Code

94-2977419

Tax Identification No.

Consultant Signature

Date

Name, Title

BACWA Signature

Date

Jim Ervin, BACWA Chair

EXHIBIT A

CHLORINE RESIDUAL BASIN PLAN AMENDMENT

TECHNICAL ASSISTANCE SCOPE OF WORK

CHLORINE RESIDUAL PROBLEM DEFINITION

Task 1. Compile Recent POTW Chlorine Residual Excursion Information

Review CIWQS records from 1/1/2010 through 12/31/2017 and compile table of chlorine residual excursions reported with assessed minimum mandatory penalties (MMPs) in Region 2. Review excursion associated monthly self-monitoring report (SMR) transmittal letters in CIWQS records and summarize available information on chlorine residual event durations, causes, and actions taken to prevent similar events from reoccurring. Prepare summary statistics and graphical summaries of events from that period including frequency, magnitude and duration. Provide narrative summary and interpretation of causes of most frequent events and corrective actions required. Prepare estimates of recent total annual Bay area POTW dechlorination chemical usage from pooled chemical purchase program and estimates of ranges of excess chemicals added by POTWs to maintain consistent compliance with the 0.0 mg/L effluent limit. Prepare summary tables showing the reduction in dechlorination chemicals and costs that could occur if dosages were able to be reduced by 0.5 mg/L, 1.0 mg/L, or 2.0 mg/L, respectively.

Estimated Hours: 50

POTW WATER QUALITY BASED EFFLUENT LIMIT APPROACH

Task 2. Evaluate Alternative Approaches for Replacing the Basin Plan Table 4-2 Chlorine Residual Technology Based Effluent Limit with QBELs Based on USEPA Ambient Water Quality Criteria for Chlorine (1984)

Conduct two meetings with RWB staff to evaluate alternative approaches for replacing the Table 4-2 Chlorine Residual instantaneous maximum technology based effluent limit water quality based effluent limits (QBEL). Options include adding the saltwater and freshwater UPEPA 1-hour average and 4-day average chlorine WQC (below) as QBELs to Table 4-2, including the EPA WQC elsewhere in the Basin Plan Implementation Plan (Chapter 4), or adopting the 1-hour average and 4-day average chlorine WQC as Water Quality Objectives in Basin Plan Chapter 3.

- Saltwater: **13 ug/L 1-hour average**; 7.5 ug/L 4-day average
- Freshwater: **19 ug/L 1-hour average**; 11 ug/L 4-day average

Based on the results of the two RWB meetings prepare summary of recommended approach for Basin Plan modifications and any additional guidance deemed necessary for calculation of QBELs such as on use of deepwater and shallow-water discharge dilution credits. Prepare technical and regulatory rationale for why QBELs should be expressed on a 1-hour basis instead of average weekly and average monthly, as is otherwise required by NPDES regulations for POTWs unless deemed impractical. Rationale should address the impracticality of adequately protecting aquatic life with weekly or monthly average limits based on the short-term exposure toxicity of chlorine.

Estimated Hours: 60

Task 3. Evaluate Approaches for Determining Compliance with a 1-Hour Average Limit Using Continuous Monitoring Data

Compliance with the current 0.0 mg/L instantaneous maximum effluent limit, for purposes of CIWQS reporting and MMP assessment, is determined based on 24-daily every hour on the hour readings per an agreement developed between the RWB and BACWA in 2004. The USEPA chlorine WQC is expressed as a 1-hour average value. The WQC needs to be translated into an NPDES permit effluent limit using SIP procedures, including dilution where applicable. The Basin Plan is silent on how to use continuous monitoring data for compliance determination (Section 4.7.3). The SWB draft Total Residual Chlorine (TRC) policy (June 2006) proposed an approach averaging 60 one minute readings every hour for compliance determination. The POTW community and instrumentation professionals deemed this to be infeasible given on-line monitoring system limitations.

The SWB April 2008 on-line field monitoring system report recommended a reporting frequency of every 5-minutes (averaging 12 readings per hour). The Santa Ana RWB uses a compliance determination protocol based magnitude and duration of individual excursions and receiving water dilution. Evaluate alternative compliance determination protocols and develop draft potential language for inclusion in Basin Plan Section 4.7 Implementation of Effluent Limits.

Provide an analysis of implementing a potential 1-hour WQBEL as an instantaneous not-to-exceed value for compliance purposes in addition to evaluating alternative averaging period approaches. Evaluate how to address averaging values below a potential Reporting Level (DNQs) if one were to be established. Summarize pros and cons of the options and rationale for the apparent best alternative to implement.

Estimated Hours: 80

Task 4. Conduct Electronic Research for Examples of Minimum (Reporting) Levels Developed for On-Line Continuous Monitoring Chlorine Residual Systems

The SIP establishes MLs for evaluating compliance with priority pollutant based effluent limits. TRC is not a priority pollutant but is a toxic pollutant. MLs (RLs) have not been established for TRC measured by continuous on-line monitoring systems by the SIP or by this RWB. SIP section 2.4.3 provides general guidance for establishing an ML not contained in SIP Appendix 4. TRC WQBELs calculated using actual dilution credit, as is now done for total ammonia WQBELs, are unlikely to result in compliance problems for deep water dischargers. However, WQBELs calculated for shallow-water dischargers using zero dilution credit or limited dilution credit (e.g., Basin Plan Table 4-6 cyanide WQBEL allowed dilution credit) would likely result in widespread non-compliance in the absence of a technically defensible reporting level (RL) set at a level above the WQBEL. Conduct electronic literature search for examples of chlorine residual MLs/RLs established for on-line continuous monitoring systems, as distinguished from laboratory discrete sample analyses. Evaluate potential applicability of on-line continuous analyzer RL recommended in SWB April 2008 study. Summarize pros and cons of the options and rationale for the apparent best RL alternative to implement, or existing data gaps and recommended approach for additional data collection needed to develop a defensible RL.

Estimated Hours: 30

BASIN PLAN AMENDMENT PREPARATION TECHNICAL ASSISTANCE

Task 5. Summarize Technical and Regulatory Analyses from Task 1 – 4 in Suitable Format for Development of Draft Basin Plan Amendment Documents

Compile technical and regulatory analysis information developed in Tasks 1 – 4 and organize it in a manner and format consistent for use as supporting text in a BPA example to be selected by RWB staff. Existing background information and language developed by SWB staff as part of their Draft 2006 *Total Residual Chlorine and Chlorine-Produced Oxidants Policy of California* used to the extent applicable to this TRC BPA. Draft BPA language will be developed based on close consultation with RWB staff.

Estimated Hours: 110

Task 6. Provide Technical Support for Completing CEQA Checklist and Related Portions of the Substitute Environmental Document (SED)

Coordinate with RWB staff to summarize the results of Tasks 1 – 4 in a format suitable for a CEQA project alternatives analysis, including the no project (no action) alternative and a draft economic assessment. Coordinate with RWB staff to determine if additional third party (CEQA consultant) assistance will be needed to complete portions of the CEQA checklist and SED. If needed, coordinate with RWB and BACWA to develop draft scope of work for CEQA consultant assistance to be funded separately by BACWA.

Estimated Hours: 30

Task 7. Water Board Coordination, Meetings, Document Reviews

Coordinate with RWB staff during the BPA technical support process to ensure staff remain apprised of project status and progress via phone, email, and in-person meetings. Help set-up and facilitate approximately quarterly coordination meetings. Provide drafts of work products to staff with sufficient advance notice to allow for their timely review and comment. Assumes project will be conducted over approximately an 18-month period from notice to proceed.

Estimated hours: 30

OPTIONAL FUTURE TASKS

Task 8. Coordinate Additional Studies to Develop Reasonable RL for POTWs

The intent of Task 4 is to identify from literature reviews and consultation with RWB staff a reasonable RL that could be applied to continuous on-line TRC monitoring systems for compliance reporting purposes. Adoption of a reasonable RL is essential for compliance by shallow-water discharges with TRC WQBELs. If Task 4 finds that insufficient information exists to select a reasonable RL, work would be initiated under this Task 8 to produce a workplan to develop the additional information stakeholders believe necessary to develop a reasonable RL. It is assumed that the focus of the workplan would be on coordinating additional field studies at representative POTWs to update and augment the work coordinated by SWB staff and reported

in the SWB 2008 Study “Investigation of Continuous Online Measurement of Chlorine and Sulfite in Wastewaters.”

Coordinate with BACWA to identify POTW’s with continuous monitoring chlorination and dechlorination systems to participate in the study and potentially contribute additional funding to support full implementation of this Task 8. Assumes that there would be a lead BACWA POTW to oversee the actual field study portion of the project at the volunteer POTWs. Coordinate with BACWA to develop a scope of work for a control system technology firm with expertise in chlorination and dechlorination control systems to assist in developing the workplan for this study and to provide as-needed technical support during the study. Goals of the study would be to collect sufficient on-line and ancillary bench-top data to support development of a reasonable RLs and associated data reporting frequencies for continuous on-line monitoring TRC compliance evaluation and reporting.

Estimated Hours: 100

Task 9. Supplemental RWB BPA Technical Assistance

The intent of Tasks 1 – 7 is to develop and then package the information needed to support the RWB staff in preparing a complete draft BPA package suitable for submittal to their Board for consideration of approval. There are multiple steps in the BPA development and approval process and there may be unexpected data collection or analysis requirements identified during the conduct of Tasks 1 – 7. This Task 9 would provide additional as-needed BPA technical assistance to RWB staff to help complete the TRC BPA process.

Estimated Hours: 100

EXHIBIT B
CHLORINE RESIDUAL BASIN PLAN AMENDMENT TECHNICAL ASSISTANCE
BUDGET SUMMARY TABLE / ESTIMATED TIMING

Task Descriptions	Hours	Budget (\$)	Estimated Timing
Chlorine Residual Problem Definition			1 month
Task 1. Chlorine Excursions and Bisulfite Use	50	13,000	
POTW WQBEL Approach			5 months
Task 2. Basin Plan WQBEL Approaches	60	15,000	
Task 3. Compliance Determination Approaches	80	20,000	
Task 4. Reporting Limit (RL) Approaches	30	8,000	
BPA Preparation Technical Assistance			12 months
Task 5. BPA Technical/Regulatory Sections	110	28,500	
Task 6. SED Technical/Regulatory Sections	30	7,500	
Task 7. RWB Coordination	30	7,500	
Cumulative Total	390	99,500	18 months
Optional Future Tasks			
Task 8. Reasonable RL Additional Studies	100	25,000	
Task 9. Supplemental RWB BPA Assistance	100	25,000	



Environmental and Public Health Engineering

2018 FEE SCHEDULE

The following fee schedule covers personnel rates for EOA, Inc. staff.

Our charges are divided into two categories: personnel, and direct expenses. A new fee schedule is issued at the beginning of each year. Charges for all work, except where other arrangements have been made, are based on the new schedule of charges.

PERSONNEL

Personnel charges are for any technical, clerical or administrative work necessary to perform the project. Work tasks include geologic and environmental consulting, engineering and computer services, regulatory liaison, and report preparation. Personnel rates are as follows:

Personnel Category	Hourly Rates
Principal Engineer	\$271
Managing Engineer/Scientist III.....	\$263
Managing Engineer/Scientist II	\$249
Managing Engineer/Scientist I	\$238
Senior Engineer/Scientist III – Project Leader	\$218
Senior Engineer/Scientist/Planner II.....	\$200
Senior Engineer/Scientist/Planner I.....	\$183
Associate Engineer/Scientist III	\$174
Associate Engineer/Scientist II.....	\$165
Associate Engineer/Scientist I	\$141
Assistant Engineer/Scientist	\$126
Technician	\$111
Clerical/Computer Data Entry	\$78

Charges for professional services are in increments of one quarter-hour. Depositions/legal testimony charged portal-to-portal, at 200% of standard rates, with a four-hour minimum charge. In accordance with California Civil Procedure 2037.7, where applicable, the minimum fee must be paid prior to commencement of testimony. Preparation for court cases is charged on a time-and-materials basis as outlined in this fee schedule.

DIRECT EXPENSES

Reimbursement for expenses directly related to services provided will be charged at cost plus 10%. Examples of such direct expenses include:

- Costs of sub-consultants or subcontractors
- Costs of special fees (insurance, permits, etc.)
- Costs of long-distance telephone, copying, drafting, blueprints, etc. (EOA copies charged at \$0.10 each for B&W, \$0.35 each for color. Large format \$0.15/sq ft for B&W, \$0.50/sq ft for color)
- Costs of color map production supplies (color ink and large format paper)
- Costs or rental of special equipment
- Costs of authorized travel and related expenses
- Automobile mileage directly related to services, at current IRS rate.

INVOICES

Invoices are prepared and submitted on a monthly basis, as either final or progress billings and are payable upon receipt unless prior arrangements have been made. Interest of 1-1/2% per month, or the maximum rate allowed by law, is payable on accounts not paid within 30 days.



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 4

FILE NO.: 18-27

MEETING DATE: Dec. 15, 2017

TITLE: Board Approval of Amendment 7 to Proposition 84 IRWM Implementation Grant for Grant Agreement No. 4600009715 between BACWA and the Department of Water Resources.

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Approve Amendment 7 to the Proposition 84 IRWM Implementation Grant for Grant Agreement No. 4600009715 to extend the expiration date from December 31, 2017 to December 31, 2018.

SUMMARY

BACWA has been operating under an agreement with the Department of Water Resources to administer the Proposition 84 Grant since 2010. There have been several previous amendments to the agreement extending the expiration date. The expiration date is being extended due to delays associated with unanticipated conflicts with underground utilities at multiple project location sites under Project 21, Regional Green Infrastructure Project. The local project sponsor of the project, San Francisco Estuary Partnership (SFEP), is coordinating with both PG&E and EBMUD to address the electric, gas, water, and wastewater conflicts. This amendment is to extend the expiration date again from December 31, 2017 to December 31, 2018.

FISCAL IMPACT

There is not fiscal impact to BACWA.

ALTERNATIVES

No alternatives were considered.

Attachments:

Amendment

Approved:

Date:

Jim Ervin, Chair
BACWA

**Grant Agreement 4600009715
Amendment 7
Under the Proposition 84 Round 1 Integrated Regional Water Management (IRWM)
Implementation Grant Program**

**State of California
Natural Resources Agency
Department of Water Resources**

**Agreement Between The State of California
Department of Water Resources
and Bay Area Clean Water Agencies**

This amendment to Agreement 4600009715 is made on _____ . The agreement is amended as follows:

Term of Grant Agreement: The term of the grant agreement is extended from December 31, 2017 to December 31, 2018.

Project 21: Regional Green Infrastructure Project: the scope, schedule and budget for this Project are being revised. The attachment contains a revised Exhibit A (Work Plan), Exhibit B (Schedule) and Exhibit C (Budget) for the Project.

All other terms and conditions of the agreement will remain the same.

IN WITNESS WHEREOF, the parties hereto have executed this amendment on the date first written above.

STATE OF CALIFORNIA

BAY AREA CLEAN WATER AGENCIES

DEPARTMENT OF WATER RESOURCES

Carmel Brown, P.E., Chief
Financial Assistance Branch
Division of Integrated Regional Water
Management

Jim Ervin, Chair
Bay Area Clean Water Agencies

Date_____

Date_____

Approved as to Legal Form and Sufficiency:

Robin Brewer, Assistant Chief Counsel
Office of Chief Counsel

Date_____

AMENDMENT 7
GRANT AGREEMENT BETWEEN THE STATE OF CALIFORNIA (DEPARTMENT OF WATER RESOURCES) AND
BAY AREA CLEAN WATER AGENCIES
AGREEMENT NUMBER 4600009715
INTEGRATED REGIONAL WATER MANAGEMENT (IRWM) IMPLEMENTATION GRANTS
CALIFORNIA PUBLIC RESOURCES CODE §75026 ET SEQ.

THIS AGREEMENT is entered into by and between the Department of Water Resources of the State of California, herein referred to as the "State" and the Bay Area Clean Water Agencies, a public agency in the Counties of Marin, San Francisco, San Mateo, Napa, Solano, Alameda, Contra Costa, Santa Clara, Sonoma, State of California, duly organized, existing, and acting pursuant to the laws thereof, herein referred to as the "Grantee", which parties do hereby agree as follows:

1. PURPOSE. State shall provide a grant from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 to Grantee to assist in financing projects associated with the San Francisco Bay Area Integrated Regional Water Management (IRWM) Plan pursuant to Chapter 8 (commencing with Section 79560) of Division 26.5 of the California Water Code (CWC), hereinafter collectively referred to as "IRWM Program."
2. TERM OF GRANT AGREEMENT. The term of this Grant Agreement begins on the date this Grant Agreement is executed by State, and terminates on December 31, 2018, or when all of the Parties' obligations under this Grant Agreement are fully satisfied, whichever occurs earlier. Execution date is the date the State signs this Grant Agreement indicated on page 8.
3. GRANT AMOUNT. The maximum amount payable by State under this Grant Agreement shall not exceed \$30,093,592. Of this grant amount, not less than \$885,000 shall be expended to projects that benefit the critical water supply or water quality needs of disadvantaged communities (DAC) in the IRWM effort funded by this Grant Agreement. Of the total grant amount, not less than \$9,191,685 shall be expended to urban and agricultural water conservation projects in the IRWM effort funded by this Grant Agreement.
4. GRANTEE COST SHARE. Estimated total project costs for this Agreement are \$115,905,688. Grantee shall provide a Grantee Cost Share (Funding Match) in the amount of at least 25% (unless a Disadvantaged Community project waiver is granted) of the total project cost. Grantee's Funding Match is estimated to be \$85,812,096. Grantee's Funding Match may include cost share performed after September 30, 2008.
5. GRANTEE'S RESPONSIBILITY. Grantee shall faithfully and expeditiously perform or cause to be performed all project work as described in Exhibit A (Work Plan) and in accordance with Project Exhibit B (Schedule) and Exhibit C (Budget). Grantee shall comply with all of the terms and conditions of this Grant Agreement and applicable California Public Resources Code (PRC) requirements.
6. LOCAL PROJECT SPONSOR'S RESPONSIBILITY. Grantee shall assign Local Project Sponsors to act on behalf of Grantee for the purposes of individual project management, oversight, compliance, and operations and maintenance. Local Project Sponsors shall be assigned in accordance with the participating agencies identified in the San Francisco Bay IRWM grant application. Exhibit F identifies Local Project Sponsors. Local Project Sponsors shall also act on behalf of Grantee in the fulfillment of Grantee responsibilities where specifically specified in this Grant Agreement.
7. BASIC CONDITIONS. State shall have no obligation to disburse money for a project under this Grant Agreement unless and until Grantee has satisfied the following conditions in accordance with the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006.

Project #21. Regional Green Infrastructure Project

Project Sponsor: San Francisco Estuary Partnership (SFEP) Project Description

The Regional Green Infrastructure Project will construct innovative stormwater treatment units in the Bay Area to accomplish multiple water quality management benefits, including: slowing, spreading, and sinking stormwater; reducing stormwater pollution; reducing peak flows; restoring a natural hydrograph; and reducing the need for imported water for landscape irrigation, etc. Overall project objectives include 1) creating several new demonstration green infrastructure projects across the region; 2) analyzing each project to determine actual benefits of vegetated LID stormwater treatments, and 3) disseminating the lessons learned from implementing these projects, which will then be used by many other cities, counties and water management entities to benefit their future water management practices.

Benefits specific to the project include:

- Increase adoption of LID/Green Infrastructure projects in the region
- Create new demonstration projects in areas easily accessible to the public
- Analyze each project to determine actual costs and benefits of stormwater quality treatment measures
- Slow and reduce peak stormwater flows; filter and improve stormwater quality
- Retrofit the built-out urban landscape with green stormwater treatment facilities that beautify the urban environment, improve property values, slow traffic in problem areas, and provide habitat for birds and pollinating insects
- Improve quality of life in disadvantaged communities through greening of the landscape
- Promote economic and environmental sustainability by decreasing the amount of hardscape (impervious surface) that requires continuous maintenance and future replacement expenditures.
- Create resilient watersheds in the face of climate change
- Raise public awareness about the need for water quality protection
- Convert impervious surfaces to pervious cover to allow stormwater runoff currently discharging into nearby streams to be detained for gradual percolation into the groundwater table or underground aquifer.
- Decrease the carbon footprint by reducing the use of concrete and asphalt materials which are derived from petroleum and generate carbon emissions from their production

Project Components

Task 1. Direct Project Administration

Direct Project Administration includes preparation of a Project Assessment and Evaluation Plan, quarterly progress reports, a project completion report, and post performance reports. SFEP will manage all phases of the project. SFEP staff will track project schedules to ensure project tasks are completed on time and within budget. The SFEP Director will provide overall project oversight. SFEP will budget and manage project costs. SFEP will negotiate a master contract with BACWA and subcontracts with SFEI and Stopwaste.org or Bay Friendly Coalition and City of Campbell. SFEP/ABAG staff will review and process subcontractor invoices. ABAG will set up financial and project reporting systems and provide monthly financial statements. SFEP/ABAG will complete monthly grant billing to BACWA. SFEP will hire a third-party to implement a labor compliance program to ensure compliance with state prevailing wage laws including visiting the

worksite weekly, interviewing workers, auditing payrolls and certifying that proponents are complying with applicable labor laws.

Task 2. Land Purchase/Easement

Easement costs are to be in-kind contribution from the participating cities and CalTrans for the Stormwater Spine project.

Task 3. Planning/Design/Engineering/Environmental Documentation

SFEP will draft a request for proposal (RFP) for design services for the participating city's sites to be retrofitted with vegetated stormwater treatment facilities. The selected design firm will obtain formal site surveys from the participating cities and/or Caltrans, and/or conduct additional surveys as needed, as well as obtain maps showing utilities, storm drains, etc., and perform appropriate hydrologic studies. The design firm in collaboration with SFEP project staff, Caltrans, and cities' staff will produce individual design documents for each site for review at 30%, 60%, and 90% completion. Following city, Caltrans, and SFEP staff review of 90% design plans, designer will complete plans and specifications to 100%; provide project cost estimates; and assist with bid package completion as required. Final plans and specifications will be certified by a California Registered Civil Engineer.

SFEP project staff will draft planting plans for each project using appropriate native plants to provide the most effective treatment, site cover, and aesthetic considerations, and coordinate with city staff for approval. The design firm will review, stamp, and sign plans. Costs under this grant will cover planning plan refinement and additional design coordination.

Deliverables: Site surveys and maps
 Final plans and specifications
 Planting plans

Task 4. Construction/Implementation

SFEP/ABAG will draft and issue an Invitation for Bids for a construction contractor to complete the participating city's projects (no less than 5 and no more than 7 projects will be developed to achieve the goal of treating a minimum of 7 acres treated cumulatively), following all state and federal requirements, including prevailing wage/labor compliance requirements and outreach to minority firms. SFEP will oversee the bid opening and draft the construction contract. Contractor(s) will install stormwater treatment facilities in participating cities along San Pablo Avenue in Contra Costa and Alameda Counties. All mobilization will be handled by contractor(s). Construction entails excavation and/or demolition of existing site, relocating utilities as needed, pouring concrete forms for flowthrough planters (depending on design), installing and connecting sub-drain to existing storm drain pipe as needed, adding special soil mix to encourage infiltration, and initial planting the plants. . SFEP will retain the services of the project designer during the construction phase to address any design issues that may arise. as well as complete an as-built set of drawings.

In order to assure survival of vegetated treatment plantings, the construction bid and subsequent contract will include a two-year warranty to ensure failing plants, irrigation systems, and/or other defects are corrected. Firms will be evaluated based on similar experience and qualifications and a contract executed. SFEP will design project signs that describe the stormwater treatment units, native plants, Bay Friendly certification, and

water quality impacts of each project. Fabrication and installation of the signs will be the responsibility of the awarded construction contractor. Bay-Friendly Landscape Raters will be selected by each project team to verify the sustainable practices implemented in the project.

Subcontractor, SFEI will develop monitoring plan in accordance with DWR requirements to cover representative sites along the San Pablo Avenue Stormwater Spine as well as assist Campbell in developing a monitoring plan. SFEI will collect and analyze samples from sites on the Stormwater Spine and Campbell. Water quality monitoring results will be provided to SFEP by SFEI. A report on water quality monitoring results will be issued. SFEI will assist SFEP in regional outreach products describing the benefits of green infrastructure.

SFEP plans extensive regional outreach as part of the implementation task for these projects. Campbell and the Stormwater Spine projects will implement different stormwater treatment designs/concepts (green streets, pervious pavement, rain barrels, rain gardens. SFEP will collaborate with SFEI, cities and others interested in green infrastructure to compile a database of regional efforts, post information, including video podcasts about the projects on the internet, produce brochures and other outreach materials, and convene tours, green infrastructure forums and other public events. IRWMP funding will support continuation of this process by furthering the science of green infrastructure retrofits in the Bay Area and expanding recognition of the multiple benefits of green infrastructure and LID. Activities will include presentations to the ABAG Executive Board, the Estuary Partnership Implementation Committee, and other forums of public officials, resource agencies, non-profit organizations, and citizens' groups; meetings with cities who express interest in initiating green infrastructure projects; updates to IRWMP Coordination Committee agencies on benefits of green infrastructure and project progress.

Deliverables: Monitoring Plan

Bid summary package

- Notice-to-Proceed to the contractor

- Construction photos

- Certification of Completion

- As-built drawings

- RFPs and contracts for plant maintenance firm, and signage fabricator

- Project web page

- Podcasts and/or other web tools

- Flyers and photos of tours, forums and/or training seminars

Meeting announcements, agendas, presentations

Task 5. Environmental Compliance / Mitigation / Enhancement

SFEP staff with CalTrans assistance will complete environmental review for CEQA for each of the seven projects using either the categorical exemption or negative declaration categories for evaluation depending on the site and design selected.

Task 6. Construction Administration

SFEP will draft and circulate an RFP for construction management services for a qualified firm, preferably with low impact development construction experience, to provide on-site construction management. Under contract, the firm selected for construction management will provide construction oversight for all projects to

assure quality and compliance. SFEP staff will coordinate with construction manager and also provide oversight for compliance along with project designer.

Deliverables: RFP and contract for construction manager
Weekly construction progress reports and photos

Task 7. Other Costs

No activity is planned for this task.

Task 8. Contingency

Because these projects are retrofits of existing asphalt or concrete impervious pavement, it is anticipated that utility relocation and other issues may require change orders above the estimated construction budget. The contingency covers anticipated change orders.

Exhibit B: Schedule

Project 21 – Regional Green Infrastructure Project, SFEP

Key: Planned Activity: x
Progress: =

No.	Task	2008 QQQQ	2009 QQQQ	2010 QQQQ	2011 QQQQ	2012 QQQQ	2013 QQQQ	2014 QQQQ	2015 QQQQ	2016 QQQQ	2017 QQQQ	2018 QQQQ
1	Direct Project Admin.			xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
				=====	=====	=====	=====	=====	=====	=====	==	
2	Land / Easement											
3	Planning / Enviro. Doc.				x	xxxx	xxxx	xxxx	xxxx	xx		
					=	=====	=====	=====	=====	=====	=====	
4	Construction / Impl.						xxxx	xxxx	xxxx	xxxx	xxxx	xxx
							=====	=====	=====	=====	==	
5	Construction Admin						xxxx	xxxx	xxxx	xxxx	xxxx	xxx
							==	=====	=====	=====	==	
6	Other Costs											
7	Contingency											

Exhibit C: Budget

Project 21: Regional Green Infrastructure Project (S.F. Estuary Partnership)						
Task		Estimated Non-State Share	State Grant	Other Funds	Required Non-State Share	Estimated Total Project Cost
1	Direct Project Administration		\$248,880			
2	Land Purchase/Easement					
3	Planning/Design/Engineering/Environmental Documentation	\$300,378	\$227,097			\$527,475
4	Construction/Implementation	\$1,745,000	\$1,370,144			\$3,115,144
5	Environmental Compliance/Mitigation/Enhancement					
6	Construction Administration		\$469,760			\$469,760
7	Other Costs					
8	Contingency	\$120,000				\$120,000
	Totals	\$2,165,378	\$2,315,881		\$300,000	\$4,481,259



Bay Area Clean Water Agencies
Nutrient Reduction Study

Potential Nutrient Reduction

by Treatment Optimization, Sidestream
Treatment, Treatment Upgrades, and Other
Means

Draft Report Outline
December 7, 2017





Summary Report Outline

1. Executive Summary (Intent is 1-paragraph per item)
 - 1.1. Role of Nutrients on Bay health
 - 1.2. WRRF loads to the Bay (represents 2/3's)
 - 1.3. Load reduction potential to the Bay for each treatment level and cost (present the plots from Workshop #2)
2. Introduction
 - 2.1. Background
 - 2.1.1. Health of the Bay (set the stage for the "why?" Does someone from BACWA want to write this section?)
 - 2.1.2. Nutrient Loads
 - 2.1.3. Watershed Permit (summary of permit requirements)
 - 2.1.3.1. Optimization-what is this and give some examples (e.g., ABAC, SRT controller, unused tanks, etc.)
 - 2.1.3.2. Sidestream-what is this (cross-reference the EPA Regional Grant)
 - 2.1.3.3. Upgrades-what is this
 - 2.1.3.4. By other means-what is this and give some examples
 - 2.1.3.5. Group Annual Report
 - 2.1.3.6. Greenhouse gas emissions
 - 2.1.3.7. Sea level rise
 - 2.2. Participating Agencies
 - 2.3. Related Activities (Would somebody from BACWA like to develop a brief of the other ongoing studies – e.g., SFEI? We don't have to have this section, but it might be helpful for the casual reader for context).
 - 2.4. Report Organization
 - 2.5. Abbreviations
3. Basis of Evaluation.
 - 3.1. Project Approach. This section will describe the approach (scoping/evaluation plan, data collection, site visits, analysis etc.) to the evaluation for each individual plant and point to Appendices for plant-specific findings
 - 3.2. Assumptions. This will have brief subsections to define key assumptions, (e.g., planning period for each task, basis of cost estimates, basis of GHG emissions)
 - 3.3. Unit Process Overview. (The intent is to provide a brief primer on treatment for the laymen who might pick this up. This was a request in several draft reports)
4. Nutrient Reduction Findings (each section to include summary of findings, load reductions, costs, unit costs, GHG impacts etc.)
 - 4.1. Optimization
 - 4.2. Sidestream Treatment
 - 4.3. Treatment Upgrades
 - 4.4. Nutrient Reduction by Other Means (this will include the findings of the findings from the recycled water survey)
 - 4.5. Emerging Technologies
 - 4.6. Summary of Results

5. Sea Level Rise
 - 5.1. Background
 - 5.2. Findings
6. Conclusions and Observations
 - 6.1. Role of Averaging Periods
 - 6.2. Role of Peak Flows
 - 6.3. Role of Constrained Sites
 - 6.4. Role of Emerging Technologies
 - 6.5. Statement on GHGs and sea level rise
7. Appendices:
 - 7.1. Scoping and Evaluation Plan
 - 7.2. Basis of Cost Estimates
 - 7.3. Plant Reports
 - 7.3.1. American Canyon, City of
 - 7.3.2. Benicia, City of
 - 7.3.3. Burlingame, City of
 - 7.3.4. Central Contra Costa Sanitary District
 - 7.3.5. Central Marin Sanitation Agency
 - 7.3.6. Delta Diablo
 - 7.3.7. Dublin San Ramon Services District
 - 7.3.8. East Bay Municipal Utility District
 - 7.3.9. Fairfield-Suisun Sewer District
 - 7.3.10. Hayward, City of
 - 7.3.11. Las Gallinas Valley Sanitary District
 - 7.3.12. Livermore, City of
 - 7.3.13. Millbrae, City of
 - 7.3.14. Mt. View Sanitary District
 - 7.3.15. Napa Sanitation District
 - 7.3.16. Novato Sanitary District
 - 7.3.17. Oro Loma / Castro Valley Sanitary Districts
 - 7.3.18. Palo Alto, City of
 - 7.3.19. Petaluma, City of
 - 7.3.20. Pinole, City of
 - 7.3.21. Richmond, City of
 - 7.3.22. Rodeo Sanitary District
 - 7.3.23. San Francisco International Airport
 - 7.3.24. San Francisco Public Utilities Commission Southeast Plant
 - 7.3.25. San Jose-Santa Clara Regional Wastewater Facility
 - 7.3.26. San Leandro, City of
 - 7.3.27. San Mateo, City of
 - 7.3.28. Sausalito-Marín City Sanitary District
 - 7.3.29. Sewerage Agency of Southern Marin
 - 7.3.30. Silicon Valley Clean Water
 - 7.3.31. Sonoma Valley County Sanitation District



- 7.3.32. South San Francisco and San Bruno
- 7.3.33. Sunnyvale, City of
- 7.3.34. Treasure Island
- 7.3.35. Union Sanitary District
- 7.3.36. Vallejo Sanitation and Flood Control District
- 7.3.37. West County Wastewater District

DRAFT LETTER FOR AGENCY ACCEPTANCE

[Click here to enter a date.](#)

Mr. Bruce Wolfe
Executive Officer
San Francisco Bay Regional Water Quality Control Board

Re: Acceptance of Plant-Specific Findings for the Nutrient Optimization and Upgrade Study

Dear Mr. Wolfe,

On behalf of *[Insert Agency Name]*, I have reviewed the individual plant report prepared for the *[Insert Plant Name]* that is included as an appendix to *[Group Report Name]*. The plant report was prepared by the HDR/B&C consulting team (Consultants) under a contract with the Bay Area Clean Water Agencies (BACWA). The *[Insert Plant Name]* report was prepared after the Consultants visited the plant site, interacted with plant staff, prepared a draft report for our staff's review and responded to staff's comments. A representative group of BACWA members (i.e. Contract Management Group) also provided direction to the Consultants in preparing the individual plant reports and the overall summary for *[Group Report Name]*. This report represents my best understanding of our facility in 2017.

With this level of involvement and oversight of our staff who worked with the Consultant in preparing the report for *[Insert Plant Name]*, I agree that the recommended approach and cost estimates for reducing nutrients at our facility are reasonable with respect to the context of the overall report. Furthermore, in accordance with the Watershed Permit requirement for report certification, I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Thank you,

[Insert Name, Title of Responsible Agency Representative]

Planning Subcommittee (PS) Meeting Summary No. 29

November 21, 2017

1:00 pm – 4:00 pm

Water Board Offices

Draft Meeting Summary

Attendees: Tom M., David S., Ian W., Mike C., David W.

Note: Action Items and Decisions are shown in *bold italic*.

1. **Agenda Modifications:** There were no modifications to the Agenda.
2. **Review Outstanding Action items:** Outstanding Action Items from both the Steering Committee (SC) Meeting #14 and Planning Subcommittee Meetings #27 and #28 were reviewed. Several Action Items were on-going and will no longer be tracked as outstanding. There was one outstanding Action Item from SC Meeting #14. ***Action Item: Water Board to send an invitation letter to the South Bay Salt Pond Restoration Project (SBSPRP). Facilitator to update the Charter with a new seat for the SBSPRP (IW)***
3. **Science Program update:** The Science Manager (SM) reported that there were no major updates.
 - a. **Staffing** – The SM reported that one of the SFEI staff working on the NMS (Zephyr) would be leaving to go back to school.
 - b. **Other**
4. **Priority Updates**
 - a. **Report-Outs**
 - i. **LSB modeling meeting** – The SM reported that the emphasis had shifted towards looking at freshwater inputs. The hydrodynamic model will be used to look at the impacts of the salt ponds and chemistry of near shore areas of LSB. With the goal being to ultimately be able to use the model for multiple purposes, water or wastewater agencies may have an interesting in helping to fund the model development. One application would be to run the model to form hypothesis to then be verified.
 - ii. **IEP Project Work Team** – The SM and SFEI team have been coordinating with the folks from the IEP. It was noted that the IEP

favors a single project work team as opposed to having many teams. The idea of developing a Charter for NMS/IEP collaboration was discussed.

iii.Other issues - Collaboration with both IEP and DWR was discussed. It was suggested that outreach to DWR to invite participation on the NMS SC would be a good idea. The NMS SC Charter allows other stakeholders to participate on the SC with concurrence of the Water Board (WB). It was noted that Steve Culberson is the lead scientist at the IEP and also a staff person for DWR and thus would be a good candidate to sit on the NMS SC.

Action Item: SM to contact DWR and explore their interest in participating on the NMS SC

b. Current Issues

i.Measure AA submittal - The Program Coordination team reported that they had submitted a grant application for Measure AA funds for use on the San Leandro Treatment Wetland for Pollution Reduction, Habitat Enhancement and Shoreline Resiliency. The proposal committed \$25k of NMS funds, subject to SC approval, as matching funds for the grant. The funds would be used to work on a streamlined approach for permitting wetlands. Discussion ensued on when NMS funds could be committed for matching funds on projects that could benefit nutrient reductions. **Action Item: At the next PS meeting the Program Coordinating team will provide a rationale for use of the \$25k should the grant be approved.**

c. NMS Calendar Review

i.Review future SC and PS meeting schedules - The schedule of future PS and SC meeting was reviewed. It was decided to cancel the PS meeting originally scheduled for Jan 3rd and instead hold the meeting on the 5th.

5. Other Updates

- a. **Condition assessment/trend detection follow-up** – From the last SC meeting, it was decided to focus on trend analyses as the next phase of the

development of the assessment framework (AF). Use of the General Additive Model (GAM) as is being done in the Chesapeake would help in this effort. Mr. Jim Hagy of EPA has a lot of experience on the Chesapeake, particularly with DO issues and may be willing, if asked, to assist on the NMS.

A lengthy discussion followed on the approach to follow in developing a work plan for continued work on the AF and how it will be used. **Action Item: the Program Coordination team will draft a letter for the WB and EPA Region IX sign-off inviting Mr. Hagy to participate in the NMS activities.**

As work proceeds on the next phase of the development of the AF, the SC will need to be kept informed. Future presentations to the SC should include review of collected data and how it is being used, and decisions that are or will be made. The group was reminded that by 2024 the WB would like to have a set of standards for nutrients established. The SM posed the question of using FY 18 funds to develop an AF work plan. The WB noted that even with added funding on the horizon associated with the 2nd WS Permit, the NMS Science Plan is still financially challenged to accomplish its key goals.

6. Planning the next Steering Committee meeting

- a. **Review of Action items from meeting** - the review of Action items was deferred and will be documented in the meeting summary.
- b. **Agenda planning** - The group discussed the length and content of the next SC meeting on Dec 8th. It was suggested that a routine agenda item would be going around the room and having each member of the SC discuss what their agency is doing to help make progress on the NMS Science Plan. It was also suggested to provide an update on the activities of the Program Coordination effort.

BACWA discussed their recent experience with a real time polling application (Poll Everywhere) that allowed participants in a meeting to provide their input on key issues. It was agreed that if possible, this would be a good activity to undertake at the next SC meeting. **Action Item: BACWA to work with the SM to try and set up a Poll Everywhere session along with key questions as a demonstration at the next SC meeting.**

The venue for the next SC was discussed. The group decide that the meeting should be changed from the WB's offices to the he SFEI office building.

The SM then proposed 3 projects to be completed with the \$195k SEP funds that are available to the NMS. His proposal consisted of the following:

- (1) an anchovy-toxin study
- (2) a study of saxitoxin in mussels
- (3) a study of Alexandrium cysts in sediments

After some discussion, (1) and (2) above received support but there was not consensus on (3). The SM said he would set up a call to further discuss the next agenda.

- c. **Next steps** - Set up call to discuss the agenda for the next SC meeting

7. Adjourn or address Parking Lot items: the meeting adjourned at 4:00

Parking Lot of Identified PS Future Agenda Items

- a. **Brainstorming on future priorities for the PS**
- b. **EPA nutrient criteria discussion**
- c. **Discuss concept of holding an annual forum on nutrients**

San Francisco Bay Nutrient Management Strategy (NMS)

Steering Committee Meeting # 15

December 8, 2017

DRAFT Meeting Summary

Steering Committee Attendees

Organization	First	Last	Role	Present	Comments
BASMAA	Adam	Olivieri	Member		
	Tom	Hall	Alternate	x	
	Matt	Fabry	Alternate		
	Geoff	Brosseau	Alternate		
BACWA	Mike	Connor	Member	x	
	Lori	Schectel	Alternate	x	
	Jim	Ervin	Member	x	
	Bhavani	Yerrapotu	Alternate		
Cal DFW	Becky	Ota	Member		
	Bill	Paznokas	Alternate		
Delta Stewardship Council	Rainer	Hoenicke	Alternate	x	
Napa County Farm Bureau	Jeff	Page	Member	x	
U.S. Geological Survey	Joe	Holomuzki	Member	x	
NOAA Fisheries	Joe	Dillon	Member		
	Melanie	Harrison	Alternate		
Regional San	Christoph	Dobson	Member		
	Lisa	Thompson	Alternate	x	
San Francisco Baykeeper	Ian	Wren	Member	x	Program Coordinator Team
SFCWA	Lynda	Smith	Member	x	
	Frances	Brewster	Alternate		
	Stephanie	Fong	Alternate		
U.S. EPA	Terry	Fleming	Member	x	
	Luisa	Valiela	Alternate		
U.S. FWS	Leanna	Zweig	Member		
WSPA	Kevin	Buchan	Member		
	Mike	Armour	Alternate		
Central Valley Water Board	Adam	Laputz	Member		
	Janis	Cooke	Alternate	x	

	Christine	Joab	Alternate		
SF Bay Water Board	Tom	Mumley	Member	x	
	Naomi	Feger	Alternate		

Additional Attendees

David Williams, BACWA

David Senn, SFEI, Science Manager, Program Coordinator Team

Phil Trowbridge, SFEI Facilitator, Program Coordinator Team

Robert Schlipf, SF Bay Water Board

John Bourgeois, Salt Pond Restoration Project

Karin North, BACWA

Rusty, SFEI

Morgaine, SFEI

Jen, SFEI

2 others from SFEI

DPH person

1. Welcome, Introductions and Agenda Review: The Facilitator welcomed all attendees and introductions were made. The agenda was reviewed with no changes suggested.

2. Decision Item: Approve Prior SC Meeting Summaries: The past meeting summary was reviewed and approved.

3. Action items: A table of action items and status was provided in the packet. It was noted that all past action items had been completed. Several Steering Committee (SC) members had difficulty in accessing the meeting materials on the SFEI web site. The Science Manager (SM) stated that he would send out a test packet for future meetings to check on accessibility.

Action item: For future meeting the SM will send out a test packet to ensure that all SC members can access the meeting materials.

4. Program Update

- **Science Program and Financials update** – The SM stated the program is moving along in accordance with the schedule. Delays in projects within the approved program occur occasionally as priorities shift. The Cytobot project was deferred and may be funded next year. Adjustments get made in the program as needed.
-

It was also noted that SEP funding in the amount of \$195k is available. Four projects are being conducted with these added funds: 1. Saxitoxin in mussels; toxins in anchovies; molecular assessment of HABs; and Alexandrium cysts in sediment.

BACWA also made a voluntary contribution of an additional \$200k. The SM is proposing to use the funds for moving ahead on two already approved projects at \$50k each and the remaining \$100k to be used to help plan for the future larger science program that will be enabled with an increase in funds from the 2nd Watershed Permit. The SM then discussed the two already approved projects i.e. zooplankton sampling in the South and Central Bay (\$50k) and a moored sensor for sampling in the shoals (\$50k). The sampling in the shoals project will be coordinated with the USGS and Romberg Tiburon Center. A discussion followed with several comments/questions being offered as follows:

- what information will result and what decisions will it allow us to make?
- it's not clear that zooplankton controls phytoplankton
- are we adequately monitoring the benthos?
- is the shoal sampling project for one year or will the monitoring go on for several years and what about continued funding?
- how do we judge if the project is successful?

In response the SM stated that the data from the shoals is critical to understanding the nitrogen/chl-a relationship and zooplankton data is needed for running the model.

After a lengthy discussion the SC unanimously approved \$50k for each of the zooplankton sampling and the monitoring in the shoals projects.

- **Planning Subcommittee Update** – An update on activities was provided. The Project Coordination Team (PTC) discussed the Measure AA grant application that had been submitted for a San Leandro wetlands project. They also discussed a letter sent to the IEP on future coordination of efforts and resources. Several SC members voiced concerns about the letter (i.e. implications of cost sharing and coordination needed between efforts in the Delta and the Bay) being sent without SC review. As a result of the discussion, the Facilitator assured the SC that any future letters would be reviewed by the SC and

on this particular issue requested that SC members provide their input on coordination of resources for monitoring the Bay/Delta system.

Action Item: SC members to provide their input to the Facilitator on their views for coordination of resources needed for monitoring the Bay/Delta.

5. Program Priorities: FY 2019 and beyond

The SM then raised two issues for priority discussion: 1. A discussion of using \$100k of the \$200k provided by BACWA to revise the Science Plan (SP) and conduct an external review as part of the ramp-up of the science program to utilize the funds that will be available under the 2nd Watershed Permit; and 2. Engaging in a long term planning effort of activities in FY 19 and beyond. The original SP cost \$75k and was completed about 1 1/2 years ago. An external review could cost between \$20k and \$75k. A key goal of the 10-year SP was to have nutrient standards in place by 2024. The SM then showed plots of the expected amount of funding going forward and described the importance of planning for those expenditures.

A brief exercise was then conducted by the SM using an online polling application called Poll Everywhere. Questions were posed regarding a priority ranking of the components of the SP and the need for an external review.

Even with the increased funding, the SP would be roughly \$4+M/yr short of the funds needed for an ideal program. Options to deal with the funding shortfall include accepting more uncertainty, scaling back the focus of the SP and extending the 10 yr. timeline for completing the SP. With this as background the SM asked for feedback on the need for an external review of the SP. The following comments were received:

- Need to focus on an assessment framework in order to evaluate condition of the Bay and needed management actions by 2024.
 - Do not need an external review since we already have a very talented group of scientist and advisors.
 - Some level of objective external review may be needed especially since many of the science advisors also do the work
 - The timing isn't right for a wholesale review at this time.
-

-
- More focus should be assessing whether or not the beneficial uses for the Bay are being achieved.
 - The focus should be on getting data that will help inform management decisions by 2024. The plan is to not have hard numerics for nutrients but first focus on making sure the Bay does not get degraded from its current condition.
 - If an outside peer review is conducted, it should be for both the Bay and the Delta since they are so interconnected.
 - We already have had one peer review of the SP plus workshops on DO and HABs.
 - Perhaps a review by a subcommittee of scientists and managers would be appropriate.
 - There was a lot of support expressed for further development of the assessment framework.

A motion was introduced with the following components:

- No external review at this time but approve \$50k of the BACWA voluntary contribution to proceed with an internal review of the SP to align it with the AF and ability to make management decisions in 2024
- Coordinate with Region 2 and 5 on the effort
- Some consideration of the coastal impacts should be given

The motion was unanimously approved.

BREAK

6. Technical Update – Assessment Framework (AF)

The SM explained that the AF focus is on response indicators. It could consist of a description of a condition, with a value for a concentration, and a frequency of observance. The intent is to identify what are the needed protective conditions and then to monitor the changes in those conditions over time to establish a trend.

A tool that will be useful in assessing the conditions is the General Additive Model (GAM) which is being used in the Chesapeake. Examples of how this

could be applied for San Francisco Bay for nutrient related indicators was presented. The SC agreed that GAM would be a useful tool. It was pointed out that the GAM was not intended to be used as a forecasting tool, rather its use is in statistical analyses of existing data.

The SM stated that for AF version 2.0, work will need to continue on DO and HABs but that there may be other possible indicators such as DO in margins and toxins in biota. The goal is to focus on trends in the key indicators.

The SM estimated that by the end of May 2018, there should be a draft available of an AF Update work plan which will set forth goals and steps.

7. Technical Update – Scenario-Risk Modeling

The SM posed the question of how to incorporate risk into the science teams planning efforts. The proposal is to use a variety of scenarios to help address risk. An example using salinity was presented. A discussion followed with comments as follows:

- the USGS is looking at sediment supply, that data should be used by the NMS
- the Bay is nutrient rich so if conditions change, the nutrients will still be available
- stratification is a very important variable and is impacted by wind and wave action
- recent data has shown that the Bay is losing resiliency tied to mixing, grazing and sediment load
- scenarios may show that certain events are so unlikely thereby giving confidence that the Bay is not in immediate danger
- the expectation is that the SM will tell the SC what are the most important scenarios to examine.

8. Other Business

DPH monitoring program - The representative from DPH who is the project manager for shell fish monitoring, discussed the DPH program for monitoring shell fish tissue for various toxins. They don't do cell counts but do look at the abundance of toxins present. They are seeing toxic species inside the Bay

where shellfish are harvested. They have not collected mussel samples from inside the Bay. It was pointed out that toxins are not always released from species that can produce toxins. Sometimes the toxins only get release when the species is stressed. SFEI stated that they have access to the DPH historical data.

Other Updates from SC Members – The SM asked for pertinent updates from the SC members. The following updates were provided:

USGS: A reorganization is being undertakes. They are also coordinating with NAS in hopes of getting funds for coastline monitoring

Salt Ponds: The Measure AA RFP received 22 proposals. There is funding for only about half of the proposals. Decisions will be made in January

Region 5: The Delta Nutrient Research Plan will be out in January and will go to the CVRWQCB in June. The Delta RMP is funding two reports 1. Updating the nutrient trends in the Delta and 2. Identifying flow monitoring gaps

BACWA: The preliminary costs estimates for various approaches to reduce nutrients at POTWs were provided.

Regional San: Their biological nutrient reduction project will be on line in 2020-21 and their filtration/denitrification project will be online in 2022-23. They have completed a pre-project survey and are planning on conducting a post-project survey to assess differences as a result of the increased treatment.

Delta Stewardship Council: have developed a scope of work for a baseline assessment.

9. Action Items and Wrap-up – Approvals and Action Items were reviewed.

- Next meeting: March 9, 2018 @ SFEI
- Following meeting June 8, 2018 @ SFEI

There was a preference for future meetings to be held at SFEI

Adjourn: The meeting adjourned at 3:00 pm

Joint BACWA/Regional Water Board staff Meeting Summary

December 4, 2017, 10am-12pm

Attendees:

Eileen White, EBMUD
Amit Mutsuddy, San Jose
David Williams, BACWA
Lorien Fono, BACWA
Jim Ervin, San Jose
Laura Pagano, SFPUC
Mike Connor, EBDA

Jean Marc Petit, CCCSD
Eric Dunlavey, San Jose
Amanda Roa, Delta Diablo
Naomi Feger, Regional Water Board
Robert Schlipf, Regional Water Board
Tom Mumley, Regional Water Board
Tom Hall, EOA

1. Introductions

2. Nutrients

- a. **Optimization/Upgrade Studies** – The consultant team is wrapping up their response to comments on the Facility reports and updating costs per the revised ENR indexes, as costs have risen substantially since this effort began. BACWA circulated a draft letter that member agencies will sign to certify their Facility Reports in compliance with the NPDES permits. Regional Water Board staff proposed some minor changes to the proposed language.
- b. **Regional Study for Second Watershed Permit** – BACWA will work with Robert Schlipf to develop permit language for the study. There was a discussion about sea level rise planning, and how the analysis in the current Optimization/Upgrade Studies is fairly high level. Regional Water Board staff asked whether the Regional Study may be an appropriate venue for a more in-depth analysis. BACWA will discuss this issue internally and propose ideas to the Regional Water Board. It was noted that a shoreline adaption study is being conducted by SFEI.
- c. **Second Watershed Permit** – An item is being brought before the Regional Water Board in July as the second watershed permit process will be kicked off. BACWA can offer Regional Water Board staff slides on the Optimization and Upgrade Studies to assist in their presentation to their Board at that time.
- d. **Support for Scientific Studies** - The science program manager has requested an advance of funds in support of scientific studies prior to adoption of the second watershed permit. BACWA will consider its reserves and how to minimize the risk of changing the payment schedule. This item will be agendaized for the next Joint Meeting between BACWA and the Water Board.

3. CMSA Tentative Order

CMSA's Tentative Order includes its satellite agencies for the first time. The Regional Water Board postponed adoption of CMSA's permit from December to January to have more time to respond to legal comments.

4. Sediment Quality Objectives

The State Water Board is proposing new Sediment Quality Objectives that link human health to impaired sediment. The new objectives pertain specifically to chlorinated contaminants such as PCBs and legacy pesticides. Since the Objectives do not override existing TMDLs, this should not impact PCB management in the SF Bay. It is unclear whether organochlorine pesticides will be an issue, since monitoring data are lacking. There is a tiered approach built into the Objectives. The first tier is to screen available data to compare to an acceptable threshold value, and fish tissue data trump water quality monitoring data. Some data suggest that San Pablo Bay may have issues, but otherwise, data do not show cause for concern. The RMP will rescreen existing data including contaminated urban sites. There is existing language in municipal NPDES permits in the Region stating that no linkage can be drawn between contaminated sediment and POTW discharges. The Water Board stated that there may be some hot spots and in those areas clean-up may be considered. The Water Board would like to ultimately remove organopesticide 303(d) listings.

5. Chlorine Residual Basin Plan Amendment

BACWA submitted a revised scope to Regional Water Board staff that included a reduced level of effort compared to the previous version. The first task is for BACWA and Regional Water Board staff to agree on what constitutes a reasonable reporting level for chlorine. There is consensus this needs to be included in the current Basin Plan Amendment to support shallow water dischargers, rather than addressing shallow water dischargers as a separate future effort. If we can't come to an agreement, then consideration may be given to doing a field study. Another question is whether there is a way to allow excursions from the limit if acceptable documentation is in place that all equipment is operating correctly. It was pointed out that this approach is in place already to some extent, where agencies can demonstrate stoichiometric equivalence between chlorine and bisulfite dosing. There was a discussion that this should really be a Statewide effort, but attendees agreed that this process should not be derailed by waiting for the State to take action.

6. BAAQMD Rule 11-18

The Rule was adopted on November 15. BACWA is updating the dataset that BAAQMD will use in their Health Risk Analyses. One question in implementation will be the timeline for these analyses versus that of capital improvement projects at agencies that will change what facilities are being evaluated. The attendees agreed that there would be value to hosting a workshop between the Water Board and Air District Staff. BACWA will work to determine the appropriate time to set up such a workshop. There was also a discussion about the phaseout of biosolids as ADC, and how trucking solids for land application will be more greenhouse gas intensive, in some cases, than applying as ADC, since the bioavailable carbon has already been digested. CalRecycle and CARB are in the process of developing the rule that will govern biosolids, and Regional Water Board staff expressed concern that the Water Boards have not been included in these discussions.

7. Wetlands

BACWA provided a support letter for San Leandro's wetland project that is eligible for Measure AA funding. BACWA representatives to the RMP will voice support for wetlands monitoring. SFEP is in the process of developing a technical program for wetlands.

8. CECS

As discussed at Pardee, BACWA will develop a white paper on POTW participation in the RMP's CEC studies and the regional approach being used to address CECs. The State Water Board is still aiming to develop a Statewide Program.

9. Toxicity

The Regional Water Board has been working with the State Water Board to reduce requirements for sensitive species screening, since that is a major component of Region 2's Alternate Monitoring Plan. Funds that used to be spent on species screening are now redirected to the RMP. The State Water Board is concerned that this will be a loophole used in other Regions, but Region 2 argues rescreening is not necessary, and new contaminants that may impact species choice will be caught by our CECs program, which is partially funded by the Alternate Monitoring Plan. The State Plan is now scheduled for release until January.

10. Cannabis Grow Permitting

EBMUD will be presenting the issue to its board and will share a memo with the group. All of its satellites except Albany and Piedmont plan to allow cannabis grows in their service area.

11. ELAP Update

BACWA discussed the documentation burden associated with transition to the TNI standards, and the possibility of alleviating some of the burden by switching to online analyzers for some constituents where allowed by regulation.

12. Supplemental Environmental Projects

While many of the wastewater community and Region 2's concerns were alleviated in the latest draft language, there are still concerns about how third party administered projects are regulated, since SFEI is such a third party. Third party administered projects may be approved on a case by case basis, so Region 2 may need to bring an action before the State Water Board to allow SEP funding to the RMP. All SEP projects must be specified in the settlement agreements, and money can't be banked. The response may be to batch projects and then SEP funds can be allocated to specific projects.

ADJOURNMENT

California Ocean Protection Council Priorities to Address Ocean Litter

The California Ocean Protection Council (OPC) has maintained a long-standing commitment to addressing ocean litter to minimize impacts on marine life and habitats. The OPC's proposed priorities to address ocean litter are laid out below. The structure of the OPC's priorities is to set a goal, followed by a priority objective, and actions. From a subject standpoint, the priorities can broadly be divided into the categories of Litter, Microplastics/Microfibers, and Fishing and Aquaculture Gear.

I. Ocean Litter

Goal: Protect healthy marine ecosystems and the communities that rely on them by prohibiting litter from reaching the ocean.

Priority Objective: Advance source reduction efforts through policy tools and research to prevent land-based litter from entering and negatively impacting waterways and the ocean

Actions:

- a. **Policy Implementation:** Use a variety of tools to prevent ocean litter at its source; examples of actions under this category include, but are not limited to:
 - i. Promote and support changes in service contracts and institutional purchasing for the State, as appropriate, to reduce the State's reliance on single-use foodware that typically becomes ocean litter.
 - ii. Promote extended producer responsibility as a waste management approach to address the kinds of products that typically become ocean litter, under CalRecycle's packaging reform process. Additionally, support CalRecycle's inclusion of expanded polystyrene as a priority product to be addressed in the packaging reform framework.
 - iii. Recommend the prohibition of expanded polystyrene in foodware and other products that are likely to become ocean litter.
 - iv. Convene innovative partnerships and use funding mechanisms to redesign products that frequently become ocean litter, which may include but not be limited to leashing the lid.
- b. **Research:** Address knowledge gaps to better target policy efforts and address chemical additives associated with ocean litter; examples of actions under this category include, but are not limited to:
 - i. Fund assessments of policy effectiveness to determine whether the policies are acting as intended and what, if any, changes need to be made to increase effectiveness. If local policies or ordinances are demonstrated to be effective, consider recommending for statewide implementation.
 - ii. Fund comprehensive characterizations of litter inputs to State waters; this will allow policies to better target the sources of ocean litter that are most prevalent.
 - iii. Fund research and partner with the Department of Toxic Substances Control to address chemical additives that are commonly associated with products found in ocean litter. Chemical additives may include, but will not be limited to fluorinated compounds and phthalates.

- iv. Fund needed research and develop a plan to comprehensively address cigarette butts as a primary component of ocean litter.

II. Microplastics/Microfibers

Goal: Increase understanding of the scale and impact of microfiber/microplastics on the marine environment and develop solutions to address this problem.

Priority Objective: Advance research on the extent and impact of microplastics and microfibers in source waters and the ocean and technological solutions to reduce their prevalence in aquatic environments.

Actions:

- a. Convene scientists and experts to develop a comprehensive research plan to characterize the source and effects of microplastics.¹
- b. Fund the development of standardized monitoring methods in California to assess the concentration of microplastics in wastewater effluent, ambient waters, and stormwater, as needed.
- c. Fund research to:
 - i. Quantify the concentration at which microplastics cause environmental impacts to marine life and ocean health;
 - ii. Determine whether additives associated with microfibers may cause impacts to the marine environment (The additives included in microfibers may be different than those found in packaging);
 - iii. Determine whether reformulated textiles can significantly reduce the loading of microplastics into wastewater effluent; and
 - iv. Research the feasibility and effectiveness of technical solutions for microfibers in wastewater treatment plants, washing machines, and other points in the wastewater management system.

III. Fishing and Aquaculture Gear

Goal: Reduce fishing and aquaculture-related debris in the ocean

Priority Objective: Promote improved fishing and aquaculture gear management and support sustainable innovation to reduce the potential for lost gear; remove lost gear and legacy infrastructure from the ocean.

Actions:

- a. Provide best-available science and information to the California Department of Fish and Wildlife and the California Fish and Game Commission as they work to develop improved fishing and aquaculture gear management.

¹ The use of the term “microplastics” in this document includes microfibers.

- b. Promote fixed-gear best practices, including how to minimize losing traps.
- c. Develop fishery-funded gear retrieval programs through industry education and collaborations with NGOs, port and harbor districts and associations, and other partners to effectively implement existing and developing gear retrieval programs.
- d. Fund sustainable innovation in fishing and aquaculture gear to reduce the potential for lost gear, including new technologies, and ensure that any new and effective fishing and aquaculture gear innovation is an allowable technology in legislation and regulations.
- e. Recommend the development and implementation of regulatory tools to allow for retrieval of lost gear or traps that belong to other fishermen.
- f. Fund removal of fishing gear and abandoned aquaculture materials, disused creosote pilings, and illegal artificial reefs, where liable owners and responsible parties cannot be identified.

OPC's Role in Addressing Ocean Litter

OPC's identified priorities are guided by four principle strategies to protect coastal and marine ecosystems, as mandated by the California Ocean Protection Act:

Recommend and implement policy: OPC strives to be a leader in policy development and makes recommendations to the Governor and State legislature regarding changes in state and federal law needed to better protect the ocean.

Lead and promote coordination: OPC works to break down silos and coordinates across state agencies, including providing guiding principles for state agencies to follow in protecting the State's coastal and ocean resources. In our work on ocean litter, OPC coordinates with coastal and ocean resources agencies and state agencies involved in waste and pollution management.

Seek and leverage funding: OPC provides funding for catalytic and innovative projects that promote ocean health and resilience. Our investments support scientific research, monitoring and shovel-ready projects.

Inform government decision making with the best available science: OPC works to ensure that best available science is integrated into state policy and management decisions.

CA Ocean Litter Strategy Update Workshop #2

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Characterizing microplastics in the San Francisco Bay and adjacent National Marine Sanctuaries to inform regional policy recommendations

Box, C.¹, Sedlak, M.², Sutton, R.², Eriksen, M.¹, Lin, D.², Cummins, A.¹, Zhu, X.³, Rochman, C. M.³

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One of the goals of the San Francisco Bay Microplastic Project is to characterize microplastics in a variety of media to determine sources, pathways, loadings, and processes leading to microplastic pollution in the San Francisco Bay and adjacent Cordell Bank, Greater Farallones and Monterey Bay National Marine Sanctuaries; this information will be used to develop scientifically robust policies and build off of past scientific efforts that influenced statewide and national legislation banning plastic microbeads in personal care products. A limited field staff collected stormwater runoff, wastewater effluent, receiving waters, fish and sediment, all of which were analyzed for microplastic. Sample sites were selected based on population density, known hotspots and ambient conditions, and were geographically distributed. The results of this study will be incorporated into a regional ocean model to determine spatial distributions. Guided by the research results, the project will bring together key policy experts in the field to develop recommendations on data-driven source reduction and communicate these recommendations to stakeholders, policy makers and the general public.

Raman analysis: using spectroscopy to identify microplastics in complex matrices

Zhu, X.¹ and Rochman, C.M.¹

¹Department of Ecology and Evolutionary Biology, University of Toronto, St George, Toronto, Canada

Without the use of polymer identification methods, it is often the case that natural polymers are identified as synthetic plastics (false positives) and true polymers are excluded (false negatives) by visual inspection, leading to inaccurate quantification of the amount of microplastic pollution in a given sample. This issue becomes more evident with smaller and smaller microplastics (especially < 100 µm) in complex matrices. To overcome this issue, investigators confirm material type using chemical analysis. Raman spectroscopy is an ideal method for this application because it uses backscattering of laser light from a material to produce characteristic spectra for specific materials, including natural and synthetic polymers, minerals, and dyes, thereby increasing the confidence with which scientists identify plastics in complex samples. We are optimizing methods for single particle identification using library software and creating our own Raman libraries. We are also optimizing methods for multi-particle mapping, scanning and analysis using ParticleFinder software from HORIBA Scientific, New Jersey. Finally, we tested the effects of chemicals commonly used for degradation of organic matter in samples, namely H₂O₂ and KOH, on the quality of Raman spectra for many polymer types to assure that Raman spectra can still be obtained for common thermoplastics and fibres. Based on our preliminary studies, we are optimistic we can develop a fast and accurate analysis of microplastics in the environment.

Field measurements to quantify microplastics from effluent and urban runoff in the San Francisco Bay

Lin, D.¹; Sedlak, M.¹, Sutton, R.¹, Gilbreath, A.¹, Box, C.², Zhu, X.³, Rochman, C. M.³, Yee, D.¹

¹San Francisco Estuary Institute, Richmond, CA, USA

²5 Gyres Institute, Los Angeles, CA, USA

³Department of Ecology and Evolutionary Biology, University of Toronto, St George, Toronto, Canada

Treated wastewater effluent and stormwater runoff are suspected to be two of the most important pathways for microplastics and microfibers to enter the San Francisco Bay. The Bay is an important ecosystem surrounded by a dense urban population and industrial land uses, and therefore vulnerable to contamination from land-based sources. This study presents field measurements that quantify and characterize microplastics from effluent and urban surface runoff in the region. Microplastic particles were collected from the effluent of eight wastewater treatment plants, employing varying treatment technologies to calculate first order estimates of microplastic loads from effluent discharges into the Bay. At least two 24-hour composite samples were collected from each facility. Stormwater samples from 15 sites representing both urban and undeveloped spaces in the San Francisco Bay region were collected during rain events in 2016 and 2017. Using a newly developed field technique, samples were composited from multiple sips collected over the course of the storm. Microplastics were identified and quantified using optimized analytical methods. Discussion of sample results and increased understanding of the predominant types of microplastics and microfibers discharged into the Bay will support identification of microplastic sources and inform development and prioritization of source control solutions for this emerging contaminant.

Source to Sea Transport of Microplastics: Modeling Fate and Transport in San Francisco Bay and the Coastal Ocean

R. Holleman¹, E. Nuss¹, L. Sim¹, M. Sedlak¹, D. Lin¹, C. Box², R. Sutton¹

¹SFEI; ²5 Gyres

Microplastics enter the environment from a variety of sources, with varying morphologies, size and composition. These characteristics affect the transport and fate of such particles, with an impact on whether plastics enter the aquatic food web, wash ashore, deposit on the bed, or even become entrained in one of the five global gyres.

We present a process-based modeling study intended to predict the trajectories of microplastics from potential sources, through San Francisco Bay, and to the coastal ocean and beyond. The Bay portion of the domain requires a robust treatment of tidal transport and mixing, complex geometry and wetting and drying. Modeled transport in the coastal ocean, including three National Marine Sanctuaries, draws on high-frequency radar data as well as regional ocean models. We investigate the sensitivity of the predictions to particle characteristics and source location. The modeling study complements a field-based study of the Bay and coastal ocean, with the ultimate goal of assessing the feasibility and model skill for predicting microplastic transport and fate.



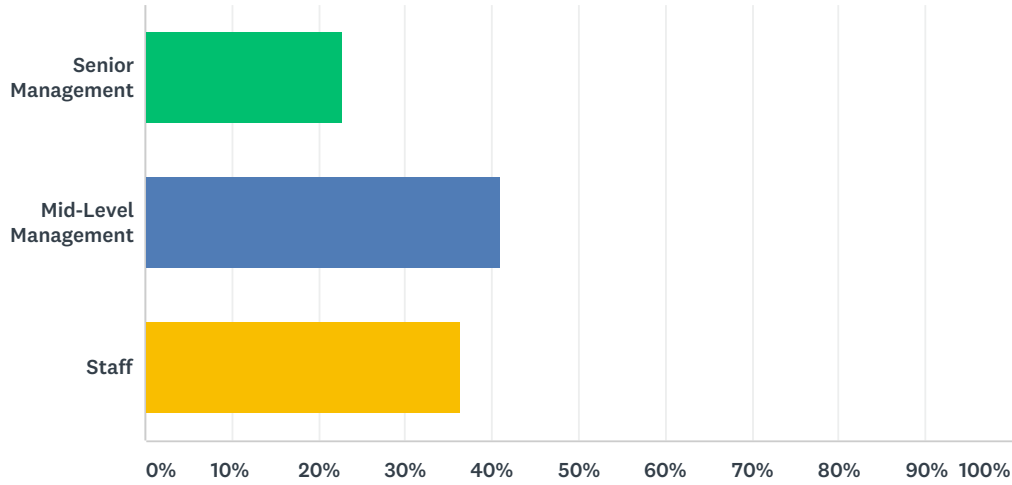
BAY AREA CLEAN WATER AGENCIES
Draft ANNUAL MEETING PROGRAM
JANUARY 19, 2018

<u>TIME</u>	<u>SUBJECT</u>	<u>DESCRIPTION</u>	<u>SPEAKER</u>
<i>Need to intersperse questions for "Poll Everywhere" interactive audience participation throughout the agenda</i>			
8:30 am - 9:00 am	Coffee and Refreshments		
9:00 am - 9:15 am	Welcome	Introduction and Year in Review	Jim Ervin, Chair
9:15 am - 10:00 am	EPA/SWRCB/RWQCB/ Priorities	<u>Moderator</u> BAAQMD APCO EPA Region IX, Manager, NPDES Permits Office SWRCB Board Member RWQCB Executive Officer	<u>Lori Schectel</u> Jack Broadbent David Smith Steve Moore Bruce Wolfe
10:00 am - 10:15 am	Nutrients - Overview	Progress on 1st WS Permit/Governance Update	Mike Connor
10:15 am - 10:30 am	Break		
10:30 am - 11:45 am	Nutrients - Regulatory Update (cont'd)	<u>Moderator</u> Optimization/Upgrade Studies Annual Reporting Q & A Next Steps	<u>Eileen White</u> JB Neethling, HDR JB Neethling, HDR JB Neethling, HDR JB Neethling, HDR
11:45 am - noon	Arleen Navarret Award presentation and BACWA Leadership Recognition	presentation of award followed by Committee Recognition (scrolling screen with Committee Accomplishments)	Jim Ervin, Chair
Noon - 12:35 pm	Lunch		
12:35 pm - 12:45 pm	BACWA Business Meeting	Financial/Organizational Outlook	David Williams
12:45 pm - 1:30 pm	Nutrients - Technical Update	<u>Moderator</u> SFEI Study Findings/Assessment Framework/Future Efforts	<u>Eileen White</u> David Senn, SFEI

1:30 pm - 1:45 pm	Nutrient - Regulatory	Preview of the 2nd Watershed Permit	David Williams
1:45 pm - 2:45 pm	BACWA Hot Topics (pick 4-6 topics for high level overview)	<u>Moderator</u> Biosolids Recycled Water Policy AIR Issues/Rule 11-17/CWCCG Excess Wet Weather Flows/Blending TNI Lab Standards Chlorine Residual BPA Enhancing Service to the Membership (key survey results)	<u>Laura Pagano</u> Alicia Chakrabarti Rhodora Biagtan Sarah Deslauriers Lorien Nirmela Arsem Tom Hall (EOA) Laura Pagano
2:45 pm - 2:50 pm	Annual Meeting Wrap-Up		Jim Ervin, Chair

Q1 Thank you for responding to the survey: What role do you play at your agency?

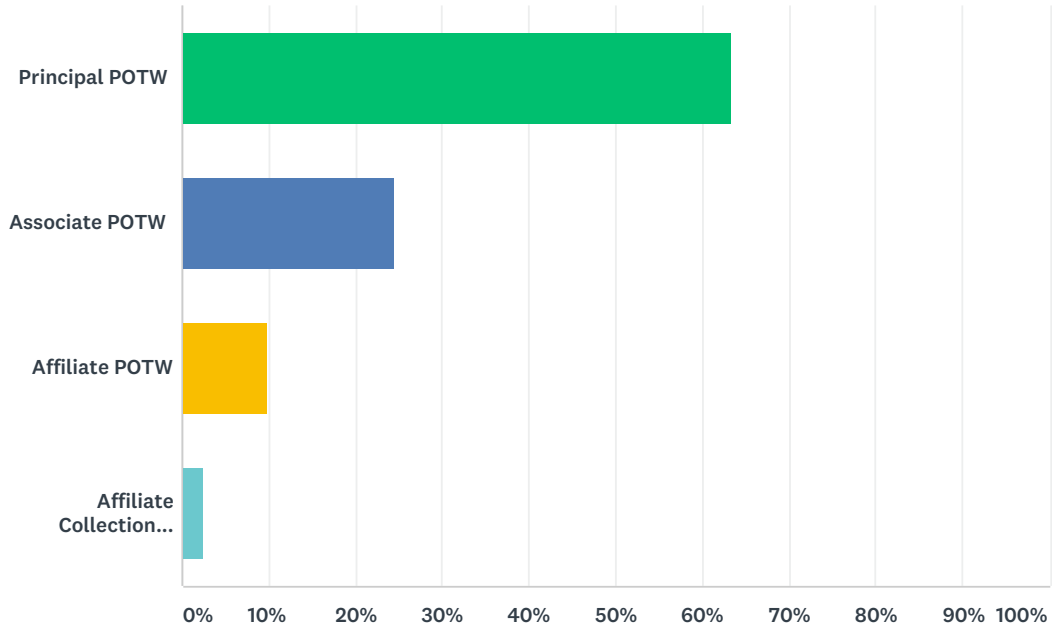
Answered: 44 Skipped: 0



ANSWER CHOICES	RESPONSES	
Senior Management	22.73%	10
Mid-Level Management	40.91%	18
Staff	36.36%	16
TOTAL		44

Q2 What type of BACWA Member is your agency?

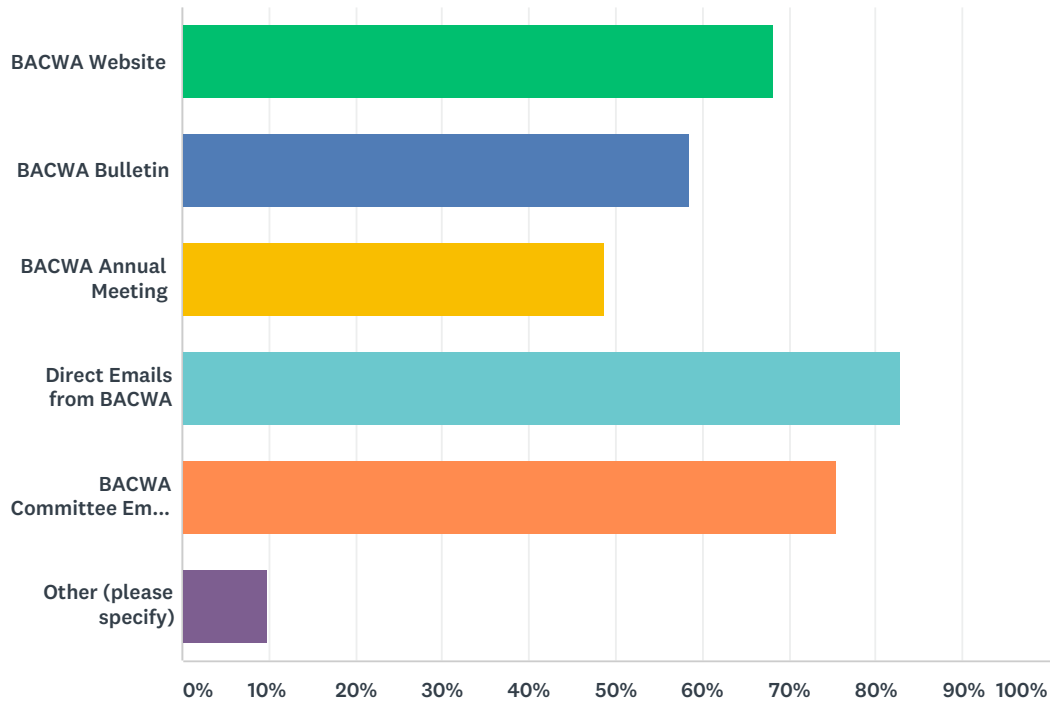
Answered: 41 Skipped: 3



ANSWER CHOICES	RESPONSES	
Principal POTW	63.41%	26
Associate POTW	24.39%	10
Affiliate POTW	9.76%	4
Affiliate Collection System	2.44%	1
TOTAL		41

Q3 How do you access information from BACWA (click all that apply)

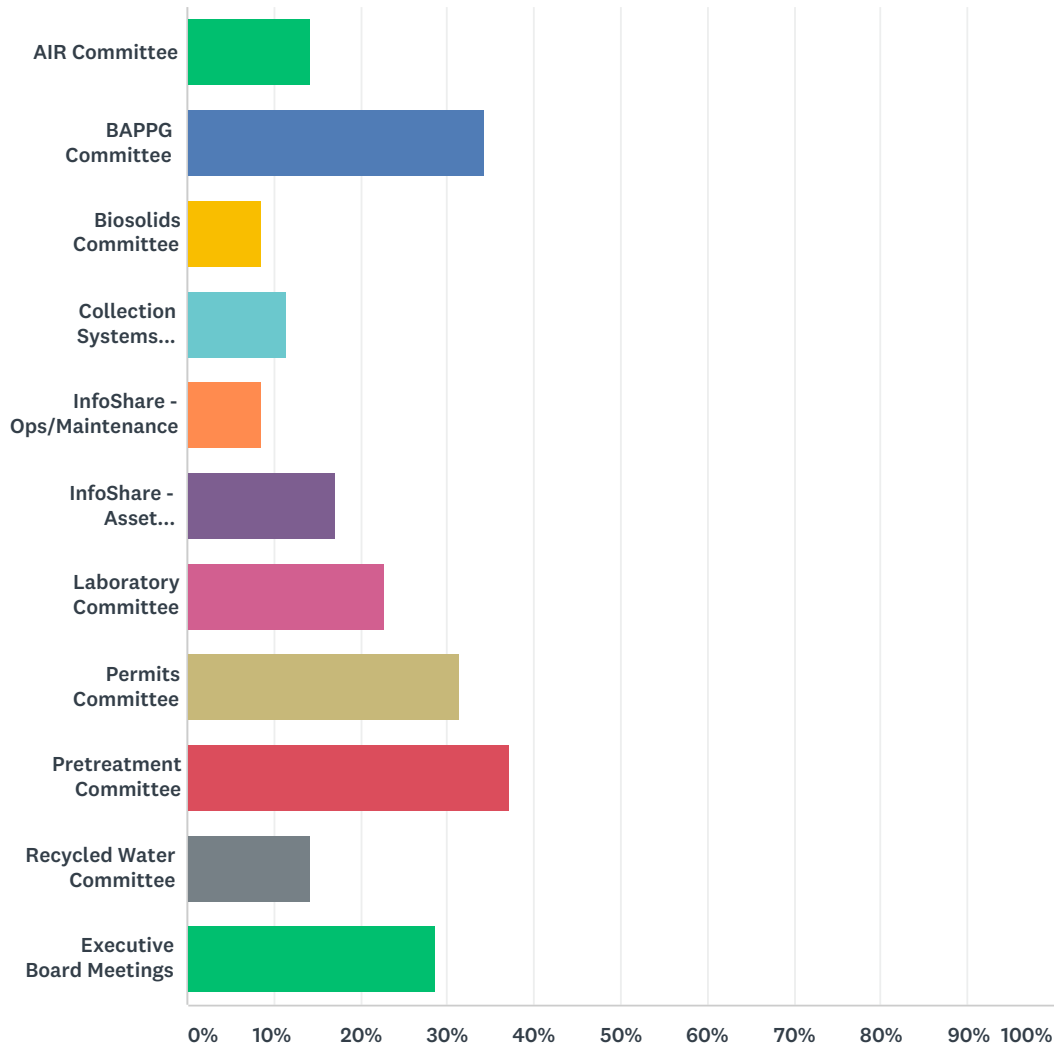
Answered: 41 Skipped: 3



ANSWER CHOICES	RESPONSES	
BACWA Website	68.29%	28
BACWA Bulletin	58.54%	24
BACWA Annual Meeting	48.78%	20
Direct Emails from BACWA	82.93%	34
BACWA Committee Email Lists	75.61%	31
Other (please specify)	9.76%	4
Total Respondents: 41		

Q4 Do you attend any BACWA Committee meetings or Executive Board Meetings? Click all that apply.

Answered: 35 Skipped: 9



ANSWER CHOICES	RESPONSES	
AIR Committee	14.29%	5
BAPPG Committee	34.29%	12
Biosolids Committee	8.57%	3
Collection Systems Committee	11.43%	4
InfoShare - Ops/Maintenance	8.57%	3
InfoShare - Asset Management	17.14%	6
Laboratory Committee	22.86%	8
Permits Committee	31.43%	11
Pretreatment Committee	37.14%	13

BACWA Membership Satisfaction Survey

Recycled Water Committee	14.29%	5
Executive Board Meetings	28.57%	10
Total Respondents: 35		

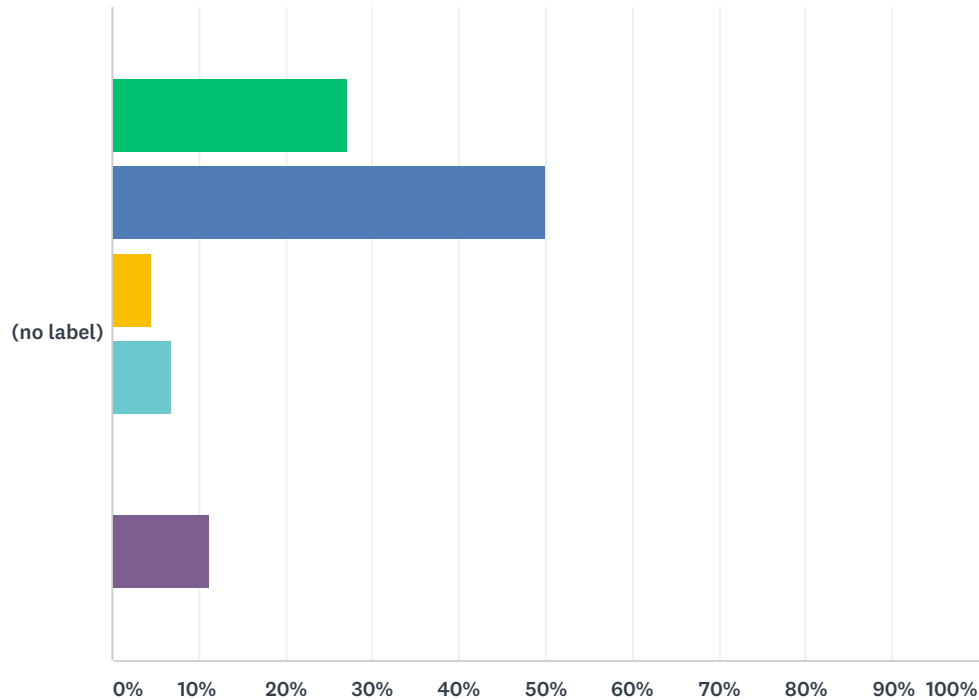
Q5 Do you have any suggestions for improving Committee or Executive Board Meetings?

Answered: 19 Skipped: 25

[SEE LINK TO COMMENTS](#)

Q6 Please rate how easy it is to access information on the BACWA.org website?

Answered: 44 Skipped: 0



■ Information is easy to find
 ■ Mostly easy
 ■ OK
 ■ Somewhat difficult
 ■ Information is difficult to find
 ■ N/A

	INFORMATION IS EASY TO FIND	MOSTLY EASY	OK	SOMEWHAT DIFFICULT	INFORMATION IS DIFFICULT TO FIND	N/A	TOTAL	WEIGHTED AVERAGE
(no label)	27.27%	50.00%	4.55%	6.82%	0.00%	11.36%	44	1.90
	12	22	2	3	0	5		

Q7 Do you have any suggestions for improving the BACWA website?

Answered: 20 Skipped: 24

[SEE LINK TO COMMENTS](#)

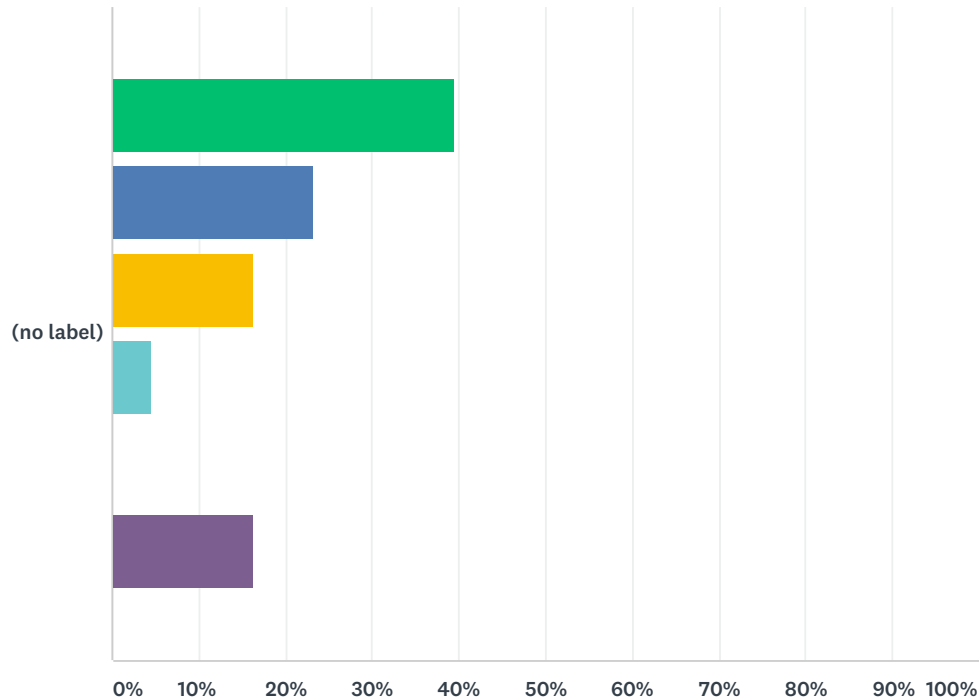
Q8 How can BACWA encourage participation by Associate & Affiliate Members?

Answered: 18 Skipped: 26

[SEE LINK TO COMMENTS](#)

Q9 Please rate how satisfied you are with how BACWA has communicated with its members about the Nutrient Watershed Permit?

Answered: 43 Skipped: 1



■ Very satisfied
 ■ Mostly satisfied
 ■ OK
 ■ Mostly unsatisfied
 ■ Very unsatisfied
 ■ N/A

	VERY SATISFIED	MOSTLY SATISFIED	OK	MOSTLY UNSATISFIED	VERY UNSATISFIED	N/A	TOTAL	WEIGHTED AVERAGE
(no label)	39.53%	23.26%	16.28%	4.65%	0.00%	16.28%	43	1.83
	17	10	7	2	0	7		

Q10 What issue(s) would you like to see addressed that are not currently being covered by BACWA?

Answered: 21 Skipped: 23

ANSWER CHOICES	RESPONSES	
Issue 1	100.00%	21
Issue 2	28.57%	6
Issue 3	9.52%	2
Issue 4	9.52%	2

[SEE LINK TO COMMENTS](#)

Q11 Over the last 2 years has BACWA taken a direction or position that you have been dissatisfied with?

Answered: 26 Skipped: 18

[SEE LINK TO COMMENTS](#)

Q12 If you would like BACWA to contact you to follow up on any of your replies, please give us your name and email address/phone.

Answered: 6 Skipped: 38

[SEE LINK TO COMMENTS](#)

Request for Qualifications (RFQ) for BAPPG Support

Public outreach, Technical outreach to professionals, Technical Support for pesticides

General Outline

(Three separate RFQs will be issued)

- **Introduction**
 - Description of BACWA
 - Description of BAPPG
 - General description of scope of work for contract (1. public outreach; 2) technical outreach to professionals; and 3) technical Support for pesticides)
- **Description of Qualifications**
- **Format of submission**
 - Up to two-page cover letter with attached resumes
 - Email to Lorien Fono
- **Submittal Deadline – early Feb (tbd)**
- **Consultant Selection – Mid Feb**
 - A selection committee made up of members of the BACWA Board and BAPPG Steering Committee will review the submittals
 - Depending on the number and quality of qualification received, BACWA will either sole source the contract or issue a request for proposals for a competitive bid process
- **Contract**
 - Following selection, a scope of work and contract will be negotiated that will specify billing for services on an hourly basis
 - The term contract is one year, beginning July 1, 2018, with optional extensions for four additional years for a maximum of five years total
 - Sample contract will be attached

Sherry Hull

From: Computer Courage <reports@computercourage.com>
Sent: Tuesday, November 28, 2017 1:27 PM
To: Sherry Hull
Subject: Website Improvement Plan Ready! (bacwa.org)

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Sherry,

Your Website Improvement Plan is ready! Our team has carefully built a list of improvements along with estimates for implementation. Some are simple changes taking advantage of new technologies, while others are specific improvements discovered during our review process.

Next Steps:

1. Review the report and select improvement items of interest by checking off "I'm Interested".
2. Finalize your list of selected improvements.
3. (Optional) Submit a retainer payment to move forward and get your improvements scheduled in our queue.

You can view the report here:

<https://reports.computercourage.com/improvement-plan/bay-area-clean-water-agencies/key/kuc54/>

While not every improvement may be selected, we hope to use this plan as a roadmap for improvements as resources and budget permit.

Thanks!
The Computer Courage Web Team

Computer Courage Quote:

Add a Mobile / Responsive Layer

- Estimate: 15-20 hours (\$2,025 - \$2,700)

Your website does not have a mobile layer, meaning that visitors on tablets or mobile phones see the desktop site, and are forced to pinch, zoom, and squint in order read your site's content. In addition, Google and other search engines are known to penalize sites that lack a mobile layer. We can add an automatic, responsive mobile layer to your site which will scale all content naturally to screen sizes. Mobile traffic is responsible for more than 50% of most website traffic, so having a fully optimized mobile layer is considered a high priority.

Committee Request for Board Action: None

17 attendees representing 9 member agencies.

Sarah Deslauriers and Courtney Mizutani provided the [regulatory update presentation](#). Key topics from the meeting and since are below:

BAAQMD Updates

- a. [Regulation 11, Rule 18](#) (Rule 11-18): Risk Reduction from Air Toxic Emissions at Existing Facilities was adopted by the BAAQMD Board November 15. The [list of “Potentially Subject Sites”](#) was distributed as part of the BAAQMD Board packet - we discussed the fact that BAAQMD staff does not project many POTWs to be subject to the Rule. For reference, a list of toxic air contaminants can be found in Table 2-5-1 [here](#). Late additions to the adopted regulation include establishing a Technical Dispute Resolution Committee (outside the variance process to address technical issues regarding the HRAs and Risk Reduction Plans) as well as a multi-stakeholder Rule 11-18 implementation workgroup (these are noted in the attached BAAQMD slides from the November 15 Board Meeting, Page 4). Randy Schmidt also [presented](#) Central San’s approach and experiences with preparing a recent Health Risk Assessment for the treatment plant (a copy of the presentation is attached).

Next Steps / Action Items:

- i. We will continue to coordinate with BAAQMD staff to update Proximity Adjustment Factors (PAF) for POTWs over the next couple months.
 - ii. With regard to updating influent flow and concentration data, there is an influent characterization study going forward, so POTWs will not be sampling as often (perhaps only once per five years as opposed to as often as monthly or twice annually).
 - iii. Summarize clear examples of projects already planned that may serve as a/the risk reduction measure to discuss how to handle them through the Rule 11-18 implementation.
- b. [Rule 9-2](#): Inorganic Gaseous Pollutants - Hydrogen Sulfide (H₂S) continues to impact some Authority-To-Construct permits for new projects, particularly digester and headworks/primary treatment projects. Several agencies shared the H₂S limits (in ppm) in their current permits and we are seeing how varied they are from one agency to another. It was noted that it is challenging to design appropriate technologies to anticipate permit condition limits that are unknown and unpredictable.

Next Steps / Action Items:

- i. EBMUD offered to share the engineering evaluation they performed for their permit conditions.
- c. The City of Petaluma shared their recent experience with a variance from permit conditions during construction of a second anaerobic digester. The discussion noted a need for developing appropriate permit conditions to address activities during construction and maintenance. This topic should be considered for inclusion in future discussions between BACWA and BAAQMD. The BAAQMD Permit Handbook includes language to address these situations, at least partially for maintenance activities, but (to date) the language has not been consistently included in permit conditions.

Next Steps / Action Items:

- i. We had previously discussed drafting Best Management Practices that would inform BAAQMD. Brenda Cabral agreed it would be helpful for BACWA to provide the first draft. We discussed revisiting this and making sure we address the [Permit Handbook](#) (written by BAAQMD) for language on digester gas exemptions, landfill gas venting allowances per year, and an approach for when the methane content of digester gas is too low to justify combustion in engines. These will be reviewed and discussed during our next meeting.

Climate Change Update

- a. The draft [2030 Target Scoping Plan](#) was released October 27 (and the [final 2030 Target Scoping Plan](#) was released November 30). Included in the objectives are providing air quality co-benefits (such as criteria pollutants and toxic air contaminants, in support of AB 617) and supporting cost-effective and flexible compliance. The Plan supports the development of partnerships between waste management and wastewater facilities to manage organic waste (in support of SB 1383 mandates, see next item) and lists other potential additional/supporting actions for water and wastewater facilities that we will monitor over time. The final Plan is expected to be adopted December 14/15 - no further review or action is needed.
- d. [SB 1383 Short Lived Climate Pollutant \(SLCP\) Reduction Strategy Implementation](#) was discussed. CASA provided [comment](#) on the draft regulatory text with regard to land application of biosolids being a recycling option, disposal of sludge in a landfill as a temporary emergency measure, assurance of clean organic feedstocks, etc. The Rule is scheduled for adoption by the end of 2018. The legislation also encourages CEC and CPUC to incentivize the production and use of biogas. CASA has been discussing the barriers to pipeline injection with CPUC staff and they are about to open proceedings for determining a reasonable range of HHV (high heating value) for digester gas and updating their current standard of 990 Btu/scf.

Next Steps / Action Items:

- i. Continue to monitor the development of the regulation and coordinate with CASA's efforts in responding to CalRecycle.
- e. Sarah is participating in the BAAQMD Methane Expert Panel as the wastewater sector representative. The current focus of BAAQMD staff is drafting the General Methane Leak Prohibition rule and a new rule for composting operations with respect to methane and VOCs. A draft composting rule is anticipated by April 2018. At the end of last meeting (in November) she presented information to the panel about anaerobic digestion at wastewater treatment facilities and highlight work that has already been done by the Air Resources Board that shows there is no discernible methane emissions at wastewater facilities. They want to continue discussing the impact of SB 1383 on facilities in a future meeting.

Next Steps / Action Items:

- i. Continue to participate on the Panel (next meeting is December 11) and develop a presentation on how SB 1383 will impact wastewater treatment facilities to distribute to BACWA members and get feedback.

Tour: Committee members were invited to participate in a tour of SFPUC's living machine building.

Next Meeting: The next meeting (and tour) is scheduled for March 21, 2018 and will be hosted by San Jose-Santa Clara Regional Wastewater Facility

BAPPG Committee Report to BACWA Board

Meeting Date: December 6, 2017
Executive Board Meeting Date: December 15, 2017
Prepared By: Lorien Fono, BACWA RPM
BAPPG Chair: Doug Dattawalker

19 participants representing 12 member agencies
Committee Notes are available [online](#).

Committee Support

The Steering Committee is working with BACWA staff to develop Requests for Qualifications for each of BAPPG's three support contracts (pesticides regulatory support, technical outreach, and PR). Depending on response, and qualifications of interested applicants, BACWA will either sole source the contracts, or put out RFPs for a competitive bid process.

Mobile Sources Presentation

RVs and trailers - Carrie Sandahl, City of Mountain View and Michelle Daher, City of East Palo Alto, gave a summary of how their cities are dealing with the challenges of residents living in mobile homes on their streets due to the scarcity of housing in their cities. [See slides](#) from Mountain View. The issue is both leaking sanitary and automotive tanks, and residents dumping raw sewage into the storm drain. It is a public health nuisance, but there are few tools to force temporary residents to change their behavior, and even towing is problematic, since the RVs become a disposal liability for the tow companies. Mountain View is looking into mobile dump facilities. East Palo Alto is encouraging the RVs to other cities move since they have no resources to deal with them. Both speakers were in favor of a regional solution for mobile home sewage management, since these vehicles move from city to city. Some POTWs accept septage from mobile homes for low or no cost.

Mobile Washers – Colleen Henry, Central San, gave a [summary](#) of her agency's approach to permitting mobile washing businesses. She gave a summary of the list of washing applications, and the pollutants associated with each. Central San has developed BMPs for proper direction of wastewater, including wash water containment, and reducing use of chemicals and wash water. They issue permits specific to different services depending on the type of equipment used, and require annual compliance reporting. Central San can provide brochures to other agencies interested in developing a similar program.

Project Updates

O'Rorke- The Spanish FOG radio ads are airing on Univision Radio this week, as well for two weeks toward the end of December. Our buy includes 238 spots total made up of:

- 91 :30 radio spots
- 27 :15 bonus spots
- 120 :30 streaming spots

Stephanie Hughes – Stephanie will work with vets on fipronil messaging, and will update the dental outreach material on the baywise website to match federal regulations.

Budget

The committee budget is \$50,480, or a little over 50% spent. There is \$8K earmarked for pesticides outreach that may be reallocated to other campaigns. The decision will be made by the end of March.

Next BAPPG Meeting

BAPPG General Meeting
February 7, 2017: 10:00am-12:00pm
1515 Clay Street, Second Floor, Room 110
Oakland, CA

Collection Systems Committee Report to BACWA Board

Collection Systems Committee Meeting on: 11/30/17
Executive Board Meeting Date: 12/15/17
Committee Chairs: Erin Smith and Andrew Damron

Committee Request for Board Action: None

19 attendees representing 12 member agencies

Service Line Warrantee Programs

Larry Byrne gave an [overview](#) of HomeServe's sewer lateral warrantee program. Through partnerships with municipal agencies they structure co-branded warranty programs for the single family homeowners and small business customers that offer protection against the cost of repairing and/or replacing their water, sewer and interior plumbing & drainage infrastructure. They do not yet offer service in areas that have private sewer lateral ordinances for point of sale inspection/repair. They are considering how they would offer service to areas with such an ordinance, where premiums would likely need to be higher than in other areas. The sewer lateral program is not lucrative, but its success encourages homeowners to sign up for their other warrantee services.. Agencies may want to give their support to a partnership with a warrantee company since they would further solidify their relationship with the homeowner. Additionally, agencies get a commission for each customer who signs up.

CMSA Permit

BACWA staff gave an update on CMSA's Tentative order, which for the first time includes its satellite agencies. Regional Water Board staff have said that they do not intend to use this regulatory vehicle for every satellite system in the Bay Area. With respect to BACWA's concerns about third party liability, they responded that collection systems are already subject to third party lawsuits if they have SSOs that reach waters of the United States. To respond to concerns about joint liability between the POTW and the satellite agencies, they rewrote the permit to make it clear which provisions referred to which entities. The Regional Water Board has delayed permit adoption to engage their attorneys in responding to legal comments.

SFEP PSL Report

The San Francisco Estuary Partnership produced a [report](#) on Private Sewer Lateral Ordinances in the Region. BACWA was not given the opportunity to comment on the report before it was published.

Other news:

CWEA has been hosting a series of collection systems workshops around the State introduce regulators to Regional issues.

Next Collection System Committee Meeting

The next committee meeting will be held on January 25, 2018 at the Alameda Public Works offices.

InfoShare Asset Management– Report to BACWA Board

InfoShare Asset Management Committee meeting on: 11/15/17
Executive Board Meeting Date: 12/15/17
Committee Chair: Dana Lawson (Central San)

Committee Request for Board Action: None

Attendees: Dana Lawson, Neil Meyer, PJ Turnham (Central San); Rebecca Overacre (EBMUD); Anthony Smith (City of Livermore); Aaron Johnson (DSRSD); Jeff Greer, Dale Riddle (Mountain View Sanitation); Robin Gamble (Napa San); TiLiAnne Tanner (Sonoma County Water Agency); Derek Wurst (Black & Veatch); Jonathan Boitano (HDR)

Introductions

- See above

Announcements

- Dillon Cowan has stepped down as co-chair. If anyone is interested in the position, please contact dlawson@centralsan.org.

Presentation

- Facility Condition Assessments (Derek Wurst, Black and Veatch)
 - Continual deterioration of assets are susceptible to consequences of failure
 - Condition assessment factors into the likelihood of failure in the risk equation
 - Prioritize condition assessment efforts based on consequence of failure, focus on critical points in the process flow
 - Establish criteria for LOF, COF
 - Multi-discipline inspections
 - KISS inspection protocol; repeatability, objectivity, simplicity
 - Rating systems, e.g. IIMM 1-5 tied to replacement value
 - Discipline specific evaluation ratings; weight condition vs. performance
 - Data collection and management
 - Initial site recon
 - Techniques and Tools
 - Condition assessment includes data analysis
 - General work sequence
 - Define “life” expectancies; design life, service life, useful life

Discussion

- Asset Cost and Lifecycle Tables
 - Aaron asked if any updates had been provided by agencies to the tables. The goal was to provide a resource for all members to use. After initial feedback from a few agencies, no additional input has been provided. Dana e-mailed out the Excel file around the last meeting and will re-send to the e-mail list. Members were encouraged to fill in data gaps and send to Dana to consolidate for redistribution to everyone.
- Prioritization – assets, locations, work orders
 - TiLiAnne briefly reviewed the templates she provided (which were e-mailed with this meeting invite) and explained how they are used.

Next BACWA Asset Management InfoShare Committee Meeting:

- 2018 Meeting Schedule: February 21 (tentatively at DSRSD); May 16, August 15, November 14

Please e-mail dlawson@centralsan.org if you can provide a presentation or host a future meeting; default is to host at Central San if no other agencies are able to volunteer.

Laboratory Committee – Report to BACWA Board

Laboratory committee meeting on: 14 June 2017
Executive Board Meeting Date: N/A
Committee Chair : Nirmela Arsem

Committee Request for Board Action: None

ELAP and TNI:

- At the May 3 workshop on the Expert Review Panel's Year 2 Final Report, State Water Board staff stated that ELAP would be releasing draft regulations for an accreditation standard this summer and would be hosting workshops regarding the development and refinement of these regulations. Based in part on the panel's work, staff recommended adopting a TNI-based standard.
- ELAP is soliciting feedback on their fee structure. ELAP is required to be a fee supported entity and that had not been the case until now. ELAP has indicated their annual budget amount and formed a ELTAC subcommittee to make recommendation as to how the fee ought to be distributed among small and large labs, based on field of testing, flat fee or any other formula. CASA, CWEA and CVCWA are providing options. BACWA members considered the cost of certification was minimal compared to implementing TNI standards.
- ELAP is proposing to use third party auditors. ELAP auditors are expected to accompany the third party auditors to the field as part of their training. It is not yet clear if the laboratory community will have to pay the fees of the third party auditors.
- ELAP has published timeline for submitting renewal application on their website. All paperwork, PT results, bioassay control charts and fees must be submitted at least 90 days before the current certificate expires.

New business:

- SFEI is planning to conduct microplastics sampling this August - September, two events in each facility. Participants will be contacted individually. SFPUC will be sampled during wet weather only to understand the effects of combined sewer system.
- An informal discussion followed about conducting MDL study for on-line chlorine monitors. Agencies generally relied on manufacturer provided information for MDL, and excess dechlorinating agent to assure there is not chlorine residual in the effluent.

Upcoming meetings, conferences, etc.:

- Forum on Environmental Accreditation, August 7-11, Washington, DC
- WEFTEC, September 30 – October 4, Chicago, IL
- BACWA toxicity workshop – September 18, 10:00 am to 2:00 pm at CCCSD

The next lab committee meeting will be on July 12

Laboratory Committee – Report to BACWA Board

Laboratory committee meeting on: 13 September 2017
Executive Board Meeting Date: September
Committee Chair : Nirmela Arsem
Committee Request for Board Action: None

EPA grant funded regional side-stream (nutrient reduction) study:

- Yuyun Shang, who managed the EPA grant funded regional side-stream study gave a presentation of the various studies conducted by BACWA agencies. This was followed by a discussion on nutrient trading model, which was led by Phoebe Grow.

ELAP and TNI:

- Several agencies and organizations submitted comments to ELAP on their proposed regulations (Title 22, Social Security, Division 4. Environmental Health, Chapter 19. Certification of Environmental Laboratories). The major deviation from TNI, such as performing one professional Testing (PT) sample per year and accepting CWEA certification as qualification were reflected in the updated regulation. The committee reviewed CVCWA, CASA and CWEA comments. BACWA did not submit comments but supported CASA's comments.
- Members who attended ELAP workshops and testified in person shared their experience. As the workshops moved forward, ELAP's response was modified to reflect those comments, which the member found a positive development. These workshops took place in July and August in Fresno, Sacramento, Redding, Los Angeles, San Diego and San Francisco.
- Some highlights of the updated regulations are: They are changing the terms Fields of Testing to Fields of Accreditation (FOA) and using the term Units of Accreditation (UOA). FOA is a group of related UOAs. A UOA is combination of Program – Method – Analyte. If a laboratory is analyzing arsenic for the Safe Drinking Water Act (SDWA) by GFAAS, that is one UOA and if a laboratory is analyzing arsenic by GFAAS for the Clean Water Act (CWA), and analyzing arsenic by GFAAS for the Department of Toxic Substances Control is a third UOA. An example of an FOA would be all UOAs for toxic elements for SDWA (rather like the current FOT 103). Historically the FOTs have been listed in law. ELAP is proposing that there be no fixed list of FOAs but rather the regulations should reference a webpage where the FOAs and UOAs are listed and which can be changed without any regulatory process or transparency.
- Under current regulations, PT sample results do not need to be submitted by the laboratory to ELAP. This has historically been done by the PT providers. Now, however, PT study results will part of the application package.

Method Update Rule:

On August 8, the new EPA Administrator signed the 2017 Method Update Rule (MUR), originally published in 2016. this rule will:

- Replaces Methods 608, 624, and 625 with updated versions of these methods
- Approves over 100 methods published by ASTM International, *Standard Methods*, several vendors and other organizations
- Clarifies the procedures for EPA approval of nationwide and limited use ATPs
- Amends the procedure for the method detection limit (MDL) in Appendix B
- Makes many minor changes affecting methods, sample preservation and other issues.
- The Method Update Rule is expected to be published in the Federal Register between August 29 and September 5, with a 30-day implementation date.

Chlorine residual basin plan amendment:

- The study BACWA is proposing to undertake in order to prevent using excessive dechlorinating agent was discussed. Member representing City of Hayward volunteered to participate in the study.

Attachment G:

- The concept of reporting duplicate results through CIWQS was discussed. The clarification was that batch QC duplicate sample results should not be reported or averaged with the base sample.

Upcoming meetings, conferences, etc.:

- WEFTEC, September 30 – October 4, Chicago, IL
- BACWA toxicity workshop – September 18, 10:00 am to 2:00 pm at CCCSD (full house)
- RMP annual meeting – October 6

The next lab committee meeting will be on October 11

Laboratory Committee – Report to BACWA Board

Laboratory committee meeting on: 08 November 2017
Executive Board Meeting Date: December
Committee Chair : Nirmela Arsem

Committee Request for Board Action: TBD

ELAP and TNI:

- Assembly Bill No. 1438, ‘Environmental Laboratory Accreditation Act’ was discussed. This bill sets the stage for ELAP to adopt TNI standards through regulations. Previous references to NELAC have been changed to TNI in this version of the bill. Some of the major provisions are:
 - This act requires accredited laboratories to report results in a timely manner and in accordance with the request for analysis, the full and complete results of all detected contaminants and pollutants to the person or entity that submitted the samples.
 - It modifies provisions relating to petition for reconsideration with regard to denials of certain applications for certification or accreditation. The bill updates provisions relating to civil penalties.
- ELAP sent an announcement on October 17 that NV5/Date Moeller consultants and ELAP auditors will be auditing drinking water certified laboratories together. The intent is to train ELAP auditors to assess laboratories to TNI 2016 standard and provide feedback to laboratories, i.e., gap analysis to be meet TNI 2016 standards.
- ELAP has made public a Standard Operating Procedure (SOP) on ‘General Complaints Regarding ELAP and ELAP staff’ which describes the process for complaints and resolutions process.
- The feedback from those attending the CWEA sponsored training on implementing TNI 2016 standards was very positive. Seats are limited and they are filling quickly. Some members indicated that while this training helped them with the big picture, they would like in-depth discussion on some topics, including getting feedback from peers if their systems and processes would meet TNI requirements. As a result of this discussion, lab committee committed to obtaining help from a consultant to lead a facilitated discussion to review corrective action and document management process.

Agency Audits

- SFPUC and Delta Diablo laboratories were audited for bioassay in October. Other laboratories whose certificate is nearing expiration have not heard from ELAP.

Microplastics:

- BACWA, CASA and SCAP (Southern California Alliance of Publicly Owned Treatment Works) prepared a joint response to the Ocean Protection Council’s (OPC) draft California Ocean Litter Prevention Strategy. While the strategy document calls out POTWs as a source of microplastic pollution, the response letter directed attention of source control and behavior modification through public education.
- The draft SOP provided by Chelsey Rockman’s team in University of Toronto (SFEI’s analytical partners for microplastic projects) for analyzing microplastics in wastewater

effluent was reviewed by BACWA lab committee members and comments were submitted to SFEI. This comments were reviewed at the meeting.

General Discussions::

- Some of the document management systems members are using or have experience using were discussed. Onbase and SharePoint were mentioned.
- Agencies indicated that DI water service provider Evoqua has recent not met expectation. Response to service calls has been not prompt. As an alternative Puretech was recommended.
- Gas vendor Madco was mentioned as working out well for some agencies.
- Silicon Valley Clean Water and City of Sunnyvale are expecting to hire part time person to help with TNI transition.

Upcoming meetings, conferences, etc.:

- Water Quality Technology Conference – November 12-16 @ Portland, Oregon
- CWEA annual conference @ Sacramento – April 17-20, 2018
- BACWA annual meeting – January 19 @ Scottish Rite Center, Oakland

Pretreatment Committee – Report to BACWA Board

Pretreatment Committee Training
Executive Board Meeting Date: December 15, 2017
Committee Chairs: Tim Potter, Michael Dunning

Committee Request for Board Action: None

The BACWA Pretreatment Committee hosted two training events in December. This Board Report summarizes the training events.

Trainer	Michael Dunning, USD, Committee Co-Chair
Subject and Outline	<p>Dental Amalgam Program – Program Elements and Inspections</p> <ul style="list-style-type: none"> • Review Federal Dental Amalgam Rule Elements <ul style="list-style-type: none"> -Federal rule structure -SF Bay Area Mercury TMDL structure under federal rule • Elements of Dental Amalgam Programs • Inspecting Dental Offices • Reviewed Different Amalgam Separators <p>Representatives from two amalgam separator manufacturers, Solmetex and Metasys (PureLife), participated. Each gave a presentation on the units they manufacture and discussed their experiences working with dentists both the sale the units but also with maintaining the units.</p>
Dates	December 4, 2017 at USD, Union City, CA December 7, 2017 at CCCSD, Martinez, CA
Duration	3 hours
Cost	No cost for trainer; \$532.67 for lunches/drinks for CCCSD session; USD covered cost of refreshments for USD session.
Contact hours	CWEA contact hours (2) being requested by CWEA staff
Attendees	<p>December 4: 23 attendees from 10 agencies</p> <p>December 7: 39 attendees from 19 agencies</p> <p>Totals: 62 attendees from 25 agencies</p>
Feedback	Surveys were not collected at conclusion of training. Verbal feedback received after training, and during conversations with attendees later, was very positive with comments like “very helpful”, “wish I had this training before I started inspecting dentists”, “information was relevant”, “we needed this training as we plan to develop our program”.

Committee Request for Board Action: none

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

16 attendees (including 4 on phone) representing 8 member agencies

State Water Board revision of State Recycled Water Policy

The draft amendment is scheduled to be released in March 2018. The Water Board wants annual reporting of Recycled Water Production in policy, similar to the recent survey they conducted. They will also be looking at priority pollutant and CEC monitoring. WaterReuse will be working on reporting issue with SWRCB staff. There was a December 1, 2017 conference call between Recycled Water Policy Workgroup members and Division of Water Quality staff to develop a list of recommendations on developing an annual recycled water survey. BACWA's representative is Cheryl Muñoz, who will report back to the Committee. A CEQA scoping session took place on December 1 (see [informational document](#) for CEQA scoping).

Surface Water Augmentation

The State Water Resources Control Board (State Board) has posted an update of the [proposed regulations](#) regarding Surface Water Augmentation, and is making the changed text available for public comment prior to adoption, amendment, or repeal of the resulting regulations. The updated draft did not incorporate BACWA's [recommendation](#) to provide flexibility on the 60-day retention time. WaterReuse will most likely not be making further comments on the SWA regulations because of the years-long process they have gone through with the State Board and the CEC Expert Panel to get to this point. Comments on the updated regulations are due December 18.

State Revolving Fund

The State Water Board updated the [CWSRF Status Report](#) on November 8. Note that the Parks Water bond includes \$80M for recycled water projects and is set for June 2018 ballot.

Next Meeting – January 16 2018, 2016 from 10:30 am to 12:30 pm, 2nd Floor Small Training Room at EBMUD Headquarters.



BACWA
BAY AREA
CLEAN WATER
AGENCIES

Executive Director's November 2017 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 OP/Upgrade consulting team on administrative issues.
- Provided updates to the WB staff on the progress on next steps in developing permit language for the 2nd Nutrient Watershed Permit.
- Coordinated with the NMS Science Manager on presentations, meetings, and key issues on nutrients.
- Coordinated with the RPM on chairing the monthly CMG conference call to discuss the final steps needed before submitting the Op/Upgrade Report.
- Attended and participated in the 29th meeting of the NMS Planning Subcommittee Committee and provided BACWA in-kind services by serving as scribe. Following the meeting prepared detailed meeting minutes and summary of action items.
- Attended a meeting of a technical exchange group from Denmark who presented more detailed discussions of their process for simultaneous nitrification/denitrification.
- Presented initial thinking for BACWA's Nutrient Strategy Team's consideration on permit language for the Regional Study and credit banking which are two of the key tenets of the 2nd Watershed Permit.
- Sent the FY 18 first voluntary increase in science funding, in the amount of \$200k, to SFEI in accordance with the key tenets of the 2nd Watershed Permit.

BACWA BOARD MEETING AND CONFERENCES:

- Worked with staff in preparing for the November BACWA Board meeting including review of the agenda with the BACWA Chair.
- Organized and participated in the November Board meeting.
- 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 quarterly meeting of the Board of ASC/SFEI. Discussed the future of the proposed Development Program whose intent is to raise more foundation funding for scientific studies conducted by SFEI.

FINANCE:

- Reviewed the monthly BACWA financial reports with the AED.
- Continued coordinating with the AED in tracking the revenues coming in from the BACWA FY 18 member invoices.



PERMIT COMMITTEE:

- Coordinated with the RPM for items to agendize for the Permit Committee review.
- Attend the monthly meeting and provided updates on the NMS and other BACWA activities.

COLLECTION SYSTEM COMMITTEE:

- Attended the Collection System Committee meeting and discussed the option for collection systems to offer a lateral insurance program to their customers.

COLLABORATIONS:

- Coordinated with CASA Regulatory Program Manager on regulator issues of mutual concern.
- Provided input to the PPIC on their proposed survey of wastewater agencies as part of their program to study and promote water recycling.
- Provided BACWA input to Department of Homeland Security on their study of the Bay Area's security vulnerabilities.
- Participated in a conference call with representatives of King County wastewater agency to discuss the Bay Area's NMS and BACWA's collaboration with the Water Board.

SAN FRANCISCO ESTUARY PARTNERSHIP:

As the BACWA representative on the Implementation Committee, attended and participated in the quarterly meeting of the IC committee.

MANAGERS ROUNDTABLE:

- Planned and attended the quarterly Managers Roundtable. Presented several updates on BACWA activities and participated in discussions on issues of mutual concern to Bay Area managers.

AIR COMMITTEE:

- Coordinated with the AIR Committee leadership on responding to proposed regulations on health risk assessments.
- Attended the quarterly meeting of the AIR Committee.

BAPPG COMMITTEE:

Worked with the Committee to form a Pesticide Subcommittee consisting of Karin North (Palo Alto), Robert Wilson (City of Petaluma), and Autumn Cleave (SFPUC). The Subcommittee will review pending pesticide regulations and make recommendations to the full Committee and the Board for submittal of comment letters.



BACWA
BAY AREA
CLEAN WATER
AGENCIES

WOT

-Organized and participated in the BACWWE Curriculum Committee discussions to confirm the Spring class schedule as well as future class offerings.

ADMINISTRATION:

- Held the monthly BACWA staff meeting to coordinate and prioritize activities.
- Signed off on invoices, reviewed correspondence, prepared for upcoming Board meeting, 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.

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	Deadline	Status
Action Items from November 17, 2017 BACWA Executive Board Meeting				
2017.11-29	Op/Upgrade Sign-off letter	Discuss modification of language with WB (ED)	12/4/2017	Completed
2017.11-28	Dept of Homeland Security presentation	Add to future Board meeting agenda, not Annual Meeting (ED/RPM/AED)	12/31/2017	Completed
2017.11-27	BAPPG Request for Qualifications	Prepare 1-page RFQ, update Policy, and make contract for 5 yrs (RPM/AED)	1/31/2017	Pending
2017.11-26	Annual Members' Meeting Agenda	Update. Add Retiring Board Member's Recognition & A. Navarret Award (ED/RPM/AED)	11/30/2017	Completed
2017.11-25	CMSA TO	Add to December BACWA Board Meeting Agenda (AED)	11/30/2017	Completed
2017.11-24	Revised Chlorine Scope	Set up a meeting with Naomi (ED)	11/30/2017	Completed
2017.11-23	Permit Language for Banking Nutrient Reduction Credits	Convene Nutrient Strategy Team to explain and discuss (ED/RPM/AED)	1/31/2017	Pending
2017.11-22	Permit Language for Regional Study	Set up a meeting of the Nutrient Strategy Team (ED/RPM/AED)	12/8/2017	Pending
Action Items Remaining from Previous BACWA Executive Board Meetings				
2016.3-61	Membership Policy	Develop policy for out of region agency membership (ED)	6/30/2017	Pending

FY18: 26 of 29 Action Items completed
 FY17: 90 of 90 Action Items completed.
 FY 16: 96 of 97 Action Items completed.



DATE	AGENDA
1/19/2018	
Annual Members Mtg	Service Recognition Awards
	Arleen Navarret Award
Pagano; Ervin; Connor; White; Schectel	RMP & NMS Update
Williams; Fono; Hull	EPA, CWRCB, RWCB, Air Dist,
2/16/2018	<u>Consent</u>
Monthly Board Mtg	Previous Board Meeting Minutes (AED)
Items due: 2/9	Monthly Financial Report
Pagano; Ervin; Connor; White; Schectel	<u>Authorizations & Approvals</u>
Williams; Fono; Hull	Approval: Advance Science Funding from 2nd WS Permit Proposal
	<u>Other Business - POLICY/STRATEGIC</u>
	Discussion: Draft Agenda Joint Meeting with WB
	Presentation: Pesticides Update (Kelly Moran)
	Presentation: Biannual Update on CASA Climate Change Program
	Presentation: POTW Pesticide Sampling Efforts (Dr. Jennifer Teerlink)
	Presentation: AQPI Presentation
	Presentation: DHS RRAP
	<u>Other Business - OPERATIONAL</u>
	Discussion: FY2019 Budget Planning - 1st Draft of FY19 Budget
	Discussion: Annual Meeting Debrief
	Discussion: Debrief on Forum on Environmental Accreditation
	<u>Reports</u>
	Committee Reports (Committee Chairs)
	Board Reports (Executive Board)
	ED Report (ED)
	RPM Report (RPM)
	Other BACWA Representative Reports
3/?/2018	
Joint Meeting	<u>Other Business: Discussions</u>
Items due: 3/?	
Pagano; Ervin; Connor; White; Schectel	
Williams; Fono	
3/16/2018	<u>Consent</u>
Monthly Board Mtg	Previous Board Meeting Minutes (AED)
Items due: 3/9	Monthly Financial Report
Pagano; Ervin; Connor; White; Schectel	<u>Authorizations & Approvals</u>
Williams; Fono; Hull	<u>Other Business - POLICY/STRATEGIC</u>
	Discussion: WB Joint Meeting Debrief
	Presentation: CPSC Update (Heidi Sanborn)

Other Business - OPERATIONAL

Discussion: Second Draft of FY19 Budget

Discussion: Update on BARR Taskforce

Discussion: Update on regional and statewide biosolids issues

Discussion: Biannual Update on CWCCG (SDeslauriers)

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

4/20/2018**Monthly Board Mtg**

Items due: 4/13

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

Consent

Previous Board Meeting Minutes (AED)

Monthly Financial Report

Authorizations & Approvals

Approval: FY19 Budget

Other Business - POLICY/STRATEGIC

Discussion: Draft Agenda Joint Meeting with WB

Other Business - OPERATIONAL

Discussion: Update on BAAQMD Regulations

Discussion: Update on regional and statewide biosolids issues

Discussion: CASA Climate Change Program

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

5/?/2018**Joint Meeting - Water Board**

Items due: 5/?

Pagano; Ervin; Connor; White; Schectel

Williams; Fono

Other Business: Discussions**5/18/2018****Monthly Board Mtg**

Items due: 5/11

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

Consent

Previous Board Meeting Minutes (AED)

Monthly Financial Report

Authorizations & Approvals

Approval: FY19 Consulting Amendments/Agreements

Approval: Officers: Chair & Vice-Chair FY19

Authorization: Legal Support Amendments FY19

Other Business - POLICY/STRATEGIC

Discussion: Water Board Jt Mtg Debrief

Discussion: CEC Update

Other Business - OPERATIONAL**Reports**

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

6/?/2018

Nutrient Optimization/Upgrade Workshop #3

Pagano; Ervin; Connor; White; Schectel
Williams; Fono

Optimization/Upgrade Studies
Water Board

6/15/2018 **Consent**

Monthly Board Mtg

Items due: 6/8

Pagano; Ervin; Connor; White; Schectel
Williams; Fono; Hull

Previous Board Meeting Minutes (AED)
Monthly Financial Report

Authorizations & Approvals

Approval: FY19 Agreements
Approval: Appt BACWA Rep to ASC/SFEI Jt Board

Other Business - POLICY/STRATEGIC

Discussion: Opt/Upgrade Workshop Debrief
Discussion: Draft Agenda WB Joint Meeting

Other Business - OPERATIONAL

Discussion: CPSC Update
Discussion: BAAWMD Annual Meeting Draft Agenda
Discussion: 2019 BACWA Executive Board Calendar

Reports

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

7/?/2018

Joint Meeting - Water Board

Items due: 7/?

Pagano; Ervin; Connor; White; Schectel
Williams; Fono

Other Business: Discussions

7/20/2018 **Consent**

Monthly Board Mtg

Items due: 7/13

Pagano; Ervin; Connor; White; Schectel
Williams; Fono; Hull

Previous Board Meeting Minutes (AED)
Monthly Financial Report

Authorizations & Approvals

Approval: Annual Nutrient WS Payment
Approval: FY19 Agreements

Other Business - POLICY/STRATEGIC

Discussion: Water Board Jt Mtg Debrief
Discussion: Draft Agenda Pre-Pardee Technical Seminar
Discussion: Risk Reduction Update?
Discussion:

Other Business - OPERATIONAL

Discussion:

Reports

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

8/17/2018

Monthly Board Mtg

Items due: 8/10

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

Consent

Previous Board Meeting Minutes (AED)
Monthly Financial Report

Authorizations & Approvals

Other Business - POLICY/STRATEGIC

Discussion: HDR Quarterly Update on Optimization/ Upgrade studies
Discussion: Draft Agenda & Schedule Pre & Pardee Technical Seminar
Discussion: RMP & NMS Update (Phil Trowbridge/David Senn)

Other Business - OPERATIONAL

Discussion:

Reports

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

9/21/2018

Monthly Board Mtg

Items due: 9/14

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

Consent

Previous Board Meeting Minutes (AED)
Monthly Financial Report

Authorizations & Approvals

Approval:

Other Business - POLICY/STRATEGIC

Discussion: Draft Agenda Pardee Technical Seminar
Discussion: Annual Meeting Planning

Other Business - OPERATIONAL

Reports

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

9/21/2018

Pre-Pardee Mtg

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

10/25-26/2018 TENTATIVE

Pardee Technical Seminar

Pagano; Ervin; Connor; White; Schectel
Williams; Fono; Hull

11/16/2018 **Consent**

Monthly Board Mtg

Items due: 11/9

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

Previous Board Meeting Minutes (AED)

Monthly Financial Report

Authorizations & Approvals

Approval: Adoption of FY18 Annual Reports

Other Business - POLICY/STRATEGIC

Discussion: Pardee Debrief & Survey

Discussion: Draft Agenda Joint Meeting with WB

Discussion: ReNEWIt Industrial Advisory Board Meeting Debrief

Discussion: SAF-MBR Kickoff Meeting Debrief

Discussion: Climate Change (Andy Gunther)

Discussion: WTA Fact Finding Invitation

Discussion: Biannual Update on CASA Climate Change Prog (SDeslauriers)

Other Business - OPERATIONAL

Discussion: Annual Meeting Planning

Discussion: BAPPG RFP for Cumuncations

Discussion: BACWA Rep for CPSC Policy Education Advisory Committee

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

12/?/2018

Joint Meeting - Water Board

Items due:

Pagano; Ervin; Connor; White; Schectel

Williams; Fono

Other Business: Discussions

12/21/2018 **Consent**

Monthly Board Mtg

Items due: 12/14

Pagano; Ervin; Connor; White; Schectel

Williams; Fono; Hull

HOLIDAY LUNCH

Previous Board Meeting Minutes (AED)

Monthly Financial Report

Authorizations & Approvals

Other Business - POLICY/STRATEGIC

Discussion:

Discussion: WB Joint Meeting Debrief

Other Business - OPERATIONAL

Discussion: Annual Meeting Agenda

Discussion: Budget Schedule & Key Issues

Discussion:

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

CURRENTLY

*UNSCHEDULED
& SIGNIFICANT*

* Suggestions for Monthly Meeting Guest Speakers/Presenters: i.e. Jim McGrath, State Water Board



Regulatory Program Manager's Report to the Board

November 2017

NUTRIENT SUPPORT: Planned and participated in CMG call.

BACWA BULLETIN: Completed and distributed November Bulletin. Drafted December Bulletin.

TOXICITY: Edited transcript of CWEA toxicity interview.

MERCURY/PCBs: Drafted and delivered testimony on adoption of reissued Hg/PCB Watershed Permit. Closed out risk reduction contract.

COLLABORATIVES: Gave BACWA update at CASA RWG CMG call. Reviewed SEP updates and draft Sediment Quality Objectives.

CECs: Reviewed draft pesticide comment letters. Participated in a wastewater strategy call and attended OPC meeting on Ocean Litter Prevention Strategy in La Jolla. Closed out AXYS Contract for CECs analysis.

ANNUAL REPORT: Drafted text for FY17 BACWA Annual Report.

COMMITTEE SUPPORT:

AIR – Attended and supported meeting. Reviewed consultants' progress reports and invoices. Drafted Board Report.

BAPPG – Drafted meeting notes and Board Report. Started Google Group for the committee.

Collection Systems – Drafted agenda and Board Report, and attended meeting. Updated sewer rate survey data.

O&M Infoshare– Drafted Board Report.

Permits – Attended meeting, drafted agenda and Board Report.

Recycled water – Drafted notes and Board Report. Communicated with SFEP on CCMP Recycled Water Action Items.

Executive Board – Assisted in preparing meeting packet, attended meeting and edited notes. Drafted agenda for Joint meeting with Regional Water Board.

ADMINISTRATION/STAFF MEETING – Discussed BACWA administration and planned Executive Board meeting. Worked with AED to finalize Membership survey. Uploaded committee documents to website.

MEETINGS ATTENDED: Regional Water Board Hearing (11/8), CASA RWG Call (11/9), CMG Call (11/10), Staff meeting (11/13), Ocean Litter Wastewater Agency strategy call (11/13), Permits Committee (11/14), OPC Ocean Litter Strategy Meeting (11/15 to 11/16), Executive Board meeting (11/15), AIR Committee (11/29), Collection Systems Committee (11/30).