



<u>Agenda Item</u>	<u>Time</u>	<u>Page #</u>
ROLL CALL AND INTRODUCTIONS		
PUBLIC COMMENT	9:03 a.m.	
CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER	9:05 a.m.	
CONSENT CALENDAR	9:10 a.m.	
1 September 26, 2015 BACWA Executive Board Meeting Minutes		3-9
2 August & September, 2015 Treasurer's Reports		10-21
AUTHORIZATIONS & APPROVALS	9:15 a.m.	
3 <u>Approval</u> : Adoption of FY15 Annual Report		22 & see links
4 <u>Approval</u> : NBWA Conf Sponsorship FY16		23-28
5 <u>Approval</u> : Solano Comm College Agrmt Fall 2015		29-32
6 <u>Approval</u> : O'Rorke Agreement (BAPPG)		33-38
OTHER BUSINESS - POLICY/STRATEGIC	9:20 a.m.	
7 <u>Discussion</u> : Nutrients		
a. Regulatory		
i. Review of BACWA Goals		39-40
ii. Discussion of Early Actions		41-42
iii. Discussion of Science Funding		43-46
b. Technical Work		
i. Debrief on the Nutrient Technical Workgroup Meeting		47-48
ii. Review of Technical Reports		49-51
iii. Recommendations on Clarifications for Annual Report		52
c. Governance Structure		
i. Update on Program Coordination		see links
ii. Planning Subcommittee Meeting		53-64
iii. Update on Representatives		
8 <u>Discussion</u> : Pardee Debrief & Survey	10:30 a.m.	65-72
9 <u>Discussion</u> : Jt. Water Board Meeting Planning	10:45 a.m.	73
10 <u>Discussion</u> : Water Board Hearing on the Triennial Review	10:55 a.m.	74-82
a. Chlorine Decay Investigation		
11 <u>Discussion</u> : Policy on Class of Membership	11:10 a.m.	83-84

OTHER BUSINESS - OPERATIONAL			
12	<u>Discussion</u> : Drought/Recycling	11:15 a.m.	85
13	<u>Discussion</u> : Update on WOT	11:25 a.m.	
14	<u>Discussion</u> : Update on Information Collection & Sharing	11:30 a.m.	86
15	<u>Discussion</u> : Annual Meeting Planning	11:40 a.m.	87-88
16	<u>Discussion</u> : Monitoring Reduction Proposal	11:50 a.m.	89-95
REPORTS		12:00 p.m.	
17	Committee Reports		96-117
18	Member Highlights		
19	Executive Director Report		118-123
20	Regulatory Program Manager Report		124-125
21	Other BACWA Representative Reports		
	a. RMP TRC	Rod Miller	
	b. RMP Steering Committee	Karin North; Jim Ervin	
	c. Summit Partners	Dave Williams	
	d. ASC/SFEI	Laura Pagano; Dave Williams	
	e. Nutrient Governance Steering Committee	Ben Horenstein; Jim Ervin	
	f. SWRCB Nutrient SAG	Dave Williams	
	g. SWRCB Focus Group – Bacterial Objectives	Lorien Fono; Amy Chastain	
	h. SWRCB Focus Group – Mercury Amendments to the State Plan	Tim Potter	
	i. Nutrient Technical Workgroup	Eric Dunlavey	
	j. NACWA Taskforce on Dental Amalgam	Tim Potter	
	k. BAIRWMP:	Cheryl Munoz; Linda Hu; Dave Williams	
	l. NACWA Emerging Contaminants	Karin North; Melody La Bella	
	m. CASA Statewide Pesticide Steering Committee	Melody LaBella;	
	n. CASA State Legislative Committee	Lori Schectel;	
22	SUGGESTIONS FOR FUTURE AGENDA ITEMS	12:25 p.m.	
NEXT REGULAR MEETING		12:27 p.m.	
The next regular meeting of the Board is scheduled for December 18, 2015 from 9:00 am –12:30 pm at the EBMUD Treatment Plant Lab Libray, 2020 Wake Avenue, Oakland, CA. NOTE: Holiday Lunch			
ADJOURNMENT		12:30 p.m.	

3. BACWA Annual Report to Members

<http://bacwa.org/?p=3566>

3. Audit Report FY15: Basic Financial Statements for the years ended June 30, 2015 and 2014

<http://bacwa.org/?p=3555>

3. Audit Report FY15: Memo on Internal Control and Rquired Communications, June 30, 2015

<http://bacwa.org/?p=3557>

7.c.i Program Coordinator RFP

<http://bacwa.org/?p=3569>



Executive Board Meeting Minutes

September 25, 2015

ROLL CALL AND INTRODUCTIONS

Executive Board Representatives: Laura Pagano (San Francisco Public Utilities Commission); Jim Ervin (San Jose); Mike Connor (East Bay Dischargers Authority); Ben Horenstein (East Bay Municipal Utility District); Roger Bailey (Central Contra Costa Sanitary District).

Other Attendees:

<u>Name</u>	<u>Agency/Company</u>
Amanda Roa	Delta Diablo
David Senn	SFEI
Denise Connors	LWA
Greg Baatrup	FSSD
Holly Kennedy	HDR
Karin North	Palo Alto
Lori Schectel	CCCSD
Melanie Tan	Kennedy Jenks
Robert Wilson	City of Petaluma
Tom Hall	EOA
Dave Richardson	RMC
Amy Chastain	SFPUC
Joe Neugebauer	West County Wastewater Dist.
Warner Chabot	SFEI
David Williams	BACWA
Lorien Fono	BACWA
Sherry Hull	BACWA

PUBLIC COMMENT

None.

CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER

A request to discuss Item # 9 RMP Fee Calculation out of order was accepted by the Chair.

CONSENT CALENDAR

1. August 14, 2015 BACWA Executive Board Meeting Minutes
2. July, 2015 Treasurer’s Report - the Executive Director noted that there was no Revenue Report this month since FY16 invoices were sent out in August. He also noted changes to the formats of the Fund Reports, the Assistant Executive Director provided copies of the new format for the Expense Reports.

3. Update on FY16 Invoicing – the Assistant Executive Director gave a short update on the total invoices for FY16. In late August a total of \$641,379 was invoiced for BACWA Dues; \$675,000 was invoiced for CBC Fees; \$600,508 was invoiced for Nutrient Surcharges; and \$9,800 was invoiced for Non-Member Committee Fees for a total of \$1,926,687. When combined with Special Program Fees of \$196,580 for AIR & WOT, a total of \$2,119,457 was invoiced for FY16. To date BACWA has received a total of \$551,582 in payment of invoices.

Consent Calendar items 1 and 2 were approved in a motion made by Mike Connor and seconded by Ben Horenstein. The motion carried unanimously.

APPROVALS & AUTHORIZATIONS

Agenda Item 4 – Approval of the Annual Payment to SFEI as required by the Watershed Permit. A Board Authorization Request and supporting documents were included in the Handout on **Pages 15-17**. The oversight of the expenditure of the Funds was discussed. It was noted that the Water Board appreciated the effort.

Item 4 was approved in a motion made by Mike Connor and seconded by Jim Ervin. The motion carried unanimously.

Agenda Item 5 – Approval of the Agreement with Solano Community College to provide Water Operating Training Classes. This item was postponed to the November 20, 2015 BACWA Executive Board Meeting.

OTHER BUSINESS-POLICY/STRATEGIC

Agenda Item 6 - Discussion – Nutrients

a. Regulatory

- i. Draft Nutrient Watershed Permit Group Annual Report – A copy of the Draft Nutrient Watershed Permit Annual Report was included in the Handout on **Pages 18-23**. BACWA requested and received a six week delay for delivery of the Annual Report from the Regional Water Board due to the need to further explore and remedy data gaps. The RWB requested that BACWA provide a list of the participants on October 1, 2015 and the Annual Report on November 12, 2015. BACWA will contact the Points of Contact to inform them about the delay. It was noted that the only POTW not participating is the Crockett Community Services District. Most of the missing data for the Group Annual report has been located and HDR already sent the data to the POC's for confirmation. It was noted that 13267 Letter data collection requirements differed from CIWQS data. In the Group Annual Report, Annual Flows, Dry Season Flows and Concentration data will be compared for all Plants and Subembayments. The schedule on the Group Annual Report is as

- follows: Oct 1 – Letter of Participants to RWB; Oct 6 – Draft Group Annual Report to CMG; late October – Draft Annual Report to POC’s; Nov 12 – Group Annual Report to RWB. A Summary of Issues will be included and note will be made that reporting data and CIWQS could be improved. Additional information can be included for individual plants if requested by individual agencies.
- ii. Update on Optimization/Upgrade Report – HDR reported that all site visits have been completed and reports should be finalized within a week.
- b. Technical Work
- i. New Studies for FY16 – SFEI presented an overview of the FY15 progress draft report on the Nutrient Science Program and requested feedback from BACWA. The report will be provided annually in September. Several BACWA Board members commented on the report favorably. They also noted some crossover between HDR and SFEI data collection efforts and suggested more coordination in future years.
 - ii. Debrief on State of the Estuary Conference – The Chair welcomed Warner Chabot, Executive Director of San Francisco Estuary Institute and the Aquatic Science Center. It was noted that a major outcome of the Estuary Conference was the attention being paid to the microplastics issue. California Senator Diane Feinstein’s staff has contacted SFEI and report that the Senator is very interested in learning more about the issue. Mr. Chabot suggested that BACWA do a briefing for the Senator’s staff and volunteered to set up a meeting. BACWA Board members noted that the opportunity is broader than just microbeads, and is a chance to discuss larger issues of water quality and funding for the SF Bay with Feinstein's staff. BAPPG has been considering microbeads as a pollutant of concern, but the issue of microplastics might be beyond the scope of pollution prevention.
BACWA needs to share the complexities of water quality, treatment and pollution prevention limitations issues with a broader audience, along with suggestions for solutions. There is a need for more science on microplastics, especially regarding recycled water and filtering. At a request for volunteers for a microplastics subcommittee to meet with the Senator’s staff, all five Principal agencies volunteered. The BACWA Executive Director will set up a subcommittee conference call in early October.
 - iii. DO Objectives for Suisun Marsh – Information was provided beginning on Page 32 of the Handout regarding work the Water Board is conducting and how this interfaces with the Assessment Framework.
 - iv. Jim Ervin provided a presentation about the lack of correlation between nutrients and impairment in the Lower South Bay.
- c. Governance Structure – Debrief on SC Meeting #6. A copy of the Summary of Action Items from Steering Committee Meeting #6 was included in the Handout on **Pages 24-30**. – It includes an analysis of where the budget stands and projects the budget going forward, providing an update on how money is being spent. One item of note was investment in a sampling boat that should prove to be cost-effective. There have been reductions to the overall budget for the Science Plan because of decreasing RMP funds.

There is \$2.8M/year in research needs but only \$1.17M in funding. It was noted that one of the action items from the Steering Committee meeting was to set up a workshop that focuses on the ammonia paradox with a goal of determining major agreements and disagreements and the best way to address them in the Science Plan.

- i. Debrief on Planning Subcommittee Activities – Minutes of the Planning Subcommittee Meeting #13 were included in the Handout on **Pages 31-37**.
- ii. Program Coordinator – A Draft of the Request for Proposals was included in the Handout on **Pages 38-51**. The Planning Subcommittee is still considering this and will be asking SFEI for a proposal before the decision to broadly distributing a Request for Proposals.

Agenda **Item 7** – Discussion: Pardee Technical Seminar. A Draft Final Agenda was included in the Handout on **Page 52**. The Executive Director gave an overview of the Agenda noting that HDR will most likely deliver a web presentation. It was noted that the Water Board suggested that an item be added to discuss incentives for POTW's to continue pilot programs for nutrient removal. Board members suggested additional possible attendees.

Agenda **Item 8** – Discussion: Annual Meeting Planning. An Agenda and 2014 and 2015 Surveys were included in the Handout on **Pages 53-76**. Board members made several suggestions for additional Agenda items including microplastics, and discussed how to recognize Committees. It was suggested a handout be provided with the top three committee accomplishments for the year.

Agenda **Item 9** – Discussion: RMP Fee Calculation. An explanation of the Annual Budget Study for the Technical Review Committee was distributed. Questions include whether to continue to use current metrics and issues include short-term revenue shortfalls and long-term sustainability since purchasing power decreases every year. It will be a challenge to fund all studies needed. Options include changing the basis for fee calculations, especially as agencies are reducing their pollutant loading to the Bay through water recycling. BACWA is working with the Water Board to develop a proposal for reduced monitoring, and the Water Board is developing a list of current monitoring frequencies. A committee will put together a proposal on reduced monitoring for presentation to the Water Board at the Pardee Technical Seminar.

OTHER BUSINESS-OPERATIONAL

Agenda **Item 10** – Discussion: Toxicity Update – CASA obtained a new draft of the State Toxicity Plan through the Freedom of Information Act, which is linked in the packet. The draft incorporates many of BACWA's comments but does not address a statistical threshold for test acceptance. LACSD has retained an expert to put together a proposal on statistical tests to ensure toxicity tests are valid. One idea that has been floated for reducing toxicity testing costs

is to drop the sensitive species screening. It does not result in cost savings for all agencies to use the same species, but it may be possible to drop the routine screening test and only perform it when there has been a change at the treatment facility or in the SIUs. RPM will develop a recommendation for decreased screening tests.

Agenda **Item 11** - Discussion: Drought Issues. [See link](#) Flow reductions are affecting outfalls and other uses of excess water. An issue that came up at the State of the Estuary is that there is insufficient freshwater entering the Bay.

Agenda **item 12** – Discussion: Update on Ebola Research – An email from CASA was included in the Handout on **Page 77**. CASA research concludes that viruses do survive in wastewater in the absence of disinfection. Both bleach and quaternary disinfectants effectively mitigate contamination.

Agenda **Item 13** – Citizen Suit Reform Legislation – A draft letter for agencies and a copy of the proposed legislation HR3353 was included in the Handout on **Pages 78-82**. CASA is engaged in this effort with Senator Feinstein’s staff.

Agenda **Item 14** – BACWA Sponsorship of the IRWMP Update – In the past BACWA has provided a portion of the funds for this update. A copy of the previous agreement was included in the Handout on **Pages 83-91**. There is a proposal from the Coordinating Committee to update the website and obtain a new website vendor. An RFP will be distributed and options will be evaluated based on the proposals received.

Agenda **Item 15** – Selection Committee for Arleen Navarret Award in 2016. A copy of the Schedule for the Award was included in the Handout on **Page 92**. It was noted that a Board member is needed to join the selection committee. SFPUC volunteered but may not be able to sit on the selection committee if a nomination is received from the SFPUC.

REPORTS

Committee Reports were included in the handout packet for agenda **Item16. Pages 93 to 105.**

AIR Committee: A report from the September 9, 2015 meeting was included in the Handout. The chart describing how legislation and regulations impact operations at POTW’s was noted. The Committee is still deciding if they want to go forward with a meeting between the EPA, PG&E and BACWA even though there do not appear to be any agencies considering pipeline injection at this time. It was also noted that the Committee had concerns about having sufficient budgetary support moving forward. This will be addressed as part of the annual budgeting process.

BAPPG: A supporting letter from BAPPG re AB 888 (Bloom) – BAPPG Support for Plastic Microbeads Ban that was sent to Bay Area State Senators was included in the Handout. Also

included was a list of links for more information on microbeads. Kelly Moran is working with BAPPG on cuprous iodide.

Biosolids Committee: No meeting.

Collections Committee: A report from the September 10, 2015 meeting was included in the Handout.

InfoShare Group: No meeting. There is a new Chair and quarterly meetings will begin soon. It was noted that there is an Asset Management Group currently meeting that has expressed interest in becoming associated with BACWA. It was suggested that they be incorporated into the InfoShare Group rather than become a separate Committee.

Lab Committee: A report from the September 16, 2015 meeting was included in the Handout.

Permits Committee: Reports from the September 8, 2015 meeting was include in the Handout.

Pretreatment Committee: A report from the September 10, 2015 meeting was included in the Handout.

Recycled Water Committee: A report from the September 2, 2015 meeting was included in the Handout.

Member Highlights: Executive Board Representatives (Board) were given an opportunity to provide updates from each of the Principal agencies under agenda **Item 17, Member Highlights**. 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: EBDA is running several pilot programs on peracetic acid disinfection that are looking good. Will be going to a full scale pilot program at Oro Loma and would be interested in other agencies who would like to participate. Questions to be answered revolve around costs, benefits, and operational issues.

EBMUD: Would like to have more discussions on the Pardee agenda in advance of the Technical Seminar.

Central Contra Costa: No report.

San Francisco: Noted that repairs are nearing completion on a pipe that was leaking into Islais Creek. There is an SFEI/ASC research project being considered involving the North Coast Regional Board's work with marijuana growers. Concerns include improving the water quality, working with illegal entities, and safety of the inspectors.

San Jose: No report.

Palo Alto: No report.

Delta Diablo: No report.

Petaluma: No report.

The **Executive Director's Report** was included in the handout packet for agenda **item 18 (Pages 106-111)**. The report includes a link to an EPA document on low-cost modifications to reduce nutrients.

It was noted that 87 of the 90 action items from FY15 have been completed and 16 of the 18 action items from FY16 have been completed.

The **Regulatory Program Manager (RPM) Report under agenda item 19 (Page 112).**

Other BACWA Representative Reports were given an opportunity to provide updates under **agenda Item 20, Other BACWA Representative Reports.** No actions were taken based on the reports.

- a. RMP-TRC: Rod Miller; Laura Pagano – No report.
- b. RMP Steering Committee: Karin North; Jim Ervin – No report.
- c. Summit Partners: Dave Williams – The Agenda from the September 14, 2015 meeting was included in the Handout on **Pages 113-118.** Of special interest was Ken Rubin’s “Utility of the Future” presentation.
- d. ASC/SFEI: Laura Pagano; Dave Williams – No report.
- e. Nutrient Governance Steering Committee: Ben Horenstein; Jim Ervin – 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 – 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 – A meeting summary of the August 24, 2015 meeting of the SF Bay Area IRWMP Coordinating Committee was included in the Handout on **Pages 119-121.**
- l. NACWA Emerging Contaminants: Karin North, Melody LaBella – No report.

SUGGESTIONS FOR FUTURE AGENDA ITEMS:

ANNOUNCEMENTS: Silicon Valley Advanced Water Purification Center will hold an Open House on October 24, 2015 with taste testings.

The Pardee Technical Seminar is scheduled for **October 21-23, 2015** at the EBMUD Pardee Facility.

The next regular meeting of the Board is scheduled for **November 20, 2015 from 9:00 am – 12:30 pm** at the **SFPUC, Hetch Hetchy Room, 13th Floor, 525 Golden Gate Ave., San Francisco, CA.**

The meeting adjourned at 12.40 pm.



Bay Area Clean Water Agencies

A Joint Powers Public Agency

Leading the Way to Protect our Bay

November 18, 2015

MEMO TO: Bay Area Clean Water Agencies Executive Board

MEMO FROM: Lawrence Fan, Acting Controller, East Bay Municipal Utility District 

SUBJECT: Second Month 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, 2015 through August 31, 2015** (two months of Fiscal Year 2015-2016). 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),
- Prop50 Bay Area Integrated Regional Water Mgmt (PRP50)

Fund Balances as of month end 08/31/15

DESCRIPTION	BEGINNING FUND BALANCE 08/1/15	TOTAL RECEIPTS	TOTAL DISBURSEMENTS	ENDING FUND BALANCE 08/31/15	OUTSTANDING ENCUMBRANCES	UNOBLIGATED FUND BALANCE 08/31/15
BACWA	1,006,959	2,438	56,708	952,690	435,528	517,161
LEGAL RSRV	300,000	-	-	300,000	-	300,000
CBC	1,243,029	-	108,814	1,134,215	615,204	519,011
TOTAL	2,549,988	2,438	165,522	2,386,905	1,050,732	1,336,172
					See Encumbrance Report	
AIR	10,171	-	-	10,171	52,000	(41,829)
WOT	45,463	-	-	45,463	-	45,463
PRP84	275,232	-	2,057	273,175	15,965	257,210
PRP50	561,537	-	440,268	121,269	9,614	111,655
TOTAL	892,403	-	442,326	450,077	77,579	372,498
GRAND TOTAL	3,442,391	2,438	607,847	2,836,982	1,128,311	1,708,671

**BACWA PURCHASE ORDERS AS OF AUGUST 2015
OUTSTANDING ENCUMBRANCES**

	PO_NUMBER	PO_DATE	PL_DUE_DATE	VENDOR_NAME	DEPTID	FUND	ORIGINAL AMOUNT ENCUMBERED	REMAINING AMOUNT ENCUMBERED	FUND BALANCE AS OF 8/31/15
1	800-20498-AX	7/29/2015	6/30/2016	DOWNEY BRAND, LLP	800	BACWA	2,500.00	2,500.00	
2	800-20499-AX	7/29/2015	6/30/2016	DAY CARTER & MURPHY LLP	800	BACWA	2,000.00	1,422.00	
3	800-23051-AX	7/29/2015	6/30/2016	DRW ENGINEERING	800	BACWA	183,498.00	168,206.50	
4	800-23052-AX	7/29/2015	6/30/2016	SHERRY A. HULL	800	BACWA	78,642.00	63,594.59	
5	800-23053-AX	7/29/2015	6/30/2016	PATRICIA MCGOVERN ENGINEERS	800	BACWA	123,360.00	111,492.39	
6	800-23055-AX	8/3/2015	6/30/2016	O'RORKE, INC.	800	BACWA	20,000.00	19,235.25	
7	800-23058-AX	8/3/2015	6/30/2016	TDC ENVIRONMENTAL, LLC	800	BACWA	9,975.00	8,093.75	
8	800-23059-AX	8/3/2015	6/30/2016	CAYUGA INFORMATION SYSTEMS	800	BACWA	4,999.00	4,239.00	
9	800-23060-AX	8/11/2015	6/30/2016	EBMUD - BENEFIT BACWA	800	BACWA	40,000.00	40,000.00	
10	800-23061-AX	8/3/2015	6/30/2016	BIG APPLE CAFE	800	BACWA	1,000.00	744.99	
11	800-23062-AX	8/20/2015	6/30/2016	STEPHANIE HUGHES CHF PF	800	BACWA	16,000.00	16,000.00	
	TOTAL FUND 800 - BACWA								952,690.00
12	802-23054-AX	8/25/2015	6/30/2016	CH2M HILL ENGINEERS, INC	802	AIR	52,000.00	52,000.00	
	TOTAL FUND 802 - AIR								10,171.00
13	805-17887-AX	8/20/2013	6/30/2016	SAN FRAN. ESTUARY INSTITUTE	805	CBC	386,771.56	34,609.12	
14	805-20494-AX	1/21/2015	12/31/2018	HDR ENGINEERING, INC.	805	CBC	889,414.00	530,594.78	
15	805-23056-AX	8/12/2015	6/30/2017	APA FAMILY SUPPORT SERVICES	805	CBC	25,000.00	25,000.00	
16	805-23057-AX	8/12/2015	6/30/2017	CALIF INDIAN ENV ALLIANCE	805	CBC	25,000.00	25,000.00	
	TOTAL FUND 805 - CBC								1,134,214.97
TOTAL									
PROPOSITIONS									
17	811-18000-AX	12/13/2012	10/30/2016	AVILA & ASSOCIATES CONSULTING	811	PROP84	100,000.00	15,965.03	273,174.64
18	815-17921-AX	8/12/2010	6/30/2016	AVILA & ASSOCIATES CONSULTING	815	PROP50	74,404.67	9,614.05	121,268.72
TOTAL									
WOT									
GRAND TOTAL									
								1,128,311.45	

BACWA Revenue Detail Report for August 2015

DEPTID	DEPARTMENT	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
				DIRECT	INVOICED	JVS	DIRECT	INVOICED	JVS	ACTUAL	
800	Bay Area Clean Water Agencies	BDO Member Contributions	468,180	-	-	-	-	-	-	-	468,180
800	Bay Area Clean Water Agencies	BDO Fund Transfers	2,500	-	-	2,438	-	-	2,438	2,438	62
800	Bay Area Clean Water Agencies	BDO Interest Income	1,500	-	-	-	-	-	-	-	1,500
800	Bay Area Clean Water Agencies	BDO Assoc.&Affiliate Contr	171,639	-	-	-	-	-	-	-	171,639
800	Bay Area Clean Water Agencies	Bay Area Clean Water Agencies	3,600	-	-	-	-	-	-	-	3,600
	BACWA TOTAL		647,419	-	-	2,438	-	-	2,438	2,438	644,981
802	AIR-Air Issues&Regulation Grp	AIR-Air Issues&Regulation Grp	50,000	-	-	-	-	-	-	-	50,000
802	AIR-Air Issues&Regulation Grp	AIR-Air Issues&Regulation Grp	6,200	-	-	-	-	-	-	-	6,200
	AIR TOTAL		56,200	-	-	-	-	-	-	-	56,200
805	WQA-WtrQualityAttainmntStratgy	BDO Member Contributions	675,000	-	-	-	-	-	-	-	675,000
805	WQA-WtrQualityAttainmntStratgy	BDO Other Receipts	686,779	-	-	-	-	-	-	-	686,779
	WQA CBC TOTAL		1,361,779	-	-	-	-	-	-	-	1,361,779
810	WOT - Wtr/Wwtr Operat Training	BDO Member Contributions	146,000	-	-	-	-	-	-	-	146,000
	WOT TOTAL		146,000	-	-	-	-	-	-	-	146,000
GRAND TOTAL			2,211,398	-	-	2,438	-	-	2,438	2,438	2,208,960

BACWA Expense Report for August 2015

DEPTID	DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
				ENC	PV	DA	JV	ENC	PV	DA	JV		
800	Bay Area Clean Water Agencies	AS-Assistant Executive Directo	78,642	(6,868)	6,868	-	-	63,595	15,047	-	-	78,642	-
800	Bay Area Clean Water Agencies	AS-BACWA Admin Expense	7,500	-	-	524	-	-	-	556	-	556	6,944
800	Bay Area Clean Water Agencies	AS-EBMUD Administrative Servic	40,000	-	-	-	-	40,000	-	-	(10,107)	29,893	10,107
800	Bay Area Clean Water Agencies	AS-Executive Director	183,498	(15,292)	15,292	-	-	168,207	15,292	-	-	183,498	-
800	Bay Area Clean Water Agencies	AS-Insurance	4,500	-	-	-	-	-	-	-	-	-	4,500
800	Bay Area Clean Water Agencies	AS-Regulatory Program Manager	123,360	-	-	-	-	111,492	11,868	-	-	123,360	-
800	Bay Area Clean Water Agencies	BC-BAPPG	86,000	(1,881)	1,881	10,000	-	43,329	2,646	19,000	-	64,975	21,025
800	Bay Area Clean Water Agencies	BC-Biosolids Committee	3,100	-	-	-	-	-	-	149	-	149	2,951
800	Bay Area Clean Water Agencies	BC-Collections System	10,000	-	-	-	-	-	-	-	-	-	10,000
800	Bay Area Clean Water Agencies	BC-InfoShare Groups	1,000	-	-	-	-	-	-	-	-	-	1,000
800	Bay Area Clean Water Agencies	BC-Laboratory Committee	6,000	-	-	-	-	-	-	-	-	-	6,000
800	Bay Area Clean Water Agencies	BC-Miscellaneous Committee Sup	30,000	-	-	-	-	-	-	-	-	-	30,000
800	Bay Area Clean Water Agencies	BC-Permit Committee	1,000	-	-	-	-	-	-	-	-	-	1,000
800	Bay Area Clean Water Agencies	BC-Pretreatment Committee	1,000	-	-	-	-	-	-	-	-	-	1,000
800	Bay Area Clean Water Agencies	BC-Water Recycling Committee	1,000	-	-	-	-	-	-	-	-	-	1,000
800	Bay Area Clean Water Agencies	CAR-BACWA Website Development	7,088	-	-	-	-	4,239	760	664	-	5,663	1,425
800	Bay Area Clean Water Agencies	CAS-Arleen Navaret Award	1,000	-	-	-	-	-	-	-	-	-	1,000
800	Bay Area Clean Water Agencies	CAS-CWCCG	35,000	-	-	-	-	-	-	-	-	-	35,000
800	Bay Area Clean Water Agencies	CAS-FWQC	5,000	-	-	-	-	-	-	-	-	-	5,000
800	Bay Area Clean Water Agencies	CAS-Stanford ERC	10,000	-	-	-	-	-	-	-	-	-	10,000
800	Bay Area Clean Water Agencies	GBS- Meeting Support	16,600	-	-	-	-	745	255	-	-	1,000	15,600
800	Bay Area Clean Water Agencies	LS-Executive Board Support	2,000	-	-	-	-	1,422	578	-	-	2,000	-
800	Bay Area Clean Water Agencies	LS-Regulatory Support	2,500	-	-	-	-	2,500	-	-	-	2,500	-
		BACWA TOTAL	655,788	(24,041)	24,041	10,524	-	435,528	46,446	20,369	(10,107)	492,236	163,552
802	AIR-Air Issues&Regulation Grp	AIR-Air Issues&Regulation Grp	50,000	52,000	-	-	-	52,000	-	-	-	52,000	(2,000)
		AIR TOTAL	50,000	52,000	-	-	-	52,000	-	-	-	52,000	(2,000)
805	WQA-WtrQualityAttainmntStratgy	WQA-CE Addl Work Under Permit	100,000	-	-	15,810	-	-	-	15,810	-	15,810	84,190
805	WQA-WtrQualityAttainmntStratgy	WQA-CE CASA Chem of Concern	15,000	-	-	-	-	-	-	-	-	-	15,000
805	WQA-WtrQualityAttainmntStratgy	WQA-CE Opt-Upgrade Studies	559,000	530,595	-	-	-	530,595	68,034	-	-	598,629	(39,629)
805	WQA-WtrQualityAttainmntStratgy	WQA-CE Risk Reduction	17,500	-	-	-	-	50,000	-	-	-	50,000	(32,500)
805	WQA-WtrQualityAttainmntStratgy	WQA-CE-Nutrient Tech Support	-	(530,595)	-	-	-	-	-	-	-	-	-
805	WQA-WtrQualityAttainmntStratgy	WQA-CE-Nutrient WS Permit Comm	880,000	-	-	-	-	-	-	-	-	-	880,000
805	WQA-WtrQualityAttainmntStratgy	WQA-CE-Program Mgmt	50,000	-	-	-	-	-	-	-	-	-	50,000
805	WQA-WtrQualityAttainmntStratgy	WQA-CE-Technical Support	136,779	(51,728)	51,728	-	-	34,609	56,732	-	(31,762)	59,579	77,200
		WQA CBC TOTAL	1,758,279	(51,728)	51,728	15,810	-	615,204	124,766	15,810	(31,762)	724,018	1,034,261
810	WOT - Wtr/Wwtr Operat Training	Administrative Support	2,500	-	-	-	-	-	-	-	-	-	2,500
		WOT TOTAL	2,500	-	-	-	-	-	-	-	-	-	2,500
		GRAND TOTAL	2,466,567									1,268,254	1,198,313

BACWA Proposition Expense Report for August 2015

DEPTID	DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
				ENC	PV	DA	JV	ENC	PV	DA	JV		
811	Prop84BayArealIntegRegnlWtrMgmt	Administrative Support	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayArealIntegRegnlWtrMgmt	BDO Contract Expenses	-	-	-	-	-	15,965	-	-	-	15,965	(15,965)
811	Prop84BayArealIntegRegnlWtrMgmt	BDO Fund Transfers	-	-	-	-	2,057	-	-	-	2,057	2,057	(2,057)
	PRP84 TOTAL		-	-	-	-	-	15,965	-	-	2,057	18,022	(18,022)
815	Prop50BayArealIntegRegnlWtrMgmt	BDO Fund Transfers	-	-	-	-	381	-	-	-	381	381	(381)
815	Prop50BayArealIntegRegnlWtrMgmt	Administrative Support	-	-	-	-	-	-	-	-	-	-	-
815	Prop50BayArealIntegRegnlWtrMgmt	BDO Contract Expenses	-	-	-	-	-	9,614	-	-	-	9,614	(9,614)
815	Prop50BayArealIntegRegnlWtrMgmt	South Bay Advanced Regional RW	-	-	-	-	-	-	-	292,087	-	292,087	(292,087)
815	Prop50BayArealIntegRegnlWtrMgmt	Pacifica RWP	-	-	-	-	-	-	-	74,440	-	74,440	(74,440)
815	Prop50BayArealIntegRegnlWtrMgmt	Direct Install HET	-	-	-	-	-	-	-	36,680	-	36,680	(36,680)
815	Prop50BayArealIntegRegnlWtrMgmt	Sonoma - Napa Marsh RWP	-	-	-	-	-	-	-	36,680	-	36,680	(36,680)
	PRP50 TOTAL		-	-	-	-	381	9,614	-	439,887	381	449,882	(449,882)



Bay Area Clean Water Agencies

A Joint Powers Public Agency

Leading the Way to Protect our Bay

November 18, 2015

MEMO TO: Bay Area Clean Water Agencies Executive Board

MEMO FROM: Lawrence Fan, Acting Controller, East Bay Municipal Utility District ^{SL}

SUBJECT: Third Month 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, 2015 through September 30, 2015** (three months of Fiscal Year 2015-2016). 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),
- Prop50 Bay Area Integrated Regional Water Mgmt (PRP50)

Fund Balances as of month end 09/30/15

DESCRIPTION	BEGINNING FUND BALANCE 09/1/15	TOTAL RECEIPTS	TOTAL DISBURSEMENTS	ENDING FUND BALANCE 09/30/15	OUTSTANDING ENCUMBRANCES	UNOBLIGATED FUND BALANCE 09/30/15
BACWA	1,006,959	486,219	134,538	1,358,640	403,552	955,088
LEGAL RSRV	300,000	-	-	300,000	-	300,000
CBC	1,243,029	894,744	1,006,586	1,131,187	587,432	543,755
TOTAL	2,549,988	1,380,963	1,141,124	2,789,827	990,984	1,798,843
					See Outstanding Encumbrance Report	
AIR	10,171	34,293	-	44,464	52,000	(7,536)
WOT	45,463	97,026	-	142,489	-	142,489
PRP84	275,232	209	2,057	273,384	15,965	257,419
PRP50	561,537	281	440,268	121,550	9,614	111,936
TOTAL	892,403	131,810	442,326	581,887	77,579	504,308
GRAND TOTAL	3,442,391	1,512,773	1,583,450	3,371,714	1,068,563	2,303,152

**BACWA PURCHASE ORDERS AS OF SEPTEMBER 2015
OUTSTANDING ENCUMBRANCES**

	PO_NUMBER	PO_DATE	PL_DUE_DATE	VENDOR_NAME	DEPTID	FUND	ORIGINAL AMOUNT ENCUMBERED	REMAINING AMOUNT ENCUMBERED	FUND BALANCE AS OF 9/31/15
1	800-20498-AX	7/29/2015	6/30/2016	DOWNEY BRAND, LLP	800	BACWA	2,500.00	2,430.00	
2	800-20499-AX	7/29/2015	6/30/2016	DAY CARTER & MURPHY LLP	800	BACWA	2,000.00	1,422.00	
3	800-23051-AX	7/29/2015	6/30/2016	DRW ENGINEERING	800	BACWA	183,498.00	168,206.50	
4	800-23052-AX	7/29/2015	6/30/2016	SHERRY A. HULL	800	BACWA	78,642.00	56,883.55	
5	800-23053-AX	7/29/2015	6/30/2016	PATRICIA MCGOVERN ENGINEERS	800	BACWA	123,360.00	92,847.81	
6	800-23055-AX	8/3/2015	6/30/2016	O'RORKE, INC.	800	BACWA	20,000.00	19,235.25	
7	800-23058-AX	8/3/2015	6/30/2016	TDC ENVIRONMENTAL, LLC	800	BACWA	9,975.00	8,093.75	
8	800-23059-AX	8/3/2015	6/30/2016	CAYUGA INFORMATION SYSTEMS	800	BACWA	4,999.00	4,239.00	
9	800-23060-AX	8/11/2015	6/30/2016	EBMUD - BENEFIT BACWA	800	BACWA	40,000.00	40,000.00	
10	800-23061-AX	8/3/2015	6/30/2016	BIG APPLE CAFE	800	BACWA	1,000.00	744.99	
11	800-23062-AX	8/20/2015	6/30/2016	STEPHANIE HUGHES CHF PF	800	BACWA	16,000.00	13,554.85	
TOTAL FUND 800 - BACWA							481,974.00	407,657.70	1,658,640.00
12	802-23054-AX	8/25/2015	6/30/2016	CH2M HILL ENGINEERS, INC	802	AIR	52,000.00	52,000.00	
TOTAL FUND 802 - AIR							52,000.00	52,000.00	44,464.00
13	805-17887-AX	8/20/2013	6/30/2016	SAN FRAN. ESTUARY INSTITUTE	805	CBC	386,771.56	34,609.12	
14	805-20494-AX	1/21/2015	12/31/2018	HDR ENGINEERING, INC.	805	CBC	889,414.00	502,822.65	
15	805-23056-AX	8/12/2015	6/30/2017	APA FAMILY SUPPORT SERVICES	805	CBC	25,000.00	25,000.00	
16	805-23057-AX	8/12/2015	6/30/2017	CALIF INDIAN ENV ALLIANCE	805	CBC	25,000.00	25,000.00	
TOTAL FUND 805 - CBC							1,326,185.56	587,431.77	1,131,186.96
TOTAL							1,860,159.56	1,047,089.47	
PROPOSITIONS									
17	811-18000-AX	12/13/2012	10/30/2016	AVILA & ASSOCIATES CONSULTING	811	PROP84	100,000.00	15,965.03	273,383.98
18	815-17921-AX	8/12/2010	6/30/2016	AVILA & ASSOCIATES CONSULTING	815	PROP50	74,404.67	9,614.05	121,549.95
TOTAL							174,404.67	25,579.08	394,933.93
WOT									142,489.37
GRAND TOTAL								1,072,668.55	3,371,714.26

BACWA Revenue Report for September 2015

DEPTID	DEPARTMENT	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE			UNOBLIGATED	
				DIRECT	INVOICED	JVS	DIRECT	INVOICED	JVS		ACTUAL
800	Bay Area Clean Water Agencies	BDO Member Contributions	468,180	-	374,544	-	-	374,544	-	374,544	93,636
800	Bay Area Clean Water Agencies	BDO Other Receipts	-	-	2,400	-	-	2,400	-	2,400	(2,400)
800	Bay Area Clean Water Agencies	BDO Fund Transfers	2,500	-	-	-	-	-	2,438	2,438	62
800	Bay Area Clean Water Agencies	BDO Interest Income	1,500	-	-	735	-	-	735	735	765
800	Bay Area Clean Water Agencies	BDO Assoc.&Affiliate Contr	171,639	-	106,101	-	-	106,101	-	106,101	65,538
800	Bay Area Clean Water Agencies	Bay Area Clean Water Agencies	3,600	-	-	-	-	-	-	-	3,600
	BACWA TOTAL		647,419	-	483,045	735	-	483,045	3,174	486,219	161,200
802	AIR-Air Issues&Regulation Grp	BDO Member Contributions	-	-	34,280	-	-	34,280	-	34,280	(34,280)
802	AIR-Air Issues&Regulation Grp	BDO Interest Income	-	-	-	13	-	-	13	13	(13)
802	AIR-Air Issues&Regulation Grp	AIR-Air Issues&Regulation Grp	50,000	-	-	-	-	-	-	-	50,000
802	AIR-Air Issues&Regulation Grp	AIR-Air Issues&Regulation Grp	6,200	-	-	-	-	-	-	-	6,200
	AIR TOTAL		56,200	-	34,280	13	-	34,280	13	34,293	21,907
805	WQA-WtrQualityAttainmntStratgy	BDO Member Contributions	675,000	-	472,472	-	-	472,472	-	472,472	202,528
805	WQA-WtrQualityAttainmntStratgy	BDO Other Receipts	686,779	-	421,170	-	-	421,170	-	421,170	265,609
805	WQA-WtrQualityAttainmntStratgy	BDO Interest Income	-	-	-	1,102	-	-	1,102	1,102	(1,102)
	WQA CBC TOTAL		1,361,779	-	893,642	1,102	-	893,642	1,102	894,744	467,035
810	WOT - Wtr/Wwtr Operat Training	BDO Member Contributions	146,000	-	97,000	-	-	97,000	-	97,000	49,000
810	WOT - Wtr/Wwtr Operat Training	BDO Interest Income	-	-	-	26	-	-	26	26	(26)
	WOT TOTAL		146,000	-	97,000	26	-	97,000	26	97,026	48,974
	GRAND TOTAL		2,211,398	-	1,507,967	1,877	-	1,507,967	4,316	1,512,283	699,115

BACWA Expense Report for September 2015

DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
			ENC	PV	DA	JV	ENC	PV	DA	JV		
Bay Area Clean Water Agencies	AS-Assistant Executive Directo	78,642	(6,711)	6,711	-	-	56,884	21,758	-	-	78,642	-
Bay Area Clean Water Agencies	AS-BACWA Admin Expense	7,500	-	-	83	-	-	-	639	-	639	6,861
Bay Area Clean Water Agencies	AS-EBMUD Administrative Serv	40,000	-	-	2,980	-	40,000	-	2,980	(10,107)	32,873	7,127
Bay Area Clean Water Agencies	AS-Executive Director	183,498	-	-	-	-	168,207	15,292	-	-	183,498	-
Bay Area Clean Water Agencies	AS-Insurance	4,500	-	-	4,152	-	-	-	4,152	-	4,152	348
Bay Area Clean Water Agencies	AS-Regulatory Program Manager	123,360	(18,645)	18,645	-	-	92,848	30,512	-	-	123,360	-
Bay Area Clean Water Agencies	BC-BAPPG	86,000	(6,279)	6,279	3,500	-	37,050	8,925	22,500	-	68,475	17,525
Bay Area Clean Water Agencies	BC-Biosolids Committee	3,100	-	-	-	-	-	-	149	-	149	2,951
Bay Area Clean Water Agencies	BC-Collections System	10,000	-	-	-	-	-	-	-	-	-	10,000
Bay Area Clean Water Agencies	BC-InfoShare Groups	1,000	-	-	-	-	-	-	-	-	-	1,000
Bay Area Clean Water Agencies	BC-Laboratory Committee	6,000	-	-	-	-	-	-	-	-	-	6,000
Bay Area Clean Water Agencies	BC-Miscellaneous Committee Sup	30,000	-	-	-	-	-	-	-	-	-	30,000
Bay Area Clean Water Agencies	BC-Permit Committee	1,000	-	-	-	-	-	-	-	-	-	1,000
Bay Area Clean Water Agencies	BC-Pretreatment Committee	1,000	-	-	49	-	-	-	49	-	49	951
Bay Area Clean Water Agencies	BC-Water Recycling Committee	1,000	-	-	-	-	-	-	-	-	-	1,000
Bay Area Clean Water Agencies	CAR-BACWA Website Development/	7,088	(180)	180	90	-	4,059	940	754	-	5,753	1,335
Bay Area Clean Water Agencies	CAS-Arleen Navaret Award	1,000	-	-	-	-	-	-	-	-	-	1,000
Bay Area Clean Water Agencies	CAS-CWCCG	35,000	-	-	35,000	-	-	-	35,000	-	35,000	-
Bay Area Clean Water Agencies	CAS-FWQC	5,000	-	-	-	-	-	-	-	-	-	5,000
Bay Area Clean Water Agencies	CAS-Stanford ERC	10,000	-	-	-	-	-	-	-	-	-	10,000
Bay Area Clean Water Agencies	GBS- Meeting Support	16,600	(92)	92	-	-	653	347	-	-	1,000	15,600
Bay Area Clean Water Agencies	LS-Executive Board Support	2,000	-	-	-	-	1,422	578	-	-	2,000	-
Bay Area Clean Water Agencies	LS-Regulatory Support	2,500	(70)	70	-	-	2,430	70	-	-	2,500	-
	BACWA TOTAL	655,788	(31,977)	31,977	45,854	-	403,551.80	78,422	66,223	(10,107)	538,090	117,698
AIR-Air Issues&Regulation Grp	AIR-Air Issues&Regulation Grp	50,000	-	-	-	-	52,000	-	-	-	52,000	(2,000)
	AIR TOTAL	50,000	-	-	-	-	52,000	-	-	-	52,000	(2,000)
WQA-WtrQualityAttainmntStratgy	WQA-CE Addl Work Under Permit	100,000	-	-	-	-	-	-	15,810	-	15,810	84,190
WQA-WtrQualityAttainmntStratgy	WQA-CE CASA Chem of Concern	15,000	-	-	-	-	-	-	-	-	-	15,000
WQA-WtrQualityAttainmntStratgy	WQA-CE Opt-Upgrade Studies	559,000	(27,772)	27,772	-	-	502,823	95,806	-	-	598,629	(39,629)
WQA-WtrQualityAttainmntStratgy	WQA-CE Risk Reduction	17,500	-	-	-	-	50,000	-	-	-	50,000	(32,500)
WQA-WtrQualityAttainmntStratgy	WQA-CE-Nutrient WS Permit Comm	880,000	-	-	870,000	-	-	-	870,000	-	870,000	10,000
WQA-WtrQualityAttainmntStratgy	WQA-CE-Program Mgmt	50,000	-	-	-	-	-	-	-	-	-	50,000
WQA-WtrQualityAttainmntStratgy	WQA-CE-Technical Support	136,779	-	-	-	-	34,609	56,732	-	(31,762)	59,579	77,200
	WQA CBC TOTAL	1,758,279	(27,772)	27,772	870,000	-	587,432	152,538	885,810	(31,762)	1,594,018	164,261
		2,464,067	(59,749)	59,749	915,854	-	1,042,984	230,960	952,033	(41,869)	2,184,108	279,959

BACWA Proposition Expense Report for September 2015

DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
			ENC	PV	DA	JV	ENC	PV	DA	JV		
Prop84BayAreaIntegRegnlWtrMgmt	Administrative Support	-	-	-	-	-	-	-	-	-	-	-
Prop84BayAreaIntegRegnlWtrMgmt	BDO Contract Expenses	-	-	-	-	15,965	-	-	-	-	15,965	(15,965)
Prop84BayAreaIntegRegnlWtrMgmt	BDO Fund Transfers	-	-	-	-	-	-	-	2,057	-	2,057	(2,057)
PRP84 TOTAL		-	-	-	-	15,965	-	-	2,057	-	18,022	(18,022)
Prop50BayAreaIntegRegnlWtrMgmt	Administrative Support	-	-	-	-	-	-	-	-	-	-	-
Prop50BayAreaIntegRegnlWtrMgmt	BDO Contract Expenses	-	-	-	-	9,614	-	-	-	-	9,614	(9,614)
Prop50BayAreaIntegRegnlWtrMgmt	BDO Fund Transfers	-	-	-	-	-	-	-	-	381	381	(381)
Prop50BayAreaIntegRegnlWtrMgmt	Direct Install HET	-	-	-	-	-	-	36,680	-	-	36,680	(36,680)
Prop50BayAreaIntegRegnlWtrMgmt	Pacifica RWP	-	-	-	-	-	-	74,440	-	-	74,440	(74,440)
Prop50BayAreaIntegRegnlWtrMgmt	Sonoma - Napa Marsh RWP	-	-	-	-	-	-	36,680	-	-	36,680	(36,680)
Prop50BayAreaIntegRegnlWtrMgmt	South Bay Advanced Regional RW	-	-	-	-	-	-	292,087	-	-	292,087	(292,087)
PRP50 TOTAL		-	-	-	-	9,614	-	439,887	381	-	449,882	(449,882)
		-	-	-	-	25,579	-	439,887	2,438	-	467,905	(467,905)



BACWA EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 3

FILE NO.: 16-20

MEETING DATE: 11/20/15

TITLE: Approval of Audited Financial Reports for the Years Ended June 30, 2014 and 2015, and the BACWA Annual Report to its Members for FY 15.

RECEIPT DISCUSSION RESOLUTION APPROVAL

RECOMMENDED ACTION

Approve the two Audited Financial Report for 2014 and 2015 (Basic Financial Statements and Memorandum of Internal Control) provided by EBMUD acting as Treasurer of BACWA, and approve the BACWA Annual Report to its membership for FY 15.

SUMMARY

At the end of each fiscal year EBMUD requests an audit of the BACWA financials and provides the reports to BACWA. The two audits are provided for Board approval (see attached). There were no significant issues found in either audit. In addition BACWA is required to prepare and Annual Report to its membership which describes the technical and financial activities of the Association for the preceding year.

FISCAL IMPACT

Audits are prepared by EBMUD and paid for under the accounting fees paid by BACWA to EBMUD. The Annual Report to its members is prepared by BACWA staff.

ALTERNATIVES

Do not approve the audited financial reports and the Annual Report to the membership. This is not recommended as the audits and the Annual Report are required by the BACWA JPA.

Attachments:

BACWA Basic Financial Statements – see link to BACWA website on Agenda

Memorandum on Internal Control and Required Communications – see link to BACWA website on Agenda

BACWA FY15 Annual Report to Members

Approved:

Laura Pagano, Chair
BACWA

Date: _____



BACWA EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 5
FILE NO.: 16-22
MEETING DATE: 11/20/15

TITLE: AUTHORIZE A CONTRIBUTION TO NORTH BAY WATERSHED ASSOCIATION FOR FY16

RECEIPT DISCUSSION RESOLUTION APPROVAL

RECOMMENDED ACTION

Authorize a contribution for sponsorship of the North Bay Watershed Association's (NBWA) Annual Conference in an amount not to exceed \$1,500.00 for FY2016.

SUMMARY

BACWA has received a request for sponsorship of the NBWA Annual Conference (see attachments). The agenda for the conference includes discussion of issues of interest to BACWA (i.e. Climate adaptation, Integrated Projects and Recycling). In previous years BACWA determined that the Conference met the criteria for BACWA sponsorship (see attached criteria) and thus decided to be a sponsor at the Water Associate Sponsor level with a contribution of \$1,500. As an Associate sponsor BACWA will receive two complimentary tickets to the Conference.

FISCAL IMPACT

Funds were not specifically budgeted for this contribution in the BACWA FY2016 Budget however funds are available in the General Technical Support budget line item.

ALTERNATIVES

The alternative is not to fund the sponsorship. This is not recommended as the requests meets the criteria for BACWA sponsorship, BACWA has sponsored the event in the past, and this Conference benefits the BACWA members specifically those in the North Bay area plus complimentary registration is provide for two BACWA members.

Attachments:

Sponsor Invitation Letter

Sponsor Levels

Sponsor Confirmation Form

Conference Speakers

BACWA Criteria on Decision Making for Funding Collaborative Initiatives or Sponsorships

Approved:

Laura Pagano, Chair
BACWA

Date: _____



Bel Marin Keys Community Services District
Central Marin Sanitation Agency
City of Novato
City of Petaluma
City of San Rafael
City of Sonoma
County of Marin
County of Sonoma
Las Gallinas Valley Sanitary District
Marin County Stormwater Pollution Prevention Program
Marin Municipal Water District
Napa County Flood Control and Water Conservation District
Napa Sanitation District
North Marin Water District
Novato Sanitary District
Ross Valley Sanitary District
Sonoma County Water Agency
Sonoma Valley County Sanitation District

Associate Members:
The Bay Institute
Tomales Bay Watershed Council

Group Members:
City of Mill Valley
Sewerage Agency of Southern Marin

October, 2015

Dear Potential Sponsor:

We invite you to become a sponsor of the North Bay Watershed Association's 2016 Conference on **“Water Management in the 21st Century: Innovation, Integration, Adaptation”** to be held on Friday, April 22, 2016 at the Embassy Suites Napa Valley, 1075 California Boulevard, Napa from 8:30 a.m. to 4:15 p.m.

Conference highlights include:

* Keynote Addresses:

Invited – Congressman Jared Huffman and
California State Senator Lois Wolk

* Panel Discussions on:

Climate Adaptation – Extreme Weather Events

Integrated Projects – Large and Small Scale

**Barriers and Bridges – Recycling, Direct Potable Reuse,
Groundwater Sustainability**

The conference will bring together key participants from around the North Bay with a focus on how we all can collaborate and work together to plan for climate change. Your support will help promote regional cooperation and the sharing of resources and information to create a sustainable future for the North Bay.

Thank you for considering our request to be part of this North Bay community event.

If you have any questions, please contact Elizabeth Preim-Rohtla, NBWA Assistant, at (415) 945-1475 or by email at epreim-rohtla@marinwater.org

Sincerely,

Harry Seraydarian

Harry Seraydarian
Executive Director
North Bay Watershed Association



North Bay Watershed Association

2016 Conference

“Water Management in the 21st Century:
Innovation, Integration, Adaptation”

Friday, April 22, 2016

8:00 am – 4:30 pm

SPONSOR BENEFITS

Water Steward Sponsor: \$10,000

- *Afternoon Wine Tasting Host*
- *Name and/or logo on Pads and Pens for all attendees*
- *Prominent location of sponsor table to distribute materials*
- *6 tickets to Conference*

Water Partner Sponsor: \$7,500

- *Luncheon Host*
- *Name and/or logo on luncheon table tent cards*
- *Sponsor table to distribute materials*
- *5 tickets to Conference*

Water Collaborator Sponsor: \$5,000

- *Morning & Break Host*
- *Name and/or logo on napkins*
- *Sponsor table to distribute materials*
- *4 tickets to Conference*

Water Colleague Sponsor: \$2,500

- *Sponsor table to distribute materials*
- *2 tickets to Conference*

Water Associate Sponsor: \$1,500

- *2 tickets to Conference*

All Sponsors receive:

- *Name and/or logo listed in Invitation*
- *Name and/or logo listed in Program*
- *Name and/or logo listed on Signs at event*
- *Name and logo displayed on NBWA website for a year*



**North Bay Watershed Association
2016 Conference**
**“Water Management in the 21st Century:
Innovation, Integration, Adaptation”**
Friday, April 22, 2016
8:00 am – 4:30 pm

SPONSOR CONFIRMATION

Yes, I want to participate as a Sponsor for NBWA’s 2016 Conference to be held at the Embassy Suites Napa Valley at the following level:

- \$10,000 – Water Steward
- \$ 7,500 – Water Partner
- \$ 5,000 – Water Collaborator
- \$ 2,500 – Water Colleague
- \$ 1,500 – Water Associate

Company/Organization: _____
(As you would like it to appear in printed materials.)

Address: _____

Contact Name: _____

Phone #: _____ Fax #: _____

Email: _____

Total Sponsor Contribution: \$ _____

I would like _____ additional tickets @ \$95 each (\$85 before Feb. 1, 2016)

Total amount: _____

Credit Card: _____ Exp. Date: _____

Name on Card: _____

Signature: _____

1. **Please fax this form to Elizabeth Preim-Rohtla at (415) 945-1474 or scan and email to epreim-rohtla@marinwater.org by Monday, February 1, 2016. Thank you!**

2. **Please return this form if paying by check – payable to:
Marin Municipal Water District
NBWA 2016 Conference
220 Nellen Avenue
Corte Madera, CA 94925**

For more information, please call Elizabeth Preim-Rohtla at (415) 945-1475.

NBWA 2016 Conference Speakers – Water is Water (Place holder)

Panel #1 *Climate Adaptation-extreme weather events* (Place holder)

Claire Jahns, Resources Agency- California Climate Adaptation
Dr, Rob Cifelli, NOAA- Bay Area Advanced Quantification Precipitation Information System
Jeremy Lowe, SFEI- Shoreline Resiliency
Dr. Lisa Micheli, Pepperwood, North Bay Climate Adaptation Initiative(cover fire)

Panel #2 *Integrated Projects-large and small scale* (Place holder)

Panel Speakers

Amy Hutzal, SCC- Bay Area Integrated Projects
Norma Camacho, SCVWD- Integrating Flood Protection, Habitat Enhancement, and Groundwater Recharge in an Urbanized Watershed
David Rabbitt-NBWRA- Recycling - Habitat and Ag(Vineyard) Use
Ellie Cohen, Point Blue- STRAW small scale restoration and climate change

Panel #3 *Barriers and Bridges- Recycling, Direct Potable Reuse, groundwater sustainability* (Place holder)

Panel Speakers

Mike Myatt, WCF- Water Supply Sustainability(Sonoma pilot)
Paula Kehoe, SFPUC- Recycling
Jim Fiedler, SCVWD- Direct Potable Reuse
Dave Gutierrez DWR- Groundwater Sustainability

Keynotes

Senator Lois Wolk-contacted

Congressman Jared Huffman-contacted

CRITERIA FOR DECISION MAKING ON REQUESTS FOR FUNDING COLLABORATIVE INITIATIVES OR SPONSORSHIPS

THRESHOLD CRITERIA

Are there funds available in the current fiscal year budget line item where these types of initiatives are specifically budgeted? ***If not, optional funding mechanisms should be identified.***

ADDITIONAL CRITERIA

1. Is the mission of the organization making the request or the specific initiative for which funding is sought sufficiently aligned with BACWA's mission or specific initiatives to warrant funding? ***It is preferable to have a linkage to BACWA's mission or initiatives.***
2. Will there be any direct benefit to BACWA or its membership? ***It is preferable to have a direct measurable benefit to BACWA or a majority of its membership.***
3. Will there be any accountability as to how the funds are spent? ***It is preferable to have some feedback mechanism, as to how specifically the funds were used.***
4. Is the request for a one time contribution or is it a recurring contribution; or is there an expectation of a recurring contribution? ***A one-time contribution is preferable.***
5. Are there identified upsides to BACWA making the contribution? ***Identified upsides which may warrant approving the request include furthering environmental protection, increasing public awareness of their role in pollution prevention, advancing technology associated with wastewater treatment, etc.***
6. Is the amount requested in-line with other BACWA contributions? ***If a request is greater than \$25,000 or cumulatively more than \$50,000, need to ensure compliance with BACWA policies and JPA requirements.***
7. In exchange for the contribution does BACWA gain a voice in the initiative or the activities of the organization? ***BACWA being offered a voice in the governance associated with the completion of the initiative or carrying out the mission of the organization is preferable.***
8. Is the request for use of discretionary funds a high priority relative to other such requests? ***If so, consideration should be given to approving the request assuming funds are available.***



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 4

FILE NO.: 16-21

MEETING DATE: November 20, 2015

TITLE: Solano Community College Agreement with BACWA for BACWWE/WOT Program

RECEIPT DISCUSSION RESOLUTION APPROVAL

RECOMMENDED ACTION

- 1) Approve revised agreement between BACWA and Solano Community College for the Bay Area Consortium for Water & Wastewater Education Water Operator Training Program (BACWWE/WOT); and
- 2) Approve the payment of \$71,500 for the Fall Semester, 2015.

SUMMARY

Since June of 2007 BACWA has provided contracting and financial management services for the Water Operator Training program, now called the Bay Area Consortium for Water & Wastewater Education. Participating agencies are billed by BACWA and their contributions fund the Solano Community College (Solano CC) courses for the program and a \$2,500 annual BACWA administration fee. This program has grown from its ten original sponsors to 22 agencies from five counties contributing funds for Fall 2015.

The Board has expressed concern that previous agreements did not protect BACWA from financial liability in the event that adequate funds were not collected from the program contributors. In cooperation with the BACWWE/WOT Program Manager, E.J. Shalaby, and Solano Community College, BACWA has revised the contract template to include language to address these liability concerns and agreed that the total contract amount represents the upper limit of payments but the actual payment will not exceed the amount of unobligated funds available in the BACWWE/WOT account.

FISCAL IMPACT

Based on September 2015 Treasurer's Report, the WOT account has an unobligated fund balance of \$142,489.

ALTERNATIVES

This action does not require consideration of alternatives since it represents only a pass-through of funds in the WOT account.

Attachments: Solano Community College District Agreement for Educational Services, Fall 2015.

Approved:

Laura Pagano, Chair
BACWA

Date: _____

SOLANO COMMUNITY COLLEGE DISTRICT AGREEMENT FOR EDUCATIONAL SERVICES

This agreement is entered into by and between **SOLANO COMMUNITY COLLEGE DISTRICT**, hereinafter referred to as “District” and **Bay Area Clean Water Agencies**, hereinafter referred to as “BACWA.”

WHEREAS, BACWA desires to engage the District to render special educational services,

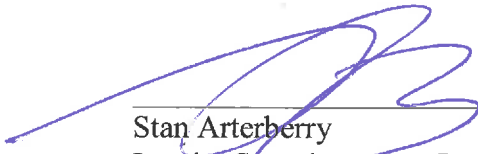
THEREFORE, THE PARTIES AGREE AS FOLLOWS:

- A. The District will provide Five (5) credit classes, WATER 100, Wastewater Treatment I, WATER 101, Basic Chemistry for Water and Wastewater, WATER 106, Instrumentation and Controls, WATER 120, Distribution Systems Maintenance, and WATER 121, Collections Systems Maintenance, for up to 30 students per class, for BACWA member organizations and other interested parties, provided member needs are met.
- B. The District will develop, coordinate, deliver, and evaluate the training. Instruction/training will be delivered at various BACWWE sites, to be determined. Classes will begin in August 2015, exact dates to be determined. Additional training can be scheduled as needed with an addendum to this contract.
- C. The District will maintain the BACWWE (Bay Area Consortium for Water & Wastewater Education) website and database and provide marketing and marketing materials for sponsoring agencies.
- D. Solano Community College and BACWWE will recruit, identify and select all trainees who will participate in training.
- E. Subject to availability of funds collected from sponsoring agencies BACWA will compensate the District up to a maximum amount for Fall 2015 of seventy one thousand five hundred dollars (\$71,500) for all services rendered hereunder, as follows: for each 3 or 4 credit hour class fifteen thousand five hundred dollars (\$15,500); for each 2 or 2 ½ credit hour class thirteen thousand five hundred dollars (\$12,500). The cost is inclusive of all instruction and teaching/training materials.
- F. Payments by BACWA to the District will be due upon receipt of invoice. An invoice will be generated upon completion of the first month of instruction.

- G. This contract may be terminated by either party upon written notice of not less than ten (10) business days.
- H. It is mutually understood that BACWA and the District shall secure and maintain in full force and effect during the full term of this Agreement, liability insurance in the amounts and written by carriers satisfactory to BACWA and the District respectively.
- I. The District will indemnify, and hold harmless, in any actions of law or equity, BACWA, its officers, employees, agents and elective and appointive boards from all claims, losses, damage, including property damages, personal injury, including death, and liability of every kind, nature and description, directly or indirectly arising from the operations of the District under this Agreement or of any persons directly or indirectly employed by, or acting as agent for the District, except to the extent caused by the sole negligence or willful misconduct of BACWA. This indemnification shall extend to claims, losses, damages, injury and liability for injuries occurring after completion of the services rendered pursuant to this Agreement, as well as during the process of rendering such services. Acceptance of insurance certificates required under this Agreement does not relieve the District from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply to all damages and claims for damages of every kind suffered, by reason of any of the District's operations under this Agreement regardless of whether or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages.
- J. BACWA will indemnify, and hold harmless in any actions of law or equity, the District, its officers, employees, agents and elective and appointive boards from all claims, losses, damage, including property damages, personal injury, including death, and liability of every kind, nature and description, directly or indirectly arising from the operations of BACWA under this Agreement or of any persons directly or indirectly employed by, or acting as agent for the District, except to the extent caused by the sole negligence or willful misconduct of the District. This indemnification shall extend to claims losses, damages, injury and liability for injuries occurring after completion of the services rendered pursuant to this Agreement, as well as during the process of rendering such services. Acceptance of insurance certificates required under this Agreement does not relieve BACWA from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply to all damages and claims for damages of every kind suffered, by reason of any of BACWA operations under this Agreement regardless of whether or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages.

K. BACWA agrees that it will not discriminate in the selection of any student to receive instruction pursuant to the Agreement because of sex, sexual preference, race, color, religious creed, national origin, marital status, veteran status, medical condition, age (over 40), pregnancy, disability, and political affiliation. In the event of BACWA's non-compliance with this section, the Agreement may be canceled, terminated, or suspended in whole or in part by the District.

Laura Pagano
BACWA Executive Board Chair
PO Box 24055, MS 59
Oakland, CA 94623



Stan Arterberry
Interim Superintendent-President
Solano Community College District
Fairfield, CA

Date _____

Date 10-27-15



EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.: 6

FILE NO.: 16-23

MEETING DATE: 11/20/15

TITLE: BACWA Executive Board Approval to Amend the Agreement with O’Rorke for BAPPG Social Marketing and Integrated Outreach Plan Implementation

RECEIPT DISCUSSION RESOLUTION APPROVAL

RECOMMENDED ACTION

Authorize increasing the contract with O’Rorke for BAPPG Social Marketing and Integrated Outreach support in the amount of \$8,450.00 for fiscal year 2016.

SUMMARY

This contract increase will provide support for public outreach, graphic design, media relations, and administrative support for placement and payment of advertising services for the Bay Area Pollution Prevention Group. The consultant will support BAPPG Project Leads in executing effective outreach messages and search for new opportunities to inspire behavior change in target groups.

Scope of Work:

- 1) **No Drugs Down the Drain:** O’Rorke will develop, book and implement a regional online campaign to educate Bay Area residents about proper pharmaceutical disposal practices. We will also design visuals and messaging that will be printed on pharmaceutical bags. The BAPPG team will be responsible for printing the pharmaceutical bags after O’Rorke develops the artwork.
- 2) **Commercial Laundry Outreach:** O’Rorke will help BAPPG to conduct research on what previous outreach has been done to educate residents and businesses about the sources of Alkyl Phenol Ethoxylates. We will also develop a fact sheet to educate commercial laundry facilities, hospitals, prisons, schools and other groups about this pollutant.

Social Marketing Outreach efforts will be carried out under the supervision of the BAPPG Chair.

FISCAL IMPACT

Funds are available for this agreement and have been allocated for this project within the following BAPPG FY 2015-16 budget line items:

- No Drugs down the Drain \$5,450
- Commercial Laundry \$3,000

TOTAL: \$8,450

ALTERNATIVES

Not funding these projects will require an alternative method for completing the two line items.

Attachments:

Exhibit A: Scope of Work & Cost Estimate for FY16 Agreement with O’Rorke

Approved:

Laura Pagano, Chair
BACWA

Date: _____

BAY AREA CLEAN WATER AGENCIES

PURCHASE ORDER

TO: Tracy Keough
 O'Rorke, Inc.
 55 Hawthorne Street, Suite 550
 San Francisco, CA 94105

Tracy@ororkeinc.com
 (415) 543-1426

FROM: David Williams, Executive Director
 BACWA
 PO Box 24055, MS59
 Oakland, CA 94623

dwilliams@bacwa.org
 Phone: 925-765-9616
 FAX: (510) 287-1351

RE: BACWA Purchase Order for FY2016 BAPPG, Social Marketing and Integrated Outreach Plan Implementation.

This Purchase Order (PO) covers additional professional services to be performed by O'Rorke, Inc. in order to implement the FY2016 BAPPG Social Marketing and Outreach Support. This work is described in the attached Scope of Work and under the direction of Robert Wilson of the City of Petaluma. The additional cost of professional services to be performed by O'Rorke, Inc. is not to exceed \$8,450. This contract will be funded by the BAPPG 2016 Budget under the following line items:

- No Drugs down the Drain \$5,450
- Commercial Laundry \$3,000

TOTAL: \$8,450

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

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

E-mail: shulll@bacwa.org

Approved:

By _____
 David Williams
 Executive Director, BACWA Executive Board

By _____
 Tracy Keough
 O'Rorke, Inc.

Date _____
 BACWA EIN: 94-3389334

Date _____

BACKGROUND

O'Rorke will develop, book and implement a regional online campaign to educate Bay Area residents about proper pharmaceutical disposal practices. We will also design visuals and messaging that will be printed on pharmaceutical bags. The BAPPG team will be responsible for printing the pharmaceutical bags after O'Rorke develops the artwork.

TIMING

- Week of November 16 – Finalize outreach plan
- Week of November 30 – Develop drafts online ad layouts, book online media buy
- Week of December 7 – Finalize online ads and submit to media outlets, develop draft of pharmaceutical bag
- Week of December 7 – Finalize artwork for pharmaceutical bag
- October 14 – January 3 – Online regional campaign flight dates

RECOMMENDED MEDIA

Facebook Ads – This popular social media network allows us to geo-target only Bay Area users. Facebook ads are managed by our media buyer in real time and feature a simple image and short message with a link to Baywise.org. We are only charged when a user clicks on an ad, and are able to set our own daily campaign budget.

Pandora Streaming Radio Ads – Pandora streaming radio ads allow us to reach users who listen to music on their mobile and desktop devices. We would run a :30 radio spot and a banner ad, both of which would direct listeners to visit Baywise.org.

KEY MESSAGES

- Never flush unwanted medicine
- Use the Earth 911 recycling location search engine on Baywise.org to find disposal locations
- Bring pills and tablets in a ziplock bag and recycle vials / bottles at home

BUDGET

The BAPPG has already encumbered **\$2,500.00** from the pharmaceutical line item for these projects. In order to develop both an online regional campaign that reaches as many residents as possible while also producing artwork for a pharmaceutical bag, we recommend increasing the budget by \$5,450.00.

ITEM	COST
Facebook	\$1,450
Pandora	\$4,000
Project Management & Creative Development	\$2,500
TOTAL	\$7,950
Encumbered Funds	-\$2,500
Requested Budget Increase	\$5,450

BACKGROUND

O’Rorke will help BAPPG to conduct research on what previous outreach has been done to educate residents and businesses about the sources of Alkyl Phenol Ethoxylates. We will also develop a fact sheet to educate commercial laundry facilities, hospitals, prisons, schools and other groups about this pollutant.

TIMING

- February 2016

KEY MESSAGES

- TBD based on research outcomes

BUDGET

ITEM	COST
Research	\$1,500
Project Management & Creative Development	\$1,500
TOTAL	\$3,000

BACWA's Position Paper on the Nutrient Issue

Introduction

In the course of discussions on nutrients over the last few years many approaches on how to deal with the nutrient issue have been discussed but have not been adopted as the official BACWA Position. The BACWA coalition dealing with nutrients depends on the great majority of POTW members understanding the direction the organization is heading and what strategies are being followed to get to the desired outcomes.

The purpose of this Position Paper is to confirm the BACWA goal on nutrients and then focus on strategies that will help achieve that goal. With a goal statement and strategies in place, specific tactics can be identified which will be pursued in support of the strategies recognizing that both strategies and tactics may need to adapt to changing circumstances as time passes. This Position Paper will help to increase clarity on the nutrient issue for all BACWA members which should provide for a stronger coalition

BACWA Goal

By definition a goal is a high level statement of something to be achieved. Given the high level nature of a goal, most BACWA goals on regulatory issues are similar, that is to achieve something that is based on scientific facts, is protective of the environment and is as cost-effective as possible. With these basic concepts supported by the membership, the BACWA Nutrient goal statement is as follows:

Nutrient regulations should be supported by scientific facts, be protective of the environment and recognize that limited resources must be applied to address the highest priorities among many competing needs.

BACWA Strategies

Several strategic concepts have been discussed within the BACWA coalition. From those discussions the following strategies have emerged:

- 1. **Sound Science:** Support the concept that regulation should be based on sound science and help fund the science.*
- 2. **Beneficial Uses:** Demonstrate that beneficial uses are being protected.*

3. **Highest Priorities:** Document competing demands on POTW resources and identify unintended consequences of regulatory actions (such as increase in Green House Gases) to help ensure that, as regulations are being considered, the highest priority needs are being addressed.

4. **Multiple Benefits:** Emphasize that on-going and increasing efforts to recycle wastewater and enhance wetlands can have multiple benefits including providing new water supplies, protecting and increasing habitat, protection from sea level rise, and reduction in nutrient loadings; but these efforts need time to be developed and converge on the sweet spot of maximizing cost-benefits of expending public resources.

Discussion of Early Action for Nutrient Reduction

Introduction

There has been an indication that early actions to reduce nutrients may be considered as an alternative to a no net loading increase in the next Watershed Permit. Although there are certainly pros and cons to the concept of early actions and the debate will continue, it behooves BACWA to consider how early actions would be incorporated into a watershed permit and what are key outstanding questions that would need to be addressed. Having a parallel internal BACWA effort to build a framework for early actions so that POTWs could better understand what is meant by early actions could help inform the debate as to whether or not early actions should be embraced by the BACWA membership as part of the next watershed permit.

The purpose of this paper is to tee-up what are the key considerations/issues and propose some next steps that BACWA could pursue to better understand how early action could be incorporated into the next watershed permit.

Key Considerations/Issues

1. What overall magnitude of nutrient reduction and in what subembayment(s) would be meaningful enough to be considered an alternative to no net loading increase?
2. How would early actions be codified in a watershed permit?
3. What POTWs would undertake the early actions?
4. If not all POTWs participated, what special recognition would be provided to those who do participate?
5. What would constitute an early action to reduce nutrients?
6. Would the early actions only last for one permit cycle?
7. Would early actions count the same regardless of what subembayment the POTW was located?
8. Could POTWs be incentivized to undertake early actions?
9. What would it cost to implement early actions?
10. What if circumstances changed such that a POTW no longer could or wanted to undertake the early actions?

Possible Next Steps

Perhaps the first step would be to review the above questions to see if they capture the key considerations/issues. To adequately address each of the above questions, and others as identified, would require some concerted thought and input from a variety of POTWs. A possible process to work through this issue is as follows:

1. Review the considerations/issues at the BACWA Board Meeting to ensure that they are the key issues that should be addressed.
2. Convene the BACWA Nutrient Watershed Permit Negotiating Team to develop BACWA positions on each key issue. This may require outreach to the BACWA members for input regarding their future plans.
3. Present the Team's recommendations to the Board as to how each issue would be addressed within the context of a watershed permit.
4. With the framework developed, attempt to reach consensus on whether or not to include early actions in the negotiations for the next watershed permit and if desirable, incorporate early actions into an overall package to discuss with the Water Board.

Discussion of Increased Funding for Nutrient Reduction

Introduction

There has been an indication that increased funding for the NMS scientific studies may be considered as an alternative to a no net loading increase in the next Watershed Permit. Although there are certainly pros and cons to the concept of increased funding and the debate will continue, it behooves BACWA to consider what level of increased funding the BACWA members would be willing to support, under what conditions it would be incorporated into a watershed permit, and what are key outstanding questions that would need to be addressed. Having a parallel internal BACWA effort to select a proposed level of increase funding would help inform the debate as to whether or not increased funding should be put on the table in the next permit negotiations compared to other potential negotiating terms and conditions.

The purpose of this paper is to tee-up what are the key considerations/issues with the concept of increased funding and propose some next steps that BACWA could pursue to better understand if BACWA would support increased funding.

Key Considerations/Issues

1. If increased funding is proposed, should it be tied to certain issues (e.g. investigation of beneficial uses)?
2. Would an increase in funding set a precedent for future permit terms?
3. Is no net loading increase a significant enough driver to support increased funding?
4. What outcomes might be expected if the science program continues to be underfunded in the coming years?
5. What level of increased funding would BACWA members support?
6. If increased funding is supported, would the Nutrient Surcharge continue to be the method for allocating the costs across the membership?

Possible Next Steps

Perhaps the first step would be to review the above questions to see if they capture the key considerations/issues. To adequately address each of the above questions, and others as identified, would require some concerted thought and input from a variety of POTWs. A possible process to work through this issue is as follows:

1. Review the considerations/issues at the BACWA Board Meeting to ensure that they are the key issues that should be addressed.
2. Convene the BACWA Nutrient Watershed Permit Negotiating Team to develop BACWA positions on each key issue. This may require outreach to the BACWA members for input regarding their future plans.
3. Present the Team's recommendations to the Board as to how each issue would be addressed within the context of a watershed permit.
4. With the framework developed, attempt to reach consensus on whether or not to include increased funding in the negotiations for the next watershed permit and if desirable, incorporate increased funding into an overall package to discuss with the Water Board.

Sherry Hull

From: Sherry Hull
Sent: Tuesday, November 17, 2015 12:49 PM
To: Sherry Hull
Subject: NMS NTW meeting, Nov 5 2015, 9am-3pm, SFEI office in Richmond...Agenda attached, RSVP needed

From: David Senn [<mailto:davids@sfei.org>]
Sent: Thursday, October 29, 2015 6:21 PM
To: David Senn
Cc: Emily Novick; Hunt, Jennifer
Subject: NMS NTW meeting, Nov 5 2015, 9am-3pm, SFEI office in Richmond...Agenda attached, RSVP needed

Hello -

Please find the agenda for the Nutrient Management Strategy Nutrient Technical Workgroup meeting on Nov 5 2015 at SFEI in Richmond

Some important notes below...

1. If you are planning to attend, please RSVP. In addition, please specify if you would like lunch. We will order sandwiches or similar, and the approximate cost will be \$10-12. We need a final head count by Monday to place the order. SFEI will provide coffee and other drinks during the day.
2. We are postponing the Assessment Framework presentation until a later meeting. The current plan is to send out the materials in November/December, and have a meeting after providing ample time for stakeholders to review prior to the meeting. Please feel free to get in touch if you have any questions.
3. Mine Berg will present the results of her study, as originally planned.
4. The agenda contains links to two reports. The first is a [FY2015 Annual Report](#), which we are releasing today. The second is the [Lower South Bay Synthesis](#), which we originally circulated in June but haven't had a chance to discuss with the NTW. These reports will be presented and discussed in Agenda Items 4 and 5, respectively. The FY2015 annual report is a relatively short and easy read. The LSB Synthesis is longer, but has been 'on the street' for several months, and we're resending the link to refresh people's memories.
5. We've left a TBD item on the agenda at the end of the meeting, which may be a discussion item or presentation on another technical topic. We'll follow up next week.

Thank you, and see you next week.

Dave

ooo
David Senn, PhD
Senior Scientist
San Francisco Estuary Institute
4911 Central Avenue

Richmond, CA 94804
mobile: (510) 999-1105
davids@sfei.org

**San Francisco Bay Nutrient Management Strategy (NMS)
Nutrient Technical Workgroup
November 5 2015**

San Francisco Estuary Institute
4911 Central Avenue
Richmond, CA 94804

AGENDA

Agenda Item		Lead	Time
1	Welcome, Introductions and Agenda Review	D Senn R Wilson	9:00 - 9:10
2	Science Program Update: Overview/Updates: Science Plan, funded projects, timelines Update presentation: 15min Discussion/Q&A: 15min <i>Desired outcome:</i> Provide high level update NMS activities	D Senn	9:10-9:40
3	Update on recently-completed Suisun Phytoplankton study (UCSC, AMS) Technical presentation: 50min Discussion/Q&A: 30min <i>Desired outcome:</i> Provide stakeholders with overview of results; Q&A/discussion and feedback	M Berg	9:40-11:00
	Break		11:00-11:15
4	NMS Science Project Update #1: FY2015 Annual Report Link to Report¹ <i>Desired outcome:</i> Present key results from FY2015 and next steps; Q&A/discussion and feedback	D Senn	11:15-12:15
	Lunch		12:15-12:45
5	NMS Science Project Update #2: LSB Synthesis and on-going DO/biogeochem studies in LSB Link to Report² <i>Desired outcome:</i> Present key results from LSB synthesis and on-going biogeochemical investigations; Q&A/discussion, feedback	D Senn	12:45-1:45
6	Additional Science Topics: TBD	TBD	1:45-2:45

¹ http://sfbaynutrients.sfei.org/sites/default/files/June%202015%20progress%20update_final.rotated_Oct142015.pdf

² http://sfbaynutrients.sfei.org/sites/default/files/LSB_Synthesis_Draft_June%202015.b.pdf

7	Action Items, next steps	R Wilson	2:45-3:00
	Adjourn		3:00

NOTES:

- *Public comment periods will be accommodated at the end of each agenda item.
The duration of each comment period will be at the discretion of the meeting facilitator.*

Various Levels of Assistance for Conducting Critical Review of Science and Modeling Reports

- I. Level One: Advisor
 - A. Overview
 - 1. Accept modeling and science at face value and provide BACWA feedback
 - B. Activities
 - 1. Review final model results, reports and presentations
 - 2. Identify major issues, data gaps, important questions
 - 3. Suggest BACWA request additional explanations from authors
 - 4. Suggest BACWA request additional model scenarios
 - 5. Discuss policy and permit ramifications of model results with BACWA
 - 6. Provide BACWA guidance/advice on permit negotiations
 - 7. Providing trading guidance to BACWA
 - C. Qualifications
 - 1. Experience with watershed permits, trading and multi-jurisdictional permits
 - 2. Experience with assessment of nutrient impacts
 - 3. Experience with nutrient permits and alternate approaches
 - D. Level of Engagement
 - 1. \$35K-75K/yr, depending on number of meetings.
 - 2. Monthly or bimonthly conference calls with BACWA
 - 3. 2-4 meetings/yr with BACWA and/or to attend presentations on studies
- II. Level Two: Limited Critical Review
 - A. Overview
 - 1. Review/critique science and model results, but do not run models
 - B. Activities
 - 1. Critically review interim model results, provide feedback to BACWA and authors
 - 2. Review preliminary findings, reports and presentations
 - 3. Identify issues, data gaps, important questions
 - 4. Interact directly with scientists and modelers
 - 5. Request explanations, additional analyses and/or model sensitivities from authors
 - 6. Request additional model scenarios
 - 7. Discuss policy and permit ramifications of model results with BACWA
 - 8. Provide BACWA guidance/advice on permit negotiations
 - 9. Providing trading guidance to BACWA
 - C. Qualifications
 - 1. Experience with watershed permits, trading and multi-jurisdictional permits

2. Experience with assessment of nutrient impacts
 3. Experience with nutrient permits and alternate approaches
 4. Experience running and reviewing high level/sophisticated hydrodynamic and eutrophication models
- D. Level of Engagement
1. \$75k-\$125k/yr depending on the number of meetings, call and iterations for additional analysis
 2. Conference calls with authors as needed
 3. Conference calls every two months with BACWA
 4. Meetings quarterly with either BACWA and/or authors
- III. Level Three: Detailed Critical Review
- A. Overview
1. Review/critique modeling and results by actively running models
- B. Activities
1. Review modeling framework and strategy, provide ongoing feedback on appropriate inputs/simulations
 2. Assess accuracy of model inputs and evaluate results to varying assumptions
 3. Review preliminary findings, reports and presentations
 4. Identify issues, data gaps, important questions
 5. Interact directly with scientists and modelers
 6. Conduct additional simulations of interest
 7. Assess model uncertainty
 8. Conduct additional analyses and/or modeling
 9. Request explanations from authors
 10. Conduct and request additional model scenarios
 11. Discuss policy and permit ramifications of model results with BACWA
 12. Provide BACWA guidance/advice on permit negotiations
 13. Providing trading guidance to BACWA
- C. Qualifications
1. Experience with watershed permits, trading and multi-jurisdictional permits
 2. Experience with assessment of nutrient impacts
 3. Experience with nutrient permits and alternate approaches
 4. Experience running high level hydrodynamic and eutrophication models
 5. Experience with high-level modeling peer review and collaborative process for model development and refinement
- D. Level of Engagement
1. \$125K-\$250K/yr depending on availability of modeling and the level of additional analyses and modeling required
 2. Monthly conference calls

3. Quarterly meetings

IV. Level Four: Independent Assessment

A. Overview

1. Develop and apply independent models for comparison and critique of results

B. Activities

1. Review preliminary modeling, findings, reports and presentations
2. Identify issues, data gaps, important questions
3. Interact directly with scientists and modelers
4. Develop independent models to critically review and/or verify work
5. Conduct simulations of interest testing calibration, sensitivities and scenarios
6. Request explanations, additional analyses and/or modeling from authors
7. Conduct and request additional model scenarios
8. Define collective uncertainty across the two model frameworks
9. Discuss policy and permit ramifications of model results with BACWA
10. Provide BACWA guidance/advice on permit negotiations
11. Providing trading guidance to BACWA

C. Qualifications

1. Experience with watershed permits, trading and multi-jurisdictional permits
2. Experience with assessment of nutrient impacts
3. Experience with nutrient permits and alternate approaches
4. Nationally recognized expertise running high level hydrodynamic and eutrophication models
5. Experience with high-level modeling peer review and collaborative process for model development and refinement

D. Level of Engagement

1. \$400K-\$800K/yr depending on level of data and information accessible from SFEI and duration of engagement
2. Monthly conference calls
3. Meetings every two months

Recommendations for Clarifications the Nutrient Annual Report

- 1. Issue: Currently some utilities report orthophosphate or soluble orthophosphate.**

Recommendation: Clearly request that orthophosphate be measured and reported as soluble reactive phosphorus (SRP).

- 2. Issue: Not all plants report recycled water diversions which make it difficult to calculate nutrient loadings.**

Recommendation: Consider requiring plants to report recycled water diversions including average monthly flows diverted for consumptive recycled use as well as return streams (e.g., brine, cooling tower blow down, etc.).

- 3. Issue: Dischargers are concerned that increasing discharge loads and decreasing discharge flows may be interpreted as deterioration in treatment performance. By presenting raw influent flows and loads the potential for misinterpretation would be reduced.**

Recommendation: Consider whether to include raw influent trending in future group annual reports.

- 4. Issue: CIWQS has several inherent challenges for data collection which would be resolved by dischargers filling out an HDR-provided workbook.**

Recommendation: Consider providing dischargers an input workbook to streamline data collection and the overall process for compiling the reports.

Planning Subcommittee (PS) Meeting No. 14

October 16, 2015

9:00 am – noon

Water Board Offices

Meeting Summary

Attendees: Tom M., David S., Ian W., Ben H., Rich W., and Dave W.
(notes)

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

1. **Agenda Modifications:** No changes were made.
2. **Review Outstanding Action items:** All items were reviewed.
3. **Science Program update** (see attached)
 - i. **Staffing:** The Science Manager (SM) reported that staffing and workflow were going well with the two new hires. The UC post doc is on maternity leave.
 - ii. **Other:** BACWA submitted the \$880k regulatory mandated payment for science funding (less \$10k already provided). The Water Board (WB) reported that the SF Bay USGS Research Program, for which they had submitted a letter of support, had gotten funded for \$100k.
 - The SM made a presentation to the Lower South Bay dischargers and received lots of questions.
 - Work is progressing on the planning for the Bay/Delta Workshop on the ammonium paradox. Efforts are being coordinated with the Central Valley WB staff. The NMS is contributing \$10k to the effort. The issue of who would comprise the expert panel was discussed. The pros and cons of local experts vs. outside experts not intimately familiar with the issues were discussed. The goal of the Workshop is to understand what are the key outstanding scientific questions regarding the ammonium paradox. Gaining insights from experts will help the WB in developing future discharger permits. It was generally agreed

that having the SM in the room during the discussion but not actually being on the expert panel would be helpful. The outcomes from the Workshop will help inform the decision making on needed next steps.

It was noted that the NSF awarded a \$5M grant to UC Berkeley to do margin hydrodynamic modeling of the Bay tied to sea level rise. There was a request to get an update at the next Planning Subcommittee (PS) meeting on the interface between SFEI and UC Berkeley on the use of a community model.

Action Item: The SM to report on status on the overall modeling effort and an interface with the NSF grant.

4. Priority Updates

i. Report-Outs

1. **Feedback from the SC on items from the last meeting:** The comment by the Water Contractors regarding the issue of transparency was discussed. The request by the Water Contractors was for issues to be raised early and not be allowed to become major points of disagreement.
2. **Follow-up on Action Item to provide the SC with the latest version of the Suisun Synthesis and literature review on ammonium:** This has yet to be accomplished since there have been questions raised about the integrity of the data set used in the Synthesis. This is a lingering issue that hopefully can be resolved at the Bay/Delta Workshop.
3. **Progress report on the Bay/Delta Workshop:** This issue was discussed above.
4. **Progress report on development of a monitoring program proposal for SC consideration:** No report at this time.
5. **Receipt of Delta Science Plan from SFWCA:** The Plan has been received.

ii. Current Issues

1. **Update on the work the WB is conducting on establishing DO objectives and how this interfaces with the Assessment Framework:** This is still a work in progress. The Assessment Framework and the NNE process are supposed to be setting

the stage for how to address DO objectives and HABs. The WB would like to develop a realm of possible end points vs. a specific end point. A question was raised as to how much of this can be opened up to the process of the NMS SC and PS without abdicating regulatory responsibility. The WB is managing this effort.

- 2. Review of the updated White Paper on defining the roles, responsibilities and selection of the various technical assistants on the Science Plan:** Based on the feedback from SC Meeting #6, the SM is working to finalize the White Paper. This needs to be done by the next SC meeting. IW and DW will work with the SM in reviewing the updated version. **Action item: SM to finalize the White Paper by the next SC meeting.**

- 3. Review of a suggested process for selection of a Program Coordinator and implementing the scope of work for the position:** Agreement has been reached by the PS (IW abstained from voting) to allow the SM, working through SFEI, to submit a proposal for providing Program Coordinator and Facilitation services in advance of a public solicitation via an RFP. Once received, the PS could decide whether or not to accept it or proceed with the RFP. BACWA continues to support the effort as a pilot and will contribute up to \$100k, without matching funds from the NMS, for one year to fund the effort.

It was decided to provide feedback on the proposal from SFEI and to allow modifications to the initial proposal if needed. The proposal should indicate time bounds and focus on “must do” activities vs. longer term activities considering the timing and funds available. A target was set of having a proposal ready for SC approval at the next SC meeting in December. **Action item: The SM should have the first version of the proposal ready for PS review by the end of the first week of November.**

- 4. Status on development of an agreement with USGS on the NMS Sampling Program.** A specific agreement will probably not be formalized however the SM and the USGA will come to terms on the use of the retrofitted boat.
- 5. Update on SC Calendar narrative:** This continues to be worked on. **Action Item: DW to create a SC calendar that**

logs all specific and routine items that need to be addressed looking out 12 months in advance

6. **Brainstorming on future priorities for the PS:** The 1st draft of the SC calendar will show all future items identified to date.

-A question was raised regarding the fact that the Science Plan identified roughly \$2.8M/yr. for funding the Plan but only \$1.3M/yr. is currently available and how this would influence regulatory decision making? The WB commented that the SC will have to continue to work with the plan and adapt it as needed to recognize the underfunding. ***Action Item: At the next PS meeting, the SM should be prepared to present the initial science program priorities for FY 17.***

iii. Scheduling

1. **Review future SC and PS meeting schedules:** It was agreed that two PS meetings should be scheduled before the next SC meeting in December. ***Action Item: IW to set up two PS meetings before the next SC meeting.***
2. **Review of the financial schedule for SC budget adoption:** The Financial Schedule was reviewed. It was noted that at the December SC meeting the initial proposal on Science Plan priorities for FY 17 is to be presented.

5. Planning for upcoming meetings

- i. Discussion of proposed topics for the next Steering Committee Meeting on December 10, 2015:*** Discussed above.
- ii. Timing and Discussion of items for the agenda for the next NTW/ SAG meeting:*** The SM then described the agenda for the next Nutrient Technical Workgroup meeting scheduled for Nov. 5th. He stated that three items were on the agenda: 1. Mine Berg's presentation on the ammonium paradox; 2. A presentation on the first of a two part discussion of the Assessment Framework (AF) with Part A being the data analyses (Part B discussing how the data would be applied would be presented at a later meeting after the first of the year); and 3. An update on the science program.

A comment was made that bifurcating the presentation on the AF will not be favorably received since the stakeholders would want to understand how the data would be applied at the same time as the

presentation of the data. Separating the presentations may be viewed as not providing the best opportunity for stakeholders to question data once they understand how it was planned to be used.

Ways to avoid this situation were discussed and included: 1. Proceeding with the meeting but letting folks know about Part B and that a second meeting will be scheduled for the Part B discussion; 2. Delaying the NTW meeting until both Part A and B are ready for discussion; and 3. Circulating the early draft of the Part B report on how the data is going to be used. The SM stated he would work with the WB and SCCWRP to figure out the best approach.

Another issue that had been raised previously was discussed, that being changing the name of the AF such that it does not imply that the document will be used to directly to assess impairment and lead to permit limits. A suggestion was to change the name of the document to something akin to "Preliminary Considerations for an Assessment Framework". The WB will consider changing the name of the document.

6. Other Updates

- i.* **Watershed Permit 1st Annual Report:** Not discussed due to time limitations.

7. Planning the next Subcommittee meeting: Not discussed due to time limitations.

- i.* **Review of Action items from meeting**
- ii.* **Next steps**

8. Park Lot of Identified PS Future Agenda Items: Not discussed due to time limitations.

- i.* **Brainstorming and options for attracting additional funds for use on the Science Plan**

9. Adjourn: the meeting was adjourned at 12:10 pm.

To:	NMS Planning Subcommittee
From:	David Senn
Re:	Oct16 2015 Science Program Update

Major Activities... Sep 22- Oct16

1. Science Program Management

a. Preparation for NMS Steering Committee meeting, June 12

- i. Developed FY2016 program plan
- ii. Developed FY2016 budget, and 5 year work plan budget

b. Staffing / Workflow

- i. Phil and Rusty (new staff) outstanding; Emily continuing outstanding
- ii. Hired temporary staff for mussel/toxin sampling. See current sampling map below.
- iii. Moving some financial program management off of Emily's plate to another SFEI staff (Jen Hunt).
- iv. Still working at capacity, with simply more stuff getting done
- v. Needs: organizational follow-through (program level), additional senior support on report writing, statistical analysis of historic / current monitoring data for monitoring program development (current staff could help with some of that, but they are at capacity, and I'm trying to minimize 'distractions')
- vi. UCSC postdoc (Misty) on maternity leave for 2-3 months beginning mid-November. Working to identify a person who can help move her routine lab work forward during her leave, tentative plan is to have temp SFEI staff person (Toxin/Mussel) play that role, with training / assessment already started last week. I was already thinking about this when proposing the toxin/mussel budget, and hoping that this would not lead to a change in budget/cost.

c. Financials

- i. Funds received from BACWA: \$880,000 (10/13/2015)
- ii. USGS transfer for research vessel completed. \$200,000.
 - 1. Received encouraging feedback from Jim Cloern, which increases confidence in reaching a mutually beneficial agreement on USGS-NMS partnership. See below
 - 2. Research vessels is apparently in SFB as of this week.
 - 3. No new news on developing specifics of agreement, but Joe H and I have a plan to talk soon.
- iii. Financials generally fine. No problems or issues to report.
- iv. Working on an end of Sep 2015 financial report. What level of detail does the PSC want?

- d. Other
 - i. Presented to LSB dischargers 10/15.
 - ii. Working with Chris Foe on NH4 workshop. Note: Foe is leaving Region 5 water board and joining State Board. He informed me of this after our Sep SC meeting.
 - 1. Seeking guidance from PSC on how much effort I should put toward this.
 - iii. Nutrient Technical Workgroup meeting: Nov 4 or 5. Draft Agenda
 - 1. Mine Berg / Raphe Kudela: Reporting on NH4/phytoplankton work funded by CCCSD, IEP, and SFCWA.
 - 2. Martha Sutula: Presenting data analysis manuscript/report (part 1). Report will be distributed next week. Part 2, assessment framework report (application of Part 1) will be distributed in November/December, followed by another meeting
 - 3. Science Program update: FY2015 annual report, DO in sloughs, relation to science plan, science plan update.
 - 4. CCP (R Wilson) will facilitate meeting. A few important reasons for that.
 - iv. Presenting to South Bay Salt Pond conference on 10/22
 - v. Completing Suisun Synthesis data analysis section is a challenge, seeking the appropriate place to "leave off".

2. Science Program/Projects

- a. General
 - i. Running at full bore.
 - ii. Underway projects going well.
 - iii. Still find myself stretched too thin.
- b. Science Plan
 - i. working on revised version for December 2015 SC meeting
 - ii. hoping to have a science advisor meeting beforehand
- c. LSB synthesis
 - i. NTW meeting discussion on Nov5
- d. Suisun Synthesis II
 - i. all sections available.
 - ii. Trying to finish my section on phytoplankton community.
- e. DO in margin habitats, and moored sensor work
 - i. Going well, interesting results.
 - ii. Total of 8 sites now installed. See map below.
 - iii. Developed a 1 yr work plan with 3 reports/manuscripts planned over the coming year on data interpretation.
 - iv. See first 3 month of data below.
- f. Assessment framework report

- i. Data analysis report to be distributed next week
 - g. DO objectives
 - i. Project beginning to move ahead.
 - h. Modeling
 - i. Going well
 - ii. Have a draft Year 1 work plan developed, planning for a modeling advisor meeting in November or December
 - iii. Would benefit from a discussion with SC to help set priorities
 - i. Monitoring Program Development
 - i. Completed FY2015 report on overall NMS activities. Focus of discussion at NTW meeting in November
 - ii. Want to discuss priorities with PSC and SC for future work
 - j. Biogeochemical Mapping
 - i. Third field campaign during last week of September
 - ii. Data analysis and next step planning underway.
- 3. Current Challenges
 - a. Behind on finalizing Suisun II synthesis, but hopeful will be distributed in draft form by end of August.
 - b. Need to reengage on Sciece Plan, and get meetings
 - c. Lots of potentially great work to do and still limited by capacity.

Date: September 27, 2015 at 9:27:11 AM PDT

Subject: thank you, once again

From: "Cloern, James" <jecloern@usgs.gov>

To: David Senn <davids@sfei.org>

Cc: Jay Davis <jay@sfei.org>, Phil Trowbridge <philt@sfei.org>, Mike Connor <mconnor@ebda.org>, "Naomi@Waterboards Feger" <Naomi.Feger@waterboards.ca.gov>, "Mumley, Thomas@Waterboards" <Thomas.Mumley@waterboards.ca.gov>, Martha Sutula <marthas@sccwrp.org>, "raphe kudela" <kudela@ucsc.edu>, "Harding, Larry" <lharding@atmos.ucla.edu>, "Joseph Holomuzki" <jholomuzki@usgs.gov>, Tara Schraga <tschraga@usgs.gov>, "James Cloern" <jecloern@usgs.gov>

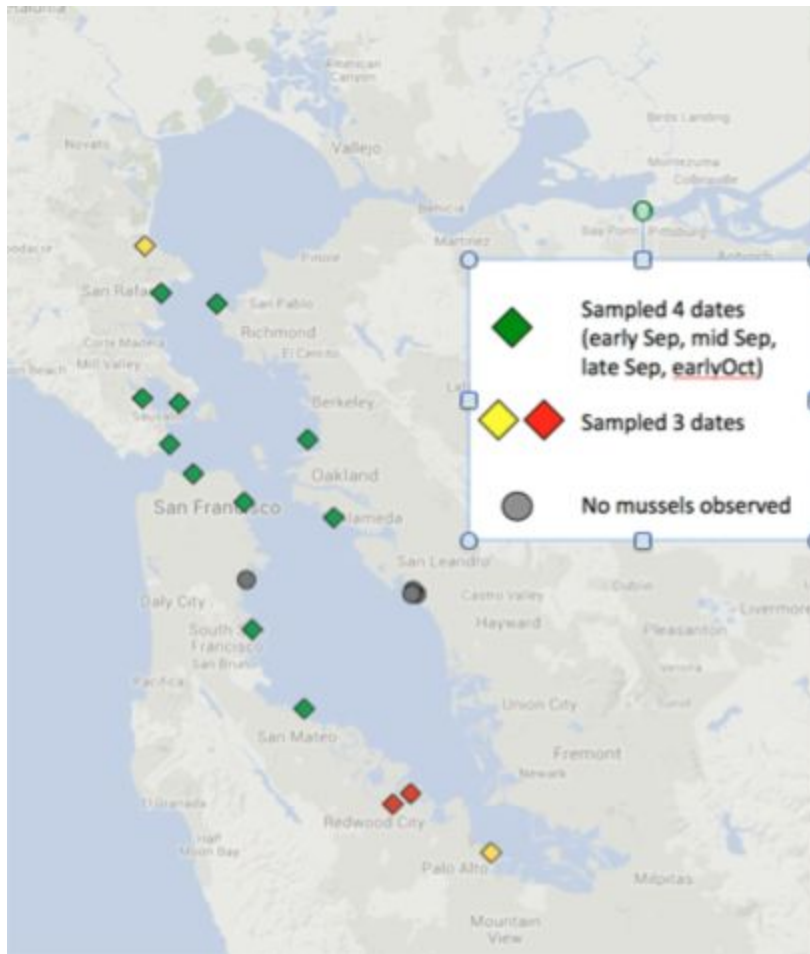
Dave I learned Friday from Joe that the nutrient science program will contribute funds to transform our new boat into a research vessel. Joe said you did the heavy lifting and there was no (weak?) dissent. This is, of course, a very big deal, not only for USGS but for the nutrient science strategy and our vision of a long term monitoring program linked to a modeling program that will require ship-based data.

I was serious when I introduced you at SOE as a new science hero. I wonder if you ever have time to reflect on all that you have accomplished in only a few years. Think of the people who have terrific jobs because of you -- Charlie, Erica, Misty, Emily, now Phil and Rusty. These are great early-career scientists doing exciting things to move us forward, and you gave them the opportunity. You've opened up our eyes about water quality connections in the bay to marginal habitats. You've built and now operate a program of real-time measurements that shows us why a monitoring program requires high-resolution measurements in time plus ship-based spatial sampling. You've given us opportunities to discover the occurrence patterns of HAB species and toxins in the bay, and gave a great introduction to these discoveries at SOE. You have been the impetus that generated an exciting collaboration between USGS, UCSC and SFEI. You have been persistent, relentless, tireless in your work to communicate the importance of a nutrient science strategy and to lay out a carefully organized structure for one. You played an essential role in bringing together the people who have crafted a starting place for a nutrient assessment framework for the bay. You've also shown an inspiring ability to decide how funding resources are allocated, even if those decisions slow progress in directions that are important to you personally -- I'm pretty sure the funds for boat reconfiguration will come from studies you planned to do next year. And you've given me and my team great hope that nutrient-related measurements in the bay will continue over the long term.

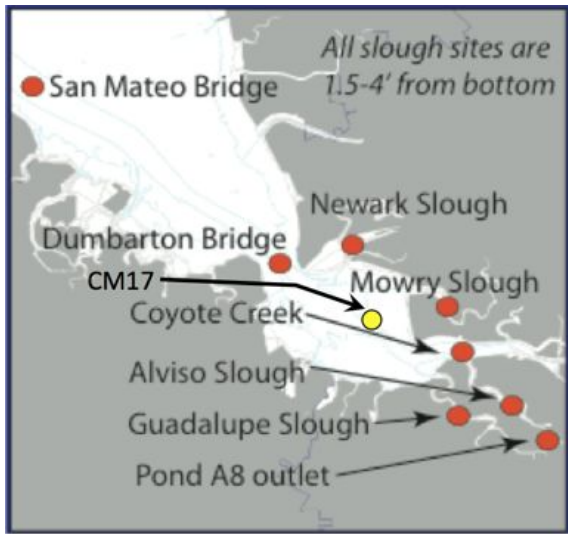
For all this, we thank you.

Jim

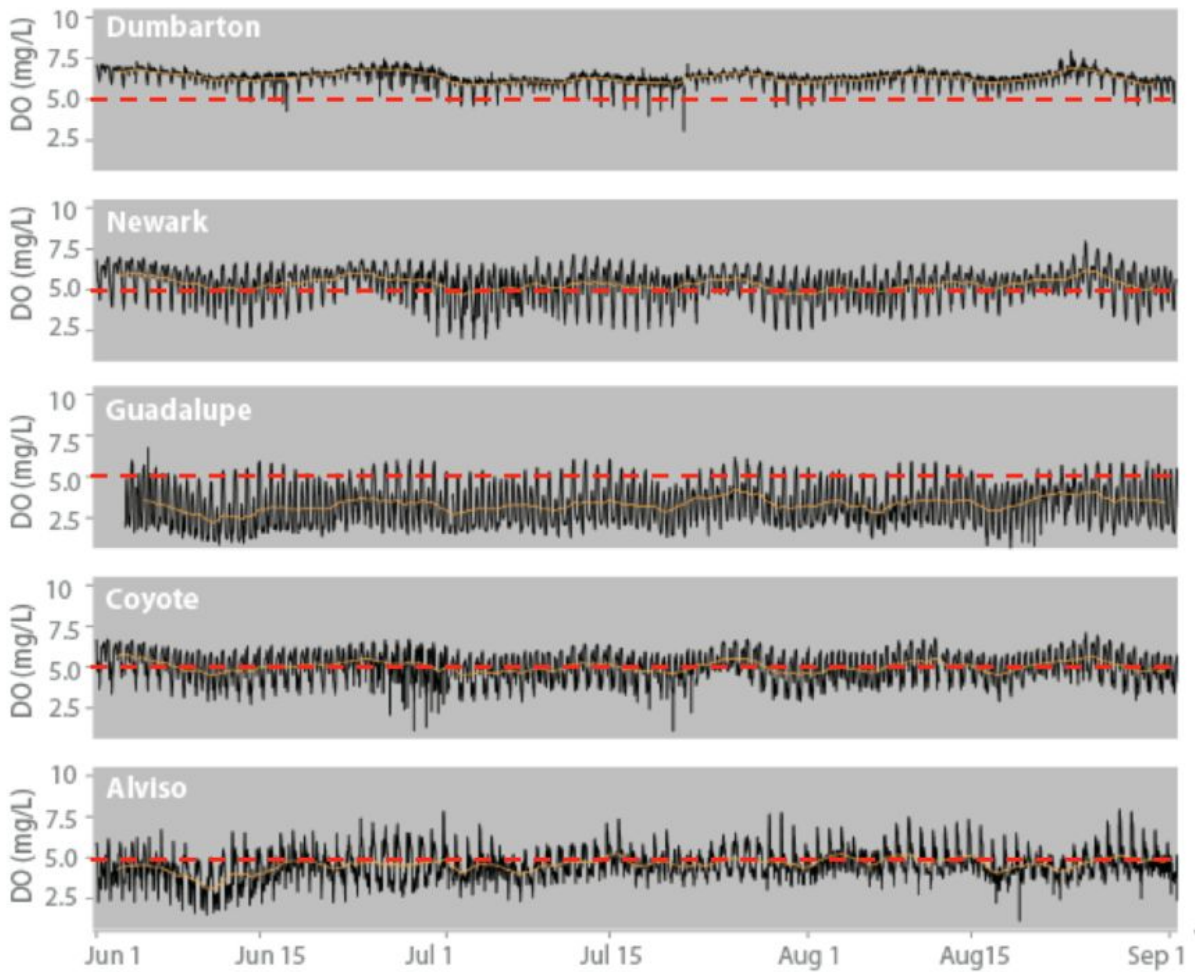
Mussel sampling sites.



Current moored sensor sites. CM17 installed mid-September (near-bottom, mid-depth, near-surface).



Data from first 3 months of deployment



To:	NMS Planning Subcommittee
From:	David Senn
Re:	Proposed PSC Authorization: \$5000k for facilitation support during CY2015 Q4

Background:

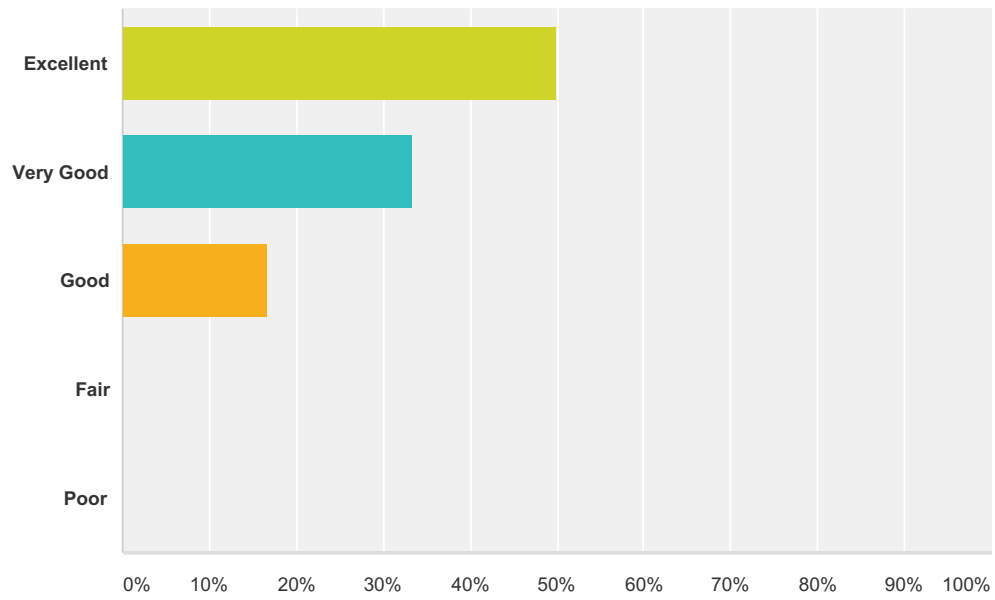
CCP has \$6000 remaining from funds authorized for the last quarter, with underspending due to less PSC and SC activity over summer months. CCP estimates that these funds are sufficient for NTW effort, but likely not enough for NTW + December 2015 SC prep, meeting, and follow-up.

Proposal:

PSC authorizes DS/SFEI to amend contract with CCP for facilitation support in CY2015 Q4, not to exceed \$5000.

Q1 Overall how would you rate the Pardee Seminar?

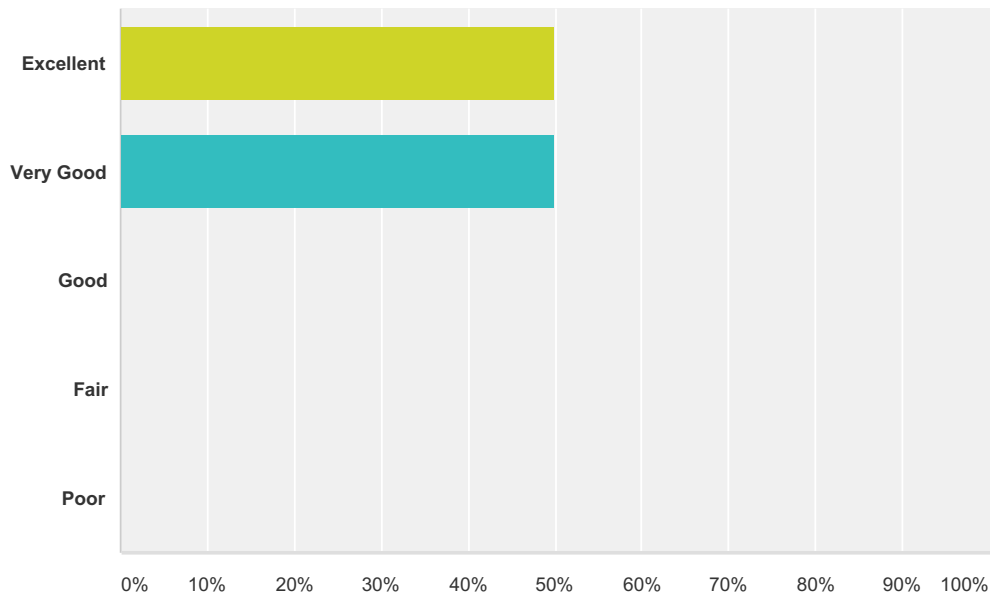
Answered: 6 Skipped: 0



Answer Choices	Responses
Excellent	50.00% 3
Very Good	33.33% 2
Good	16.67% 1
Fair	0.00% 0
Poor	0.00% 0
Total	6

Q2 Overall, how would you rate the Pardee Venue?

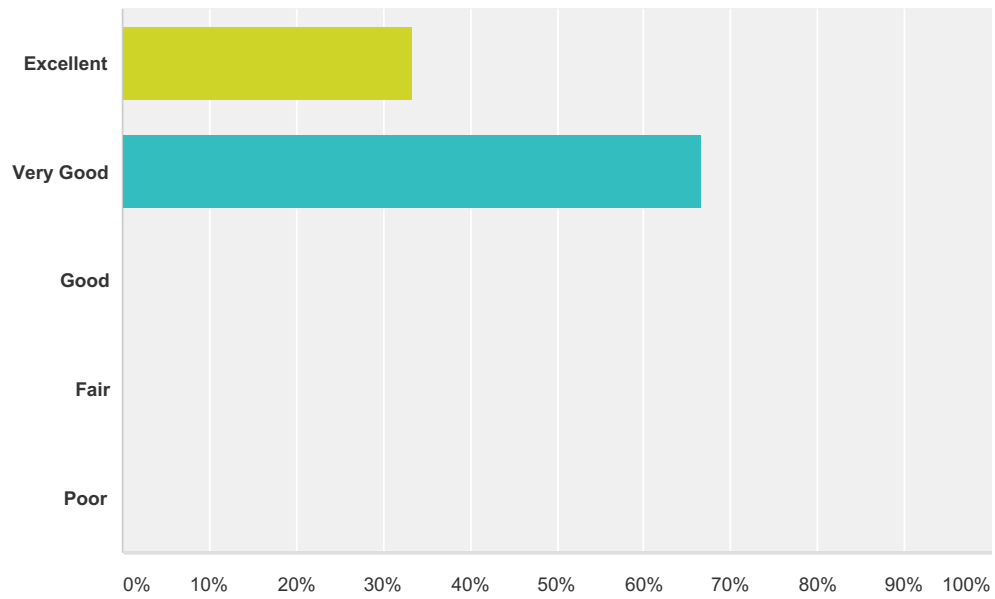
Answered: 6 Skipped: 0



Answer Choices	Responses
Excellent	50.00% 3
Very Good	50.00% 3
Good	0.00% 0
Fair	0.00% 0
Poor	0.00% 0
Total	6

Q3 How would you rate the caterer?

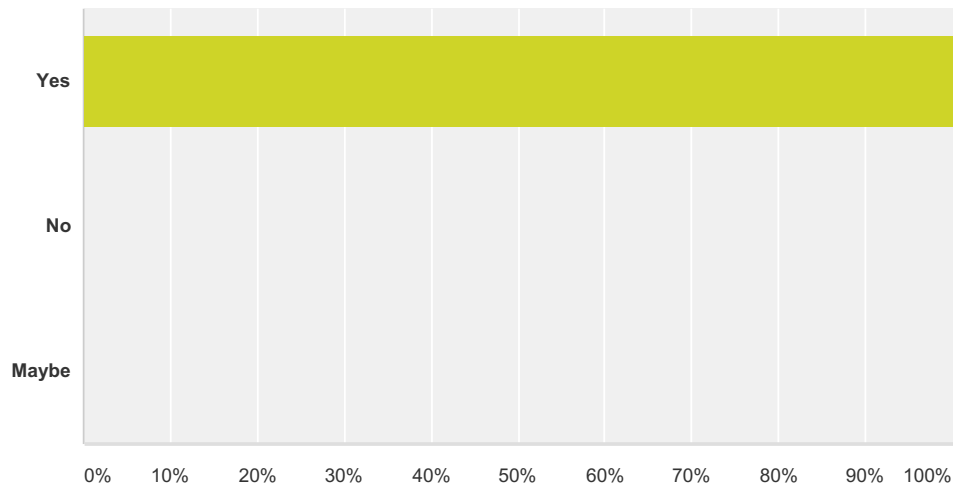
Answered: 6 Skipped: 0



Answer Choices	Responses
Excellent	33.33% 2
Very Good	66.67% 4
Good	0.00% 0
Fair	0.00% 0
Poor	0.00% 0
Total	6

Q4 Do you plan on attending next year?

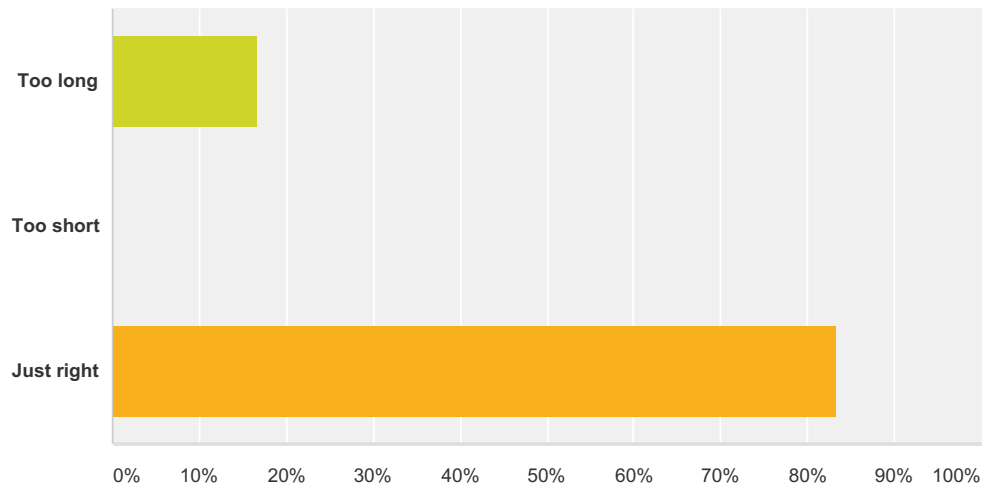
Answered: 6 Skipped: 0



Answer Choices	Responses	Count
Yes	100.00%	6
No	0.00%	0
Maybe	0.00%	0
Total		6

Q5 Please rate the length of the event.

Answered: 6 Skipped: 0



Answer Choices	Responses
Too long	16.67% 1
Too short	0.00% 0
Just right	83.33% 5
Total	6

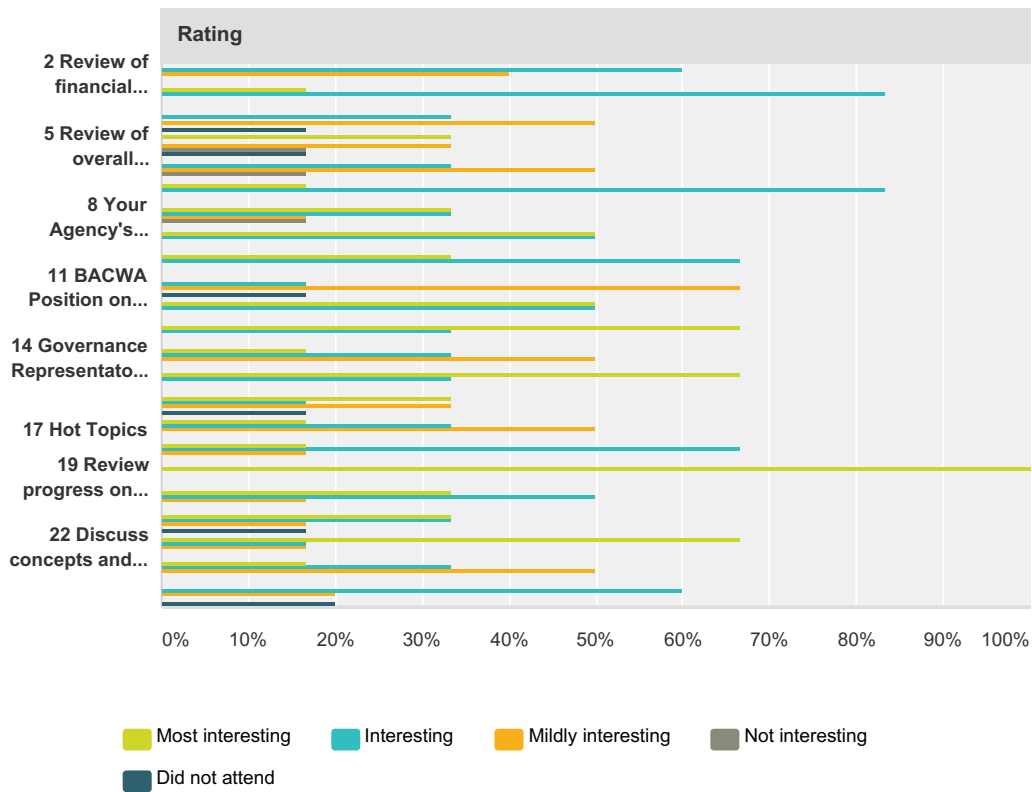
Q6 Do you have additional comments?

Answered: 1 Skipped: 5

#	Responses	Date
1	The amount of material covered was excellent, but I wonder whether the event could be shortened by a 1/2 day.	10/29/2015 1:33 PM

Q7 What discussions did you find most interesting and useful?

Answered: 6 Skipped: 0



Rating	Most interesting	Interesting	Mildly interesting	Not interesting	Did not attend	Total
2 Review of financial position and revenue needs for coming years	0.00% 0	60.00% 3	40.00% 2	0.00% 0	0.00% 0	5
3 Future Dues/CBC/Nutrient Surcharges	16.67% 1	83.33% 5	0.00% 0	0.00% 0	0.00% 0	6
4 Membership Classes Dues and Fees	0.00% 0	33.33% 2	50.00% 3	0.00% 0	16.67% 1	6
5 Review of overall committee structure, effectiveness and value to the membership	33.33% 2	0.00% 0	33.33% 2	16.67% 1	16.67% 1	6
6 Options for Continued Support of WOT	0.00% 0	33.33% 2	50.00% 3	16.67% 1	0.00% 0	6
7 Brainstorming on ideas	16.67% 1	83.33% 5	0.00% 0	0.00% 0	0.00% 0	6
8 Your Agency's Position on Nutrients & Desirable Outcomes from the Strategy Session (by individual agency)	33.33% 2	33.33% 2	16.67% 1	16.67% 1	0.00% 0	6
9 Review of Strategies & Identification of Tactics	50.00% 3	50.00% 3	0.00% 0	0.00% 0	0.00% 0	6
10 Need for BACWA Funding a Technical/Strategic Review of NMS	33.33% 2	66.67% 4	0.00% 0	0.00% 0	0.00% 0	6

11 BACWA Position on Funding Program Coordinator	0.00% 0	16.67% 1	66.67% 4	0.00% 0	16.67% 1	6
12 Second 5 Year Permit - addressing teed up questions	50.00% 3	50.00% 3	0.00% 0	0.00% 0	0.00% 0	6
13 Regulatory Scenario Planning	66.67% 4	33.33% 2	0.00% 0	0.00% 0	0.00% 0	6
14 Governance Representaton & Strategy	16.67% 1	33.33% 2	50.00% 3	0.00% 0	0.00% 0	6
15 Optimization/Updgrade Update on Findings	66.67% 4	33.33% 2	0.00% 0	0.00% 0	0.00% 0	6
16 Annual Report Findings	33.33% 2	16.67% 1	33.33% 2	0.00% 0	16.67% 1	6
17 Hot Topics	16.67% 1	33.33% 2	50.00% 3	0.00% 0	0.00% 0	6
18 Update on Science Plan Investigations	16.67% 1	66.67% 4	16.67% 1	0.00% 0	0.00% 0	6
19 Review progress on Optimization/Upgrade Studies	100.00% 6	0.00% 0	0.00% 0	0.00% 0	0.00% 0	6
20 POTW Cost of Operations	33.33% 2	50.00% 3	16.67% 1	0.00% 0	0.00% 0	6
21 Regulatory impacts of scientific findings to date	33.33% 2	33.33% 2	16.67% 1	0.00% 0	16.67% 1	6
22 Discuss concepts and rationale for the next 5 yr permit	66.67% 4	16.67% 1	16.67% 1	0.00% 0	0.00% 0	6
23 Governance issues going forward	16.67% 1	33.33% 2	50.00% 3	0.00% 0	0.00% 0	6
24 Other Technical regulatory issues	0.00% 0	60.00% 3	20.00% 1	0.00% 0	20.00% 1	5

#	Other Comments	Date
	There are no responses.	

DRAFT



Executive Board Special Meeting Agenda

SF Bay Regional Water Board / BACWA Executive Board

Joint Meeting

December 1, 2015 9:00-11:00 AM

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

ROLL CALL AND INTRODUCTIONS – 1:00

PUBLIC COMMENT – 1:05

DISCUSSION/OTHER BUSINESS- 1:10

Topic	Goal	Time
1. Nutrients a. Nutrient Science Plan b. Program coordinator c. Annual Report d. No net loading increase analysis	<ul style="list-style-type: none">• Discussion of implications of ammonia paradox studies showing little phytoplankton inhibition• Update on Program Coordinator• Discussion of Annual Report and changes in CIWQS to assist in data gathering• Updated assumptions to generate no net increase in nutrient loading estimates	1:15
2. Toxicity testing - chronic toxicity limits	<ul style="list-style-type: none">• Limits in Calistoga Tentative Order (pending issuance of TO)	2:00
3. Triennial Review	<ul style="list-style-type: none">• Discussion of next steps and BACWA feedback on Climate Change and Wetlands Policies	2:10
4. Collection Systems issues	<ul style="list-style-type: none">• Discussion of what makes a collection system a “good actor” for the purpose of assigning MMPs• Private Sewer Lateral Ordinances for triggering inspection and repair – agency survey	2:20
5. Reduction in CTR Constituents Monitoring	<ul style="list-style-type: none">• Review of proposal for reduced monitoring	2:35
7. Microplastics and CECs	<ul style="list-style-type: none">• Update on BACWA’s plans to perform an in-house study on microplastics loads• BACWA response to Tom’s request for CEC management Fact Sheets	2:45
8. Information Requests	<ul style="list-style-type: none">• Prioritize Water Board information requests	2:50
9. Annual Meeting	<ul style="list-style-type: none">• Review of BACWA Annual Meeting agenda	2:55

ADJOURNMENT



August 18, 2015

Richard Looker
1515 Clay Street, Suite 1400
Oakland, CA 94612
(510) 622-2451

VIA EMAIL: rlooker@waterboards.ca.gov

Subject: Comments on the 2015 Triennial Review for the Water Quality Control Plan, San Francisco Bay Basin

Dear Mr. Looker:

The Bay Area Clean Water Agencies (BACWA) appreciates the opportunity to comment on the 2015 Triennial Review of the San Francisco Bay Basin Water Quality Control Plan (Basin Plan). BACWA is a joint powers agency whose members own and operate publicly-owned treatment works (POTWs) and sanitary sewer systems that collectively provide sanitary services to over 6.5 million people in the nine-county San Francisco Bay (SF Bay) Area. BACWA members are public agencies, governed by elected officials and managed by professionals who protect the environment and public health.

BACWA supports the triennial review process and applauds the improvements made to the Basin Plan through this process in recent years. The current list of issues proposed for review in the *Brief Issue Descriptions for the 2015 Triennial Review of the San Francisco Bay Basin Water Quality Control Plan* (Issue Descriptions) that was developed by the Regional Water Quality Control Board (Regional Water Board) addresses roughly two dozen topics that affect broad sections of the residents, businesses, and public agencies of the San Francisco Bay Area. Because the Regional Water Board has limited resources to address each of these issues, BACWA is limiting its comments to five of the issues, while proposing two new issues.

The comments below are made with reference to the number in the Issue Descriptions. The comments are ranked in order of BACWA's assignment of importance.

1. Issue 3.1 – Consider refinement and/or development of site-specific objectives for dissolved oxygen in San Francisco Bay

The Basin Plan includes a minimum water quality objective of 5.0 mg/L for dissolved oxygen in all tidal waters downstream of the Carquinez Bridge and 7.0 mg/L upstream of the Carquinez Bridge and also includes a requirement that the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation. These dissolved oxygen water quality objectives have been interpreted to be applicable at all times, at all depths, and in all locations. As described in the Issue Descriptions, this approach does not make sense for shallow habitats on the SF Bay's margins. The objectives also do not account for natural variability due to diurnal cycling and stratification. Setting a rigid

objective that applies throughout the Region fails to consider the beneficial uses attained in a diversity of habitats in the SF Bay's margins.

BACWA and its member agencies support research on appropriate dissolved oxygen levels in the SF Bay through the Nutrient Management Strategy and other initiatives. For example, Dr. Jim Hobbs of UC Davis has been conducting monthly trawls at Artesian Slough, Pond A19, and Upper Coyote Creek in the Lower South Bay with the cooperation of staff at the San Jose/Santa Clara Regional Wastewater Facility. The aim of these studies is to determine what levels of dissolved oxygen impact different fish species. Preliminary findings indicate that dissolved oxygen is not the primary driver of species diversity, and that a natural diverse ecosystem provides various open-water and marsh habitats with variable dissolved oxygen levels. BACWA would be happy to provide data from Dr. Hobbs' studies to inform the development of a strategy for dissolved oxygen in the SF Bay margins.

Recommendation: Amend the Basin Plan to develop a narrative dissolved oxygen objective that is linked to beneficial use attainment for shallow habitats in the SF Bay. Alternatively, develop implementation language to specify that the dissolved oxygen objective does not apply to shallow habitats in the SF Bay.

2. *New Issue - Revise instantaneous chlorine limitation of 0.0 mg/L*

In Basin Plan Table 4-2, chlorine is given an instantaneous limit of 0.0 mg/L in effluent, which is an interpretation of the Basin Plan's narrative toxicity objective. Region 2 is the only Region in California where the Basin Plan assigns a limit of 0.0 mg/L. Other Basin Plans in California either include effluent limits up to 0.1 mg/L for chlorine, or include only the narrative toxicity objective. Because chlorine is monitored continuously, chlorine residuals are the most likely constituent to lead to an effluent quality violation in our Region. POTWs that use chlorine for disinfection dechlorinate using sodium bisulfite (SBS). To avoid violations, operators routinely overdose the effluent with SBS, costing agencies millions of dollars per year in aggregate, and exerting oxygen demand in the receiving water, with no water quality benefit.

Chlorine quickly decays during discharge through an outfall, and NPDES permits in other regions account for such decay. In Massachusetts, for example, in addition to using a non-zero water quality objective for receiving waters and giving dilution credit, they calculate the rate of chlorine decay in the outfall pipeline and set effluent limits accordingly¹.

BACWA is interested in contributing resources to address this issue either through the Basin Planning process, or through alternative implementation of the existing limit. BACWA has identified four options to explore alone or in combination to address chlorine residual limits and to reduce SBS overuse:

- a) Adopt an alternative effluent limit for chlorine.
- b) Change the effluent limit to a water quality-based effluent limit derived using the State Implementation Plan procedure and taking dilution into account.

¹ See Massachusetts Water Resource Authority's NPDES Permit No. MA0103284, Attachment H: <http://www.epa.gov/region1/eco/mwra/pdf/h.pdf>

- c) Change the averaging period for the limitation. For example, make it a rolling median over the course of one day.
- d) Change how the point of compliance is determined. For example, calculate the rate of decay and set the limit such that the concentration measured at the dechlorination facility would decay to zero by the time it is discharged at the outfall.

Recommendation: Work with BACWA to develop a strategy for implementing chlorine residual limitations that minimizes the risk of a momentary exceedance and does not compromise receiving water quality.

3. *Issue 4.3 - Using Wastewater to Create, Restore, and Enhance Wetlands*

BACWA sees merit in encouraging the use of wetlands to provide additional water quality enhancement of treated effluent while concurrently increasing the amount of wetlands habitat around the Bay. In order to encourage wetlands creation in this manner, BACWA recommends that Water Board staff update Regional Board Resolution 94-086. Resolution 94-086 is the “Policy on the Use of Wastewater to Create, Restore, and/or Enhance Wetlands.” The current Resolution 94-086 policy is now over 20 years old. Many lessons have been learned about salt marsh restoration over the intervening years. In fact, the hydrology and topography of the San Francisco Bay has been changing as vast areas of former salt evaporating ponds are being restored to marsh under the San Francisco Bay Salt Pond Restoration Project.

This triennial review cycle is an appropriate time to begin this updated Policy development and the evaluation of the beneficial aspects of potential future discharges to wetlands. As described in the Issue Descriptions, the goal would be to develop near-shore permitting strategies for discharges to wetlands to resolve issues such as mixing zones. It would also develop a shallow water discharge prohibition exception for discharges to enhance wetlands.

Recommendation: BACWA recommends that Basin Plan revisions be developed and incorporated to recognize that treated wastewater can enhance beneficial uses in wetlands, and to provide implementation language for encouraging and permitting such discharge.

4. *Issue 4.4 - Update Conditions for Exemption to Discharge Prohibitions*

The Regional Water Board is looking to remove treatment reliability as a justification for the shallow water discharge prohibition exception, since treatment reliability is the “minimum expectation of all treatment facilities rather than...an achievement deserving of special privilege.”

BACWA appreciates the Regional Water Board’s confidence in our members’ treatment facilities, and urges the Regional Water Board to re-envision the role of shallow water discharges to the SF Bay. As the ongoing drought has demonstrated, effluent may be the only freshwater input into a given section of the SF Bay allowing the existence of brackish margin habitats that would otherwise disappear. In many cases, it can be demonstrated that the effluent contributes to a net environmental benefit. In this manner, BACWA’s comments on issue 4.4 are related to our comments on Issue 4.3.

Recommendation: Update the Basin Plan to acknowledge that highly treated wastewater effluent can enhance the ecosystem in shallow margin habitats.

5. *New Issue - Develop policy for Recycled Water Reverse Osmosis Concentrate Discharge (New Issue)*

In response to the ongoing drought, as well as anticipated long-term water shortages in the Region, many of our member agencies have been expanding their recycled water programs. Ultimately, some agencies are considering implementing indirect potable reuse, as well as delivering to customers who require very highly treated recycled water. These projects would treat wastewater effluent with reverse osmosis, which results in a concentrate composed of approximately 15 percent of the reverse osmosis influent flow but almost all of its dissolved and suspended pollutants. When the concentrate is discharged, it has the same loads but higher concentrations of pollutants compared to the original effluent. Agencies that discharge this reverse osmosis concentrate may therefore be in jeopardy of triggering reasonable potential or exceeding permit limits. Due to the importance of recycled water as a Regional asset, BACWA encourages the Regional Water Board to examine alternative permitting strategies to allow these projects to move forward.

Recommendation: Allocate resources to scope out a future policy on encouraging recycled water while protecting receiving water quality.

6. *Issue 3.2 - Update the Basin Plan's Toxicity Testing Requirements*

The description in the Issue Descriptions states that:

“Currently, there are inconsistencies between different State and Regional Water Boards’ toxicity testing requirements that result in uneven protections for aquatic life and an unequal playing field for waste dischargers.”

The State Water Board has been working on a Plan to address toxicity testing statewide (State Toxicity Plan). The proposed State Toxicity Plan will establish numeric chronic toxicity limits and require a new statistical approach, the Test of Significant Toxicity (TST), for evaluation of toxicity tests. This new statistical approach is calibrated with a built-in “false positive” rate and the null hypothesis is inverted: instead of testing to see if effluent is “toxic,” under the new method, dischargers will be demonstrating that effluent is “not toxic.” Both of these features are intended to make toxicity testing err on the side of determining that treated effluent is “toxic”.

The most recent draft of the State Toxicity Plan from 2012 gives Regional Water Boards discretion in determining instream waste concentration for toxicity testing, and in determining reasonable potential for acute toxicity testing, assuming the chronic toxicity tests continue to be performed on a regular basis. These two areas are elements to explore via a future Basin Plan modification.

Recommendation: BACWA has no recommendations at this time since the content of the State Toxicity Plan is still uncertain. When there is clarity, BACWA will engage

with Regional Water board staff to develop an implementation plan for Region 2 and discuss a future Basin Plan Amendment.

7. Issue 4.5 - Develop Regulatory Strategy for Contaminants of Emerging Concern

BACWA supports the Regional Monitoring Program (RMP). Many of our member agencies participate in the Contaminants of Emerging Concern (CEC) Workgroup. BACWA participation in this workgroup led to development of the CECs Management Strategy, as described in the 2013 Pulse of the Estuary publication. Key elements of this Strategy, such as tiered risk levels, were borrowed and replicated by the statewide project looking at CECs in the Aquatic Ecosystem.

A benefit of an informal strategy is that it can adapt to new information. The very nature of the field of CECs research is that questions being asked are constantly shifting and analytical tools for CECs continue to develop and improve. BACWA does not see an advantage to constraining the CECs Management Strategy such that it would require a Basin Plan Amendment to change it in the future.

Recommendation: The CEC Management Strategy should not be incorporated into the Basin Plan.

BACWA appreciates the opportunity to comment on the 2015 Triennial Review and thanks you for considering our input.

Respectfully Submitted,



David R. Williams
Executive Director
Bay Area Clean Water Agencies

cc: BACWA Executive Board

San Francisco Bay Regional Water Quality Control Board

NOTICE OF PUBLIC HEARING

TRIENNIAL REVIEW

WATER QUALITY CONTROL PLAN, SAN FRANCISCO BAY BASIN

The California Regional Water Quality Control Board, San Francisco Bay Region (Water Board) will conduct a public hearing to present a tentative resolution and supporting staff report adopting the 2015 Basin Plan Triennial Review list of prioritized projects. The staff report contains a listing of candidate Basin Planning projects (excluding TMDLs) that may be pursued over the next few years and that would ultimately result in Basin Plan amendments. The Basin Plan is the master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the San Francisco Bay Region, including water quality standards.

The purpose of the triennial review is to examine and update the focus of Water Board planning efforts. Section 13240 of the Porter-Cologne Water Quality Control Act and Section 303(c)(1) of the federal Clean Water Act require a review of basin plans at least once each three-year period to keep pace with changes in regulation, new technologies, policies, and physical changes within the region.

The public hearing on the Basin Plan Triennial Review will be held at the Water Board's regular monthly meeting:

DATE: **Wednesday December 16, 2015**

TIME: 9 a.m.

LOCATION: Elihu M. Harris State Building
Main Auditorium
1515 Clay Street
Oakland, California 94612

STAFF CONTACT: Richard Looker
1515 Clay Street, Suite 1400
Oakland, CA 94612
(510) 622-2451 (ph)
(510) 622-2460 (fax)
email: rlooker@waterboards.ca.gov

Initial written comments from the public on the Triennial Review were accepted from July 3, 2015, to August 18, 2015. Water Board staff also conducted a public workshop on August 4, 2015. During the workshop and comment period, the public had the opportunity to comment on the Triennial Review process and the Basin Plan, as well as recommend Basin Plan issues for investigation. Following a review of all issues submitted, the Water Board staff developed a technical report and tentative resolution describing a prioritized list of Basin Planning projects.

DR. TERRY F. YOUNG, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

1515 Clay St., Suite 1400, Oakland, CA 94612 | www.waterboards.ca.gov/sanfranciscobay

The 2015 Basin Plan Triennial Review Tentative Resolution and supporting staff report are available at the Water Board web site:

http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.shtml#triennialreview

All evidence, written testimony and exhibits proposed to be offered at the hearing must be submitted in writing to the Water Board staff contact no later than **November 23, 2015** in order to be considered by the Water Board. Non-evidentiary policy statements to be made at the hearing need not be submitted in advance. Water Board staff will respond to written comments submitted by **November 23, 2015**.

The public hearings will be conducted in accordance with 23 Cal. Code of Regs. § 649.3. Time limits may be imposed on oral testimony at the public hearings; groups are encouraged to designate a spokesperson. All exhibits presented at the hearing, including charts, graphs, and other testimony must be left with the Water Board. They will become part of the administrative record.

A map and directions to the hearing are available online at:

http://www.waterboards.ca.gov/sanfranciscobay/about_us/directions.shtml

The location of the hearing is accessible to persons with disabilities. Individuals who require special accommodations are requested to contact the Water Board's Executive Assistant Angela Tsao, (510) 622-2399, Angela.Tsao@waterboards.ca.gov, at least five (5) working days before a meeting. TTY users may contact the California Relay Service at 1-800-735-2929 or voice line at 1-800-735-2922.

Triennial Review Talking Points

- A [Triennial Review Staff Report](#) has been issued. The projects that are highly ranked and will be allocated resources are as follows:
 1. Review and Refine Dissolved Oxygen Objectives for San Francisco Bay
 2. Climate Change and Water Resources Policy
 3. Develop Numeric Nutrient Endpoints (NNEs) in Freshwater Streams and Estuaries
 4. Develop Nutrient Water Quality Objectives for San Francisco Bay Estuaries
 5. Using Wastewater to Create, Restore, and Enhance Wetlands
 6. Lake Merced Dissolved Oxygen and pH Objectives (this project can only be accomplished with additional resources).
- Comments on the Staff Report are due by November 23. The [public hearing](#) on the Triennial Review will be held on December 16.

BACWA Comments for the Public Hearing

- BACWA supports the triennial review process and applauds the improvements made to the Basin Plan through this process in recent years
- The Regional Water Board's top ranked projects illustrate the interrelation between key water quality issues in the San Francisco Bay. For example:
 - The project to "Review and refine dissolved oxygen objectives for the Bay" is being addressed through the State and Regional nutrient efforts, two of the other projects on the list. Dissolved oxygen is lower than the current Basin Plan objectives in Bay margin habitats. Many of these shallow sites support thriving ecosystems, and in general, marshlands are known to harbor lower dissolved oxygen than in the open water. Therefore, it is likely that the current dissolved oxygen objectives are not appropriate for these areas. Site-specific dissolved oxygen objectives for the Bay's margin habitats will provide regulatory support for the continued creation of wetlands around the Bay margins. *BACWA would like to reiterate its support for the Nutrient Management Strategy and the development of site specific objectives for dissolved oxygen through this initiative.*
 - These margin habitats and wetlands are a key piece of the Region's Climate change strategy. The Climate Change and Water Resources Policy project description recognizes the importance of wetlands to protect inland areas from flooding.
 - POTWs can be a key asset in helping to create wetlands by contributing freshwater flows. This brings us to the project, "Using Wastewater to Create, Restore and Enhance Wetlands" which would help provide permitting clarity for wastewater flows to wetlands, and hopefully encourage the creation of new wetlands that are supported by wastewater treatment facilities. Several of BACWA's member agencies have expressed interest in pursuing near shore discharges to support shallow water habitat, but face regulatory uncertainty from the shallow water discharge prohibition, which could hinder their implementation.
 - *BACWA looks forward to participating in any studies or other efforts that may be required to support new permitting approaches for near shore discharges to wetlands.*

- This brings us to a larger issue that we would like to tee up for the 2018 Triennial Review. Currently the Basin Plan considers POTW discharges as a waste stream that is best moved as far away from shore as possible to achieve the greatest dilution possible. As treatment technology improves, the shallow discharge prohibition becomes more and more a relic of the past. We know that POTWs and partner water agencies are already providing recycled water of high enough quality to be used for all purposes, and during this drought, POTW effluent is already the major source of freshwater in many areas of the Bay. *BACWA proposes that it's time to end the shallow water discharge prohibition; to stop thinking of effluent as a waste product and rather as a resource that can be strategically and beneficially used for both human use and ecosystem enhancement and restoration.*



POLICY NUMBER: BP-001

NAME OF POLICY: Dues and Fees Associated with Classes of Membership

DATE APPROVED: XX-XX-XXXX

LAST REVISED: XX-XX-XXXX

PURPOSE: In accordance with the BACWA JPA define the various classes of members.

POLICY: BACWA supports the establishment of differing classes of members each having their own dues and/or fee structure.

DEFINITIONS:

Dues: Dues cover an agency's membership in BACWA and support the operation of BACWA. Dues are not a function of the number of wastewater plants and agency owns and operates. EDPA is a special situation where its dues cover multiple POTWs that are members of the EBDA JPA in accordance with the BACWA JPA.

CBC Fee: All members are charged a CBC Fee which provides BACWA the resources to conduct special investigations and advocacy efforts on behalf of its members on a variety of issues including biosolids, water quality, permitting, pretreatment, O&M, collection systems.

Nutrient Surcharge: The Nutrient Surcharge is a special assessment use to supplement the CBC Fee financial resources and was specifically developed to meet the significant financial obligations of the Nutrient Watershed Permit. This fee is assessed to only those members who are listed in the Nutrient Watershed Permit. It will be continued until all obligations under the Permit are met.

Principals: The five BACWA Principals are comprised on the five original signers of the BACWA JPA. The Principals have the largest flows and loadings and thus bear the burden of the majority of BACWA's operating costs. All Principals pay the same dues, CBC fees and Nutrient Surcharge.

Associates: Associates Members of BACWA are those members whose POTW design flows are greater than or equal to 10 million gallons per day (mgd). Being larger POTWs their dues and fees are slightly higher than Affiliate Members. All Associate dues are the same, however since the CBC and Nutrient Surcharge are based on loadings, these charges can vary among different Associate members.



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BACWA BOARD POLICIES

Affiliates: Affiliate Members are the smaller to medium size POTWs with design flows less than 10 mgd. Affiliates have the lowest dues structure. Like Associates, since the CBC and Nutrient Surcharge are based on loadings, these charges can vary among different Affiliates. Members who operate collection systems and not a POTW are placed in the Affiliate class of membership and pay fixed dues and a fixed CBC Fee, but since they do not operate a POTW they are not assess the Nutrient Surcharge.

APPLICABILITY: This Policy applies to all BACWA Members

BACWA Recycled Water Projections

Current and Projected Future Amount of Recycled Water by Uses (in acre-feet)

Agency	Year	Total	Landscape	Commercial	Industrial	Agricultural	Enviro. Enhancement	Internal Use	Truck Fill Program	Indirect Potable Reuse	Direct Potable Reuse	Other (please describe)	Reverse Osmosis Concentrate returned to WWTP? What fraction of total project?	Dry Season Volume delivered(acre-feet)	Wet Season Volume delivered(acre-feet)	Notes
	Current 2015															
	Future 2020															
	Future 2025															
	Future 2030															
	Future 2035															
	Future 2040															

BACWA'S ROLE IN ADDRESSING INFORMATIONAL NEEDS

Introduction

Informational requests from BACWA have recently been increasing from both the Water Boards and the BACWA membership. Below is a listing of information requests from the WB as well as our membership. Staff will be attempting to meet as many of the needs as possible but this may require some outside assistance. If such assistance is needed, staff will bring proposals to the Board for Approval.

For the Water Board, we will be prioritizing the requests and developing a schedule for addressing each request. For the membership requests, the plan is to have an interactive session at the Annual Meeting wherein we get feedback on the priority of the requests we have assembled and also open the floor for additional requests from the general membership.

Water Board Requests

- more detailed POTW expenditure information*
- prepare a booklet of fact sheets that describe POTW Action Plans for various CECs*
- what all the POTWs are planning on water recycling*
- what agencies have PSL programs and how do they enforce them*
- proposal on how to classify collection systems as good performers*
- compile dioxin data if the WB ultimately decides to eliminate dioxin monitoring entirely.*
- investigate the outcome of sensitive species testing, i.e., how often do agencies switch species.*

Membership Requests

- summary of bids and scopes of work*
- information on pilot projects*
- contacts at all member agencies*
- Information on staffing and succession*

January 15, 2016 BACWA ANNUAL MEMBER'S MEETING (DRAFT FOR DISCUSSION)


<u>TIME</u>	<u>SUBJECT</u>	<u>DESCRIPTION</u>	<u>SPEAKER</u>	<u>HANDOUTS/PROPS</u>
8:30 am - 9:00 am	Coffee and Refreshments			Posters from SOTE Conference Pulse of the Bay, SOTE Docs.
9:00 am - 9:15 am	Welcome	Introduction and Year in Review	Chair	
9:15 am - 9:50 am	EPA/SWRCB/RWQCB/ Priorities	<u>Moderator</u>	Roger Bailey	
		EPA Region IX, Manager, NPDES Permits Office	David Smith	
		SWRCB Board Member	Steve Moore	
		RWQCB Executive Officer	Bruce Wolfe	
9:50 am - 10:00 am	Nutrients - Overview	Activities Over the Last Year/Governance Update	Dave W.	
10:00 am - 10:10 am	Nutrients - Regulatory Update	<u>Moderator</u>	Ben Horesnstein	
		Watershed Permit	Dave W.	
10:10 am - 10:20 am	Break			
10:20 am - 11:35 am	Nutrients - Regulatory Update (cont'd)	<u>Moderator</u>	Ben Horenstein	
		Optimization/Upgrade Studies	JB Neethling-HDR	
		Annual Reporting	JB Neethling-HDR	
		Q & A	JB Neethling-HDR	
		Next Steps	JB Neethling-HDR	
11:35 am - 11:50 am	BACWA Leadership Recognition	Committee Recognition	Chair	Chart with Key Highlights
11:50 am - 12:00 pm	BACWA Business Meeting	Financial/Organizational Outlook	David Williams	

noon - 12:30 pm	Lunch		
12:30 - 12:35 p.m.	Arlene Naverret Award	Award Presentation	Chair
12:35 pm - 1:45 pm	BACWA Hot Topics	<u>Moderator</u>	Mike Connor
		Drougth/Recycled Water	SCVWD SOTE Presentation
		Toxicity	Jim Ervin
		Mircoplastics	Warner/Rebecca from SFEI/POTW rep
		AIR Issues/CWCCG	Sarah D.
		Enhancing Service to the Memberhsip	Chair
1:45 pm - 2:55 pm	Nutrients - Technical Update	<u>Moderator</u>	Jim Ervin
		SFEI Study Findings & Science Plan	David Senn
2:55 pm - 3:00 pm	Annual Meeting Wrap-Up		Chair

ED taking notes on flip chart

Cost reduction opportunities reducing all sampling to 1x per permit cycle except constituents with effluent limits - updated with Regional Water Board staff input

Test	Limiting Permitting rationale	Current Frequency each agency	Cost per analytical test, Low range*	Cost per analytical test, high range*	No. Agencies affected	Current Frequency /year - all agencies	Water Board Proposed frequency /year - all agencies	Total Cost savings (low)/yr	Total Cost savings (high)/yr	Water Board response
Sensitive Species Screening	By reference in Basin Plan	1/permit cycle	\$24,000	\$35,000	38	7.6	As needed	\$182,400	\$266,000	Open to dropping. Request data on outcome of sensitive species screens.
1668C for Congeners	"Informational" Monitoring	2-4x per year (major) 0.2-1x per year (minor)	\$1,000		37	104.6	104.6	\$0	\$0	challenge mid-permit reduction. Open to reducing when watershed permit is issued.
EPA 1613 for dioxins	Once per permit cycle	1-2x per year	\$600	\$1,000	37	67.2	0	\$40,320	\$67,200	Looking at dropping altogether, but need data compiled
Acute toxicity	Basin Plan limits	4-12x per year	\$2,000	\$3,000	39	374	374	\$0	\$0	no interest in changing this
EPA 624 VOCs	Once per permit cycle	0.2 – 2x/year	\$143	\$295	47	67.5	9.4	\$8,308	\$17,140	looking at 1x per permit cycle except agencies with WQBELs
EPA 625 Base/Neutrals and Acids	Once per permit cycle	0.2 – 2x/year	\$361	\$545	47	67.5	9.4	\$20,974	\$31,665	looking at 1x per permit cycle except agencies with WQBELs
EPA 608 for Pesticides and PCBs	Once per permit cycle	2x per year (major) 1x per year (minor)	\$143	\$230	37	69	37	\$4,576	\$9,440	looking at 1x per permit cycle
Contract lab total								\$222,720	\$333,200	
All test total								\$256,578	\$391,444	

 = tests sent to contract labs by all agencies

Skip sensitive species screening unless there is a change in treatment process, a new SIU, or other important change that could impact effluent quality

* Low end of costs for chemical analyses provided by Alpha Labs , high end by Caltest. Staff time for data management, sample collection, etc. not included

Acute toxicity test cost info provided by agencies, includes staff time since performed in-house

Sensitive species screening test cost provided by agencies, verified with PERL

RMP Budget Year: 2016 3.0% increase in budget
 Total of Current Year's Program Fees: \$3,520,551
 Avg Number of Program Participants: 73 <- this number is the average number of RMP participants (2005-2014)
 Number of Municipal Participants: 35 (POTWs)
 Current Fees for Municipal Participants: \$1,549,043
 Base Charge ¹⁾ \$4,823
 Additional Fee for Load Factor ²⁾ \$93

NOTE: As of 2007 budget year the Water Board Letter requests that these data are reported in pounds per year (lbs/year) not lbs/day as in prior years.

2016 RMP Fees for Municipal Participants

Participant	Daily flow unit	Cu	Ni	Cr	Se	2014 Total Load of Selected Metals	2013 Total Load of Selected Metals	Yearly Difference (%)	Yearly Difference (unit)	Metals Load Unit	Base Charge ¹⁾	Additional Fee for Load Factor ²⁾	Total Fee
1 City of Benicia	MGD	24.94	17.28	2.17	1.92	46.31	44.42	104%	1.89	lbs/year	\$4,823	\$4,292	\$9,115
2 City of Burlingame	MGD	61.45	30.60	4.50	0.90	97.45	111.74	87%	(14.29)	lbs/year	\$4,823	\$9,032	\$13,855
3 City of Calistoga	MGD	4.08	1.31	0.37	0.44	6.20	2.73	227%	3.47	lbs/year	\$4,823	\$575	\$5,397
4 Central Contra Costa Sanitary District	MGD	595.00	264.00	44.30	57.40	960.70	989.30	97%	(28.60)	lbs/year	\$4,823	\$89,043	\$93,865
5 Central Marin Sanitation Agency	MGD	90.19	97.32	12.32	5.52	205.35	155.92	132%	49.43	lbs/year	\$4,823	\$19,033	\$23,856
6 Delta Diablo	MGD	118.51	131.22	35.90	12.24	297.87	296.25	101%	1.62	lbs/year	\$4,823	\$27,608	\$32,431
7 East Bay Dischargers Authority	MGD	1,362.00	727.00	121.00	91.00	2,301.00	2,573.00	89%	(272.00)	lbs/year	\$4,823	\$213,269	\$218,092
8 East Bay Municipal Utility District	MGD	1,244.70	1,033.00	142.70	83.30	2,503.70	2,185.10	115%	318.60	lbs/year	\$4,823	\$232,056	\$236,879
9 Fairfield-Suisun Sewer District	MGD	190.71	124.93	11.43	15.48	342.55	342.63	100%	(0.08)	lbs/year	\$4,823	\$31,749	\$36,572
10 Las Gallinas Valley Sanitary District	MGD	36.70	26.90	1.87	2.18	67.65	38.81	174%	28.84	lbs/year	\$4,823	\$6,270	\$11,093
11 City of Millbrae	MGD	32.50	16.31	1.55	1.91	52.27	62.47	84%	(10.20)	lbs/year	\$4,823	\$4,845	\$9,667
12 Mountain View Sanitary District	MGD	22.95	9.19	0.66	2.19	34.99	36.88	95%	(1.89)	lbs/year	\$4,823	\$3,243	\$8,066
13 Napa Sanitation District	MGD	66.32	71.49	8.34	0.74	146.89	122.48	120%	24.41	lbs/year	\$4,823	\$13,615	\$18,437
14 Novato Sanitation District	MGD	29.82	54.90	4.89	3.87	93.48	62.60	149%	30.88	lbs/year	\$4,823	\$8,664	\$13,487
15 City of Palo Alto	MGD	635.00	279.00	21.00	81.00	1,016.00	1,107.51	92%	(91.51)	lbs/year	\$4,823	\$94,168	\$98,991
16 City of Petaluma	MGD	29.30	39.81	3.80	1.66	74.57	63.89	117%	10.68	lbs/year	\$4,823	\$6,912	\$11,734
17 City of Pinole/Hercules	MGD	29.69	25.81	2.68	3.63	61.81	65.85	94%	(4.04)	lbs/year	\$4,823	\$5,729	\$10,552
18 Rodeo Sanitary District	MGD	8.06	3.94	0.73	1.97	14.70	14.87	99%	(0.17)	lbs/year	\$4,823	\$1,362	\$6,185
19 San Francisco International Airport	MGD	12.30	9.96	1.40	0.50	24.16	23.24	104%	0.92	lbs/year	\$4,823	\$2,239	\$7,062
20 City and County of San Francisco	MGD	926.17	725.24	138.65	37.33	1,827.39	1,756.10	104%	71.29	lbs/year	\$4,823	\$169,372	\$174,195
21 City of San Jose	MGD	598.20	1,258.90	128.30	126.70	2,112.10	2,467.30	86%	(355.20)	lbs/year	\$4,823	\$195,761	\$200,583
22 City of San Mateo	MGD	220.35	268.34	22.15	18.63	529.47	311.15	170%	218.32	lbs/year	\$4,823	\$49,074	\$53,897
23 Sausalito-Marin City Sanitary District	MGD	34.40	13.70	2.60	0.00	50.70	49.70	102%	1.00	lbs/year	\$4,823	\$4,699	\$9,522
24 Sewerage Agency of Southern Marin	MGD	140.56	34.20	7.65	3.68	186.09	143.72	129%	42.37	lbs/year	\$4,823	\$17,248	\$22,070
25 City of South San Francisco/San Bruno	MGD	214.46	79.25	16.82	25.70	336.23	353.29	95%	(17.06)	lbs/year	\$4,823	\$31,164	\$35,986
26 Sonoma County Water Agency	MGD	5.20	5.11	1.40	1.18	12.89	17.99	72%	(5.10)	lbs/year	\$4,823	\$1,195	\$6,017
27 Silicon Valley Clean Water	MGD	142.69	180.67	12.98	9.40	345.74	345.93	100%	(0.19)	lbs/year	\$4,823	\$32,045	\$36,868
28 City of Sunnyvale	MGD	77.70	122.40	16.60	23.60	240.30	248.50	97%	(8.20)	lbs/year	\$4,823	\$22,272	\$27,095
29 City of St. Helena	MGD	1.34	0.95	0.28	0.20	2.77	1.13	245%	1.64	lbs/year	\$4,823	\$257	\$5,079
30 Marin County Sanitary District #5, Tiburon	MGD	16.07	8.65	1.26	1.24	27.22	15.67	174%	11.55	lbs/year	\$4,823	\$2,523	\$7,346
31 Union Sanitary District	MGD	36.80	80.60	40.90	4.00	162.30	138.90	117%	23.40	lbs/year	\$4,823	\$15,043	\$19,865
32 Vallejo Sanitation & Flood Control District	MGD	214.60	81.29	13.24	13.83	322.96	276.40	117%	46.56	lbs/year	\$4,823	\$29,934	\$34,756
33 West County Wastewater District	MGD	221.10	123.30	19.00	11.30	374.70	208.83	179%	165.87	lbs/year	\$4,823	\$34,729	\$39,552
34 Town of Yountville	MGD	1.62	0.86	0.16	0.06	2.70	2.51	108%	0.19	lbs/year	\$4,823	\$250	\$5,073
35 U.S. Navy, Treasure Island	MGD	7.12	2.65	0.56	0.24	10.57	11.25	94%	(0.68)	lbs/year	\$4,823	\$980	\$5,802
TOTAL	MGD	7452.60	5950.08	844.16	644.94	14891.78	14648.06	102%	243.72	lbs/year	\$168,794	\$1,380,249	\$1,549,043

¹⁾ BASE CHARGE = [10% of total program costs / avg number of RMP Program participants 2005-2014]
²⁾ ADDITIONAL FEE FOR LOAD FACTOR = [(total municipal costs - base charges) / total load of POTWs] * individual POTW's metals load
 For informational purposes only. Prior years' data do not factor into the calculation of the fee.



SAN FRANCISCO ESTUARY INSTITUTE

4911 Central Avenue, Richmond, CA 94804 • p 510-746-7334 • f 510-746-7300

www.sfei.org

DATE: November 3, 2015

TO: RMP Steering Committee

FROM: Philip Trowbridge, RMP Manager

RE: Supplemental Environmental Project Funding for the RMP

One of the high priority options for new RMP revenue is penalty funds from Water Board enforcement actions. Therefore, the Regional Board developed and vetted a legal process to establish the RMP as an authorized Supplemental Environmental Project (SEP). Under this process, entities that have to pay a fine will have the option to direct 50% of the fine to the RMP. The funds would go into the Undesignated Reserve Funds until they are allocated by the Steering Committee to a specific study.

SEP revenue will be variable and unpredictable. The RMP may receive up to \$100,000 per year depending on the number of enforcement actions. There will be some extra reporting requirements but these will not require significant staff time. The details of the SEP funding are documented in an amendment to the Memorandum of Agreement for the RMP (attached).

The Steering Committee should strongly encourage RMP participants who need to pay a fine to use the SEP option to keep these funds in the region to study high priority issues through the RMP.

SUPPLEMENTAL
to
MEMORANDUM OF UNDERSTANDING

between the

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

and the

SAN FRANCISCO ESTUARY INSTITUTE

concerning the implementation of the

SUPPLEMENTAL ENVIRONMENTAL PROJECTS FUND

of the

REGIONAL MONITORING PROGRAM FOR TRACE SUBSTANCES

This Supplemental to the Memorandum of Understanding¹ (Memorandum) between the Board and the Institute is made and entered into for the purpose of ensuring that funds for supplemental environmental projects from Board enforcement actions (1) are utilized in a manner consistent with the State Water Resources Control Board Policy on Supplemental Environmental Projects (SEP Policy), and (2) supplement, not replace or reduce, funds that the Board requires for studies under the Regional Monitoring Program (Program), also referred to as the Regional Monitoring Program for Toxic Pollutants or the Regional Monitoring Program for Trace Substances. This Supplement follows the organization and terminology in the Memorandum.

I. BACKGROUND

In 1996, the Board and the Institute entered into the Memorandum for the purpose of documenting the relationship between the Board and the Institute for the implementation of the Program. The Memorandum established that the Board and Institute form a Steering Committee to work on such issues as allocation of future program costs, participation in study proposal review and selection, and evaluation of the effectiveness of the Program. In 2015, the Steering Committee for the Program finalized a Charter describing the governance structure and decision making process for the Program.

The Memorandum establishes that the cost of the Program be set annually by the Executive Officer of the Board. It further establishes that the Board would consider a Program Participant who provides its annual share of funding to have fulfilled its obligation for the Program for that year. The 2015 Charter establishes the process for the Institute's development of annual work plans and budgets, and charges the Steering Committee with final approval of

¹ The Memorandum from 1996 has been amended every few years to extend it past its expiration dates (originally in December 1997). The most recent extension establishes an expiration date of December 31, 2016.

those work plans and budgets. Historically, the Institute and others have identified more water quality issues meriting study than the Board's cost allocations can support.

In 2009, the State Water Resources Control Board adopted the SEP Policy. The SEP Policy allows a discharger to satisfy part of a monetary assessment imposed in an administrative civil liability (ACL) order by completing or funding one or more supplemental environmental projects (SEPs). The SEP Policy establishes qualification criteria and other conditions that must be met.

The SEP Policy requires a nexus between the violation and the SEP. There is nexus between the Program and violations subject to ACLs because the Program studies water bodies that are potentially affected by violations in the San Francisco Bay region. The 2015 Charter establishes guiding goals and principals for the Program namely to collect data and communicate information about water quality in the San Francisco Estuary in support of management decisions on restoring and protecting the beneficial uses of the region's waters.

The SEP Policy also requires that the SEP must go above and beyond other applicable obligations of the discharger that proposes to satisfy a part of its monetary penalty with an SEP. This Supplement meets this requirement by limiting SEP funds to implementing only those elements of the Program that would not otherwise be implemented through the Board's annual cost allocations.

II. DEFINITIONS

The definitions in the Memorandum are supplemented with the following terms and meanings for the purpose of this supplemental document:

SEP Fund shall mean a supplemental environmental project (or SEP), as allowed by the SEP Policy and developed as a result of Board enforcement actions, to fund execution of Program elements that go above and beyond the obligation of Program Participants.

SEP Funder shall mean an entity who chooses to satisfy part of a monetary assessment imposed in an ACL order by completing or funding one or more SEPs. A SEP Funder may include Program Participants as defined in the Memorandum.

Supplement shall mean this supplement to the Memorandum of Understanding between the Board and the Institute that was entered into for the Regional Monitoring Program in 1996.

III. EFFECTIVE DATE OF AGREEMENT

The effective date of this Supplement is the later of the dates of signature by both parties.

IV. STATEMENT OF WORK

The section of the Memorandum is not supplemented.

V. PROGRAM MANAGEMENT

The Institute shall be responsible for identifying in each annual work plan and annual budget for the Program those elements, or a portion of an element, that are to be funded by the SEP Fund. The Institute shall identify these elements separately from elements that are funded by Program Participants through their fulfillment of the annual cost allocations required by the Board. Program elements to be funded by the SEP Fund must go above and beyond the elements funded by Program Participants, and their priority for funding may be determined by the Steering Committee.

VI. ALLOCATION OF COSTS AND FULFILLMENT OF PERMITTEE OBLIGATIONS

The Institute shall track SEP Fund contributions and expenditures separately from Program Participant funds pursuant to section XI (Financial Records and Accounting). A SEP Funder fulfills its obligation under a Board enforcement action after its contribution to the SEP Fund has been received by the Institute.

VII. COMMITTEES

The section of the Memorandum is not supplemented.

VIII. RESPONSIBILITIES OF SIGNATORIES

This Supplement adds the following responsibilities of the Board to the Memorandum:

9. Notify potential SEP Funders of the option of contributing to the SEP Fund.
10. Establish oversight costs to be paid by a SEP Funder that are in addition to the amount of the SEP contribution so as to cover the Institute's administrative cost of oversight of the SEP Fund. Initially, the oversight cost will be 5 percent of the amount of the SEP contribution, except that it will be zero oversight costs for SEP contributions involving straightforward penalty actions such as mandatory minimum penalties. The Board will take results and experience from this and reset the oversight rates as appropriate in accordance with the terms for amendment of this Supplemental.
11. Notify the Institute when an ACL order will come into effect involving a future contribution to the SEP Fund.

This Supplement adds the following responsibility of the Institute to the Memorandum:

11. Indicate on the Program website, and annual and other reports, that funding for a part of the Program is the result of settlement of "San Francisco Bay Water Board" enforcement actions consistent with SEP Policy section G.6.

IX. DURATION OF AGREEMENT

This Supplement shall be effective for as long as the Memorandum is effective.

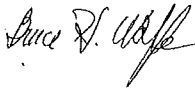
X. AMENDMENTS TO THE AGREEMENT

This section of the Memorandum is not supplemented. This Supplement may be amended consistent with the terms of the Memorandum.

XI. FINANACIAL RECORDS AND ACCOUNTING

The Institute need not maintain the SEP Fund in segregated accounts, but shall account for the funds separately from funds collected from Program Participants and other Institute monies. The Institute shall disburse SEP Funds under the terms and conditions set forth in the Memorandum. The Institute, in its annual and quarterly financial reports to the Board, shall separately itemize SEP Fund contributions and expenditures by each SEP Funder. As noted above, a SEP Funder fulfills its obligation under a Board enforcement action after its contribution to the SEP Fund has been received by the Institute. The Institute's reports shall indicate when a SEP Funder has met this obligation.

**FOR THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD,
SAN FRANCISCO BAY REGION:**



Digitally signed by Bruce H. Wolfe
DN: cn=Bruce H. Wolfe, o=SWRCB,
ou=Region 2,
email=bwolfe@waterboards.ca.gov, c=US
Date: 2015.10.22 18:14:59 -07'00'

Bruce H. Wolfe, Executive Officer

Date

FOR THE SAN FRANCISCO ESTUARY INSTITUTE:



Warner Chabot, Executive Director

10-27-15
Date

BAPPG Committee Report to BACWA Board

Meeting Date: October 7, 2015
Prepared By: Lorien Fono, BACWA RPM
BAPPG Chair: Robert Wilson

28 attendees representing 18 member agencies.

Committee Request for Board Action

Review and approve Diquat Dibromide comment letter to USEPA.

Committee Updates from BAPPG's General Committee Meeting on October 7, 2015:

- **BAPPG Budget** - The Steering Committee has been working to address the \$10,000 shortfall that was a result of a calculation error in the budget. They have cut down some projects such as the Asian Holiday Outreach, and have transferred funds from the contingency budget item. Additionally, BAPPG has requested a proposal from SFEI to put together a fact sheet on flame retardants.
- **Pollution Prevention Reporting Presentation** - James Parrish of the Regional Water Board gave a [presentation](#) outlining the features that he looks for in agencies' Pollution Prevention Annual Reports. The content of the presentation was similar to that of the [guide](#) that he distributed earlier in the year. A main take-home message is that the Pollution Prevention report can be structured to optimize readability, rather than sticking literally to the order of the reporting requirements in the NPDES permit.
- **Safer Consumer Products Presentation** - Ann-Cooper Doherty of the DTSC gave a [presentation](#) on the new Safer Consumer Products program at the Department of Toxic Substances Control (DTSC), which is intended to provide a non-legislative pathway to phase out or control chemicals and products of concern. She gave a description of how the program works and how the candidate chemical list is put together. Candidate chemicals include pollutants that have water quality concerns, and that could impact wastewater facilities. Agencies are encouraged to supply data on any chemical they would like to see addressed. Candidate chemicals cannot include pesticides that are covered by FIFRA. Manufacturers are required to perform alternatives analysis to replace constituents of concern, and there is a range of options for response, up to and including banning a product.

Diquat Dibromide Comment Letter

The use of diquat dibromide for root control in collection systems was omitted from the initial EPA's documentation during registration review. BAPPG and Palo Alto have developed the attached draft comment letter which notes that omission and then asks for clear language on the label to protect treatment plant operations and collection system workers.

The supporting information for the letter can be found [here](#). The letter has been circulated for comment to BACWA's Collection Systems Committee.

Date of Next BAPPG Meeting

BAPPG Steering Committee Meeting
November 10, 2015: 9:00am-10:00am
Conference Call

BAPPG General Meeting
December 2, 2015: 10:00am-12:00pm
1515 Clay Street, Second Floor, Room 12
Oakland, CA



November 24, 2015

Bonnie Adler
Risk Management and Implementation Branch 5
Pesticide Re-evaluation Division (7508P)
Office of Pesticide Programs (OPP)
U.S. Environmental Protection Agency (U.S. EPA)
1200 Pennsylvania Ave., NW.
Washington, DC 20460-0001

Subject: Diquat Dibromide Registration Review, Case # 0288 (Docket ID Number EPA-HQ-OPP-2009-0846)

Dear Ms. Adler:

On behalf of the Bay Area Clean Water Agencies (BACWA), we thank you for the opportunity to comment on the registration review for the herbicide and root control chemical diquat dibromide.

BACWA's members include fifty-five publicly owned wastewater treatment facilities and collection system agencies serving 6.5 million San Francisco Bay Area residents. We take our responsibilities for safeguarding receiving waters seriously and are very concerned about discharges of pesticides into wastewater systems that may compromise effluent quality, biosolids reuse, and compliance with NPDES permit requirements.

BACWA is especially interested in the registration review for diquat dibromide as it is an effective chemical commonly used to control root invasion in wastewater collection systems. Roots are a leading cause of collection system blockages, which can cause untreated wastewater to spill out of the collection system. Controlling roots helps prevent these backups, while protecting water quality. However, if too much is applied in a short time period, diquat dibromide (as well as other root control chemicals) may interfere with facilities' biological wastewater treatment processes. Wastewater collection systems are often managed by agencies other than the agency that operates the downstream publicly owned wastewater treatment plant. Consequently, wastewater treatment facilities are not always able to control the upstream use and subsequent discharge of root control chemicals.

Like several other states, California has issued Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WQO No. 2006-0003-DWQ). California's permit requires

wastewater collection system operators to implement management actions, such as use of root control chemicals, to prevent collection system blockages. We expect that these requirements have stimulated expanded use of chemical root control in recent years.

Root Control Use in Wastewater Collection Systems Was Omitted from Risk Assessment

In the referenced registration review risk assessment, *the use of diquat dibromide for root control in sewage collection systems was omitted*. We appreciate your quick response to our questions about this omission and your commitment to collect relevant information previously submitted to EPA, to consult with your science staff, and to seek confidential data reported to the California Department of Pesticide Regulation (DPR) that will clarify the level of use of this pesticide for wastewater collection system root control.

We appreciate that the use of this pesticide in sewer collection systems is different than other uses and therefore may require additional scientific analysis as part of the registration review. Our goal in submitting this letter is to provide the information necessary to support EPA's analysis. If there is anything that our member agencies or our national association, the National Association of Clean Water Agencies (NACWA) can do to support additional analysis or clarify this use, please contact us.

Our comments that follow are generally parallel to our past comments for two other root control chemicals: metam-sodium and dichlobenil.^{1,2} In particular, we have included with this letter the 2012 BACWA comment letter regarding Dichlobenil (including the attachments) as it provides considerable background, including:

- Background on Root Control in Wastewater Collection Systems
- Potential Wastewater Treatment Process Interference
- Why Pesticide Registration Review Must Prevent Water Quality Impacts from Root Control Chemicals
- The Need for POTW Notification Prior to Collection System Applications

Diquat Dibromide, While a Necessary Tool For Root Control, May Interfere with the Wastewater Treatment Process If Usage Is Not Managed on a Sewershed Basis

BACWA is concerned that diquat dibromide used in root control programs may interfere with wastewater treatment processes if too much is applied upstream of a wastewater treatment plant (i.e., in its "sewershed") in a short time period. In modern wastewater treatment plants, microorganisms do the basic work of removing fecal matter and dissolved organics in sewage, reducing biological and chemical oxygen demand as well as suspended solids prior to discharge to receiving waters. If a pesticide enters a treatment plant in sufficient quantities, it is possible it could harm these crucial microorganisms, causing "process interference," or a plant "upset" where wastewater is no longer able to be treated properly before discharge. In the case of a plant upset, microorganisms may either be impaired or killed, such that treatment does not occur for

¹ Comment Letter to Docket No. OPP-2005-0125 Metam-sodium Risk Reduction Options, Tri-TAC, September 25, 2007.

² Comment Letter to Dichlobenil Registration Review, Case #0263 (Docket ID Number EPA-HQ-OPP-2012-0395), BACWA, September 7, 2012.

hours, days, or even weeks, resulting in impacts to water quality, fish and wildlife, as well as NPDES permit violations.

In 2007, the City of Palo Alto commissioned Stanford University to investigate the potential for the three most common chemical root control products to interfere with the biological operations in the City's wastewater treatment process. All three products were found to have the potential to interfere with the City of Palo Alto POTW's biologically based nitrification treatment.³ In particular, the diquat dibromide product was determined to be a nitrification inhibitor at the laboratory bench-scale at concentrations as low as 4.7 mg/L (representing a 400-fold dilution versus typical in-field applied concentrations). While a bench-scale analysis will differ from how products distribute and react in the field, this suggests that at least a 400-fold dilution is necessary to be protective of biological operations. It further suggests the need for a wastewater agency to be notified as to the number and location(s) of application as well as volume of active ingredient.

We request that EPA review the Stanford study (enclosed) to confirm the potential for process interference. In the event that EPA determines that additional evidence is necessary, we recommend that EPA require registrants to conduct EPA's standard test for wastewater process interference, called the "Modified Activated Sludge Respiration Inhibition Test" (EPA OCSPP Guideline 850.3300). We are happy to provide samples, if needed, to support this testing.

POTW Notification Prior to Collection System Applications

To ensure that the benefits of wastewater root control chemical use can be realized without interfering with wastewater treatment facility operation, BACWA requests that EPA require root control applicators to provide advance notification to wastewater treatment facility operators of any planned chemical root control application in the wastewater collection system. Currently the diquat dibromide label includes the following restriction: "Notify appropriate wastewater agency prior to use of this product so that it may monitor the operations of the wastewater treatment plant." Such vague language does not clarify how much advanced notice should be provided, nor does it specify that information be provided regarding dates, locations and volume of active ingredient to be applied.

Wastewater collection systems are commonly managed separately from wastewater treatment plants, and it is not uncommon for multiple municipal and private wastewater collection systems to flow to a single, separately owned and operated wastewater treatment facility. Treatment plant operators may not be aware of chemical root control being applied in the collection system. Furthermore, chemical root control is often applied by contractors, who are not necessarily in daily communication with either wastewater collection systems managers or treatment managers. Meanwhile, wastewater pretreatment program staff often open manholes and/or enter wastewater collection lines to collect wastewater samples. If proper notification to downstream wastewater treatment facilities is required, wastewater treatment operations staff can work with applicators to ensure that applications remain below levels that can cause treatment process interference and ensure that pretreatment staff avoids entering affected sewer lines.

EPA has previously established a more robust wastewater treatment plant notification

³ Yeung, C.H. and C. Criddle (2007). Inhibition of Activated Sludge Nitrification by Root Control Chemicals: an Initial Evaluation of Dosage and Contact Time. (Enclosed)

requirement for metam-sodium.⁴ On the following page we propose language based on the metam-sodium label language with the following edits:

- Edited title meant to clarify that notification is necessary regardless of proximity to the wastewater treatment plant.
- Clarified the appropriate wastewater treatment plant staff person to contact
- Clarification of the timeframe for notification and require notification of dates, amounts, and locations. These data are necessary in order for the wastewater system staff to review the acceptability of the proposed amounts and to ensure that if multiple jurisdictions or contractors are conducting parallel operations, toxic dosages are not approached.
- While we included the maximum dosage discussion from the metam-sodium label, the analysis has yet to be conducted for diquat dibromide as to a maximum dosage to protect the integrity of biological treatment.⁵

BACWA requests that EPA work with registrants to immediately implement labeling requirements for a minimum of 24-hour advance notification to wastewater treatment plant operators before the application of all chemical root control products, including diquat dibromide products.

Recommended Label Instructions Regarding Notification (Based on Existing Metam-Sodium Label)

USE RESTRICTIONS NEAR UPSTREAM OF A WASTEWATER TREATMENT PLANTS

This product must be used only where wastewater treated for root control will be processed through a wastewater treatment facility.

Applicators must notify ***the Operations Manager of the*** downstream wastewater treatment facilities ***at least 24 hours*** prior to the start of ~~metamsodium~~ ***diquat dibromide*** applications so that they may monitor the operations of the wastewater treatment plant ***and restrict staff from entering the downstream lines.***

Applicators must report ***the proposed application dates, locations, and active ingredient volume to*** ~~how much product will be applied to the sewage system~~ to operators of downstream ~~waste~~ wastewater treatment plants and to inform these operators that high concentrations of these chemicals in wastewater may adversely affect the biological sewage breakdown process in wastewater treatment plants ***and may be a concern to staff entering the collection system. Applicators must maintain confirming documentation of the notification to wastewater treatment facilities.***

Never exceed the daily use of more than ~~45~~ ***(to be determined)*** gallons of ~~Sanafam Vaporooter II Liquid~~

⁴ U.S. EPA Office of Prevention, Pesticides, and Toxic Substances (2009). Amended Reregistration Eligibility Decision (RED) for the Methylthiocarbamate Salts (Metam- sodium, Metam-potassium) and Methyl Isothiocyanate (MITC). EPA 738-R-09-310.

⁵ Both pesticide control operators and wastewater facility operators would benefit from specific guidance on how to calculate how much root control product may be safely applied within a wastewater collection system. This would ideally be a “maximum allowable headworks loading” formula that would provide a simple formula to calculate the maximum hourly and daily quantity of a root control product that can be allowed in a treatment plant’s influent stream, which will afford protection of the treatment facility microorganisms and prevent interference with the treatment process.

Concentrate **[diquat dibromide product name]** for each million gallons of sewage flow (MGD) into the wastewater treatment plant (WWTP). Example: Inflow into the WWTP is 2.4 MGD, therefore, use a maximum of ~~36~~ **(TBD)** gallons (2.4 x ~~15~~ **(TBD)**) of ~~Sanfoam Vaporooter~~ **[diquat dibromide product name]** per day. When **applying** ~~Vaporooting~~ within one mile distance of the WWTP or when applying at night reduce the maximum application use by 50 % ~~to 18 gallons (36 x .5)~~. The above maximum daily use must extend over an eight hour work period.

BACWA stands ready to engage our member agencies and others in the wastewater community to ensure that the registration review for diquat dibromide fully addresses potential wastewater process interference and worker safety issues.

Thank you for your consideration of our comments. If you have any questions, please contact BACWA's Project Managers, Melody LaBella, at (925) 229-7370 or mlabella@centralsan.org or Karin North at (650) 329-2104 or Karin.north@cityofpaloalto.org.

Respectfully Submitted,



David R. Williams
Executive Director
Bay Area Clean Water Agencies

Enclosures:

1. BACWA Comment Letter regarding the Dichlobenil Registration Review (Case #0263, Docket ID Number EPA-HQ-OPP-2012-0395), September 7, 2012.

Enclosures to the above letter:

2. California Collection System Collaborative Benchmarking Group (2005). *Best Practices for Sanitary Sewer Integrated Root Control Best Management Practices*. March.
3. American Society of Civil Engineers (2004). *Sanitary Sewer Overflow Solutions*. Prepared under EPA Cooperative Agreement CP-828955-01-0. April.
4. California Department of Pesticide Regulation (1995). *Evaluation of Copper- and Tributyltin-Containing Compounds*. Report Number EH-95-07. August [see Part 4].
5. San Francisco Bay Regional Water Quality Control Agencies (2005). *Sewer System Management Plan Development Guide*.
6. County of Sacramento Department of Public Works Water Quality Division (1973). *Chemical Control of Roots*. September.
7. Water Environment Research Foundation (2009). *Fats, Roots, Oils, and Grease (F.R.O.G) in Centralized and Decentralized Systems*. WERF Project Number 03-CTS- 16T.
8. Yeung, C.H. and C. Criddle (2007). Inhibition of Activated Sludge Nitrification by Root

Committee Request for Board Action: None

18 attendees

Discussions with Regional Water Board Staff

- *New staff* – Mary Boyd has replaced Claudia Villacorta at the Regional Water Board.
- *Water Board Priorities* – Collections systems should look for pressure towards continued reduction in SSOs through aggressive O&M, hot spot strategies for SSOs due to blockages, and adequate rehabilitation. The Regional Water Board is looking for accurate and complete reporting including volume estimates and timely CIWQS certification.
- *Private Sewer Lateral Ordinance Agency List* – In 2014, Claudia Villacorta had put together a list of agencies with ordinances requiring inspection and repair of laterals by homeowners, triggered by sale, remodel or other soft triggers. Lorien Fono circulated the list to the collection system committee and partially updated it, but Regional Water Board staff are looking for more details, and information about more agencies. They also want to make sure that agencies with such ordinances are enforcing them. BACWA will work with the Regional Water Board to develop an online survey to distribute to members. Water Board staff stressed that this effort is only informational, and they do not plan to impose private sewer lateral ordinances or other I/I programs. The Regional Water Board considers the existence of such ordinances in assessing penalties, and may give discounts to agencies with adopted ordinances. There will be a discussion about sewer lateral ordinances in the Executive Officer's Report to the Board at the November 18 Regional Water Board meeting: http://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2015/November/4_ssr.pdf
- *Mandatory Minimum Penalties to curtail third-party lawsuits for SSOs* – Regional Water Board staff have reconsidered this issue following review of a draft white paper from UC Berkeley that has not yet been made public. Previously they felt that these protections prevented the public from exercising a right that is granted to them by law, but upon review, the issue can be framed as protecting agencies that are good performers so that they can use their resources to continue their work without the distraction and cost from litigations. The Regional Water Board would like to hear from the Committee what metrics should define a "good performers"
- *CWEA Certification* – The Regional Water Board has been providing penalty discounts for agencies with a high level of operation certification.
- The Regional Water Board is collecting input on how they can improved future audits and inspections

El Nino Preparation Round Table

There was a round table discussion on the steps agencies are taking to prepare for El Niño. Some key/common points:

- Agencies are cleaning out bottlenecks, and moving debris out of the sewer instead of pushing it downstream
- Coordination with stormwater agencies is important, since clogged culverts will cause flooding, which in turn leads to sanitary sewer infiltration.
- Education of public safety personnel to not pop manholes to relieve flooding
- Offering assistants to residents who may not be able to clean out their own drainage areas
- Duplicating infrastructure to provide redundancy in case a storm takes out some equipment
- One tip that was shared, that crews may not be aware of, is that a lateral will drain even if the sewer main is surcharged, so it's still worth inspecting laterals in case of backups into homes.
- Discussion about how there is often confusion regarding whether stormwater or sanitary sewers are blocked in the case of flooding
- The State Water Board and some Regions (8 and 9) have circulated a letter to collection systems, warning them that El Nino conditions should not be considered a "free pass" to allow SSOs.

Diquat Dibromide Comment Letter

The use of diquat dibromide for root control in collection systems was omitted from the initial EPA's documentation during registration review. BACWA is seeking feedback from Collection Systems Committee members on this [draft BACWA letter](#), which notes that omission and then asks for clear language on the label to protect treatment plant operations and collection system workers.

News Items

- Lenny Rather distributed the WEF Private Property Infiltration and Inflow [Fact Sheet](#). There was a discussion about how some residents will drain flooded backyards using their lateral cleanout.

Control Chemicals: an Initial Evaluation of Dosage and Contact Time. (Includes related correspondence.)

cc:

Jack Housenger, Director, U.S. EPA Office of Pesticide Programs

Tracy Perry, EPA OPP Pesticide Re-Evaluation Division

Elyssa Arnold, U.S. EPA OPP, Environmental Fate & Effects Division

Jill Bloom, Team Leader, Risk Management and Implementation Branch V

Pesticide Re-evaluation Division

Linda Arrington, Branch Chief, Risk Management and Implementation Branch V

Pesticide Re-evaluation Division

Rick P. Keigwin, Jr., U.S. EPA Office of Pesticide Programs, Pesticide Re-Evaluation Division

Donald Brady, Director, U.S. EPA Office of Pesticide Programs, Environmental Fate & Effects Division

Brian Anderson, Branch Chief, U.S. EPA Office of Pesticide Programs, Environmental Fate & Effects Division

Michael Goodis, Branch Chief, U.S. EPA Office of Pesticide Programs, Pesticide Re-evaluation Division

Betsy Southerland, Director, U.S. EPA Office of Water, Office of Science and Technology

Andrew Sawyers, Director, U.S. EPA Office of Water, Office of Wastewater Management

Tomas Torres, Director, Water Division, U.S. EPA Region 9

Debra Denton, U.S. EPA Region 9

Patti TenBrook, Life Scientist, U.S. EPA Region 9

Dawit Tadesse, California State Water Resources Control Board

Tom Mumley, California Regional Water Quality Control Board, San Francisco Bay Region

Janet O'Hara, California Regional Water Quality Control Board, San Francisco Bay Region

California State Water Resources Control Board Pesticide Team:

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- Ben.Zabinsky@waterboards.ca.gov

Jennifer Teerlink, California Department of Pesticide Regulation

Nan Singhasemanon, California Department of Pesticide Regulation

Kelly D. Moran, Urban Pesticides Pollution Prevention Project

Greg Kester, California Association of Sanitation Agencies

Chris Hornback, Chief Technical Officer, National Association of Clean Water Agencies

Cynthia Finley, Director, Regulatory Affairs, National Association of Clean Water Agencies

- Union Sanitary District has been investigating the cause of a sinkhole.

Announcements of Upcoming Training, Conferences, and Meetings

- Sewer Summit 2015 – Attendees reported in was a good conference. It is free to CSRMA members.
- CWEA Bay Section – December 2 Technical Certification Program Meeting
- Maintenance Superintendents Association Meeting - Sept 5-9, 2016 at the Berkeley Marina
- BACWA Annual Meeting – January 15, Boy Scouts Counsel, San Leandro

Next Collection System Committee Meeting

Our next committee meeting will be held on January 13, at 1:30 PM, at the Boy Scouts facility in San Leandro. The committee will review the memo that was submitted to the Regional Water Board in 2014 on protection from third party lawsuits, and refine the proposal on the metrics that are used to define a well performing collection system. Depending on the weather, there will also be a round table discussion on the impact of winter storms

**InfoShare Asset Management–
Report to BACWA Board**

InfoShare Asset Management Committee meeting on: 11/05/2015
Executive Board Meeting Date: 11/20/2015
Committee Chair : Dana Lawson, CCCSD

Committee Request for Board Action: None

Attendees: David Williams (BACWA); Dana Lawson, Matthew Mahoney, Neil Meyer, PJ Turnham (CCCSD); Kevin Kolte (City of Livermore); Ben Conner (City of Petaluma); Kim Lin (CCWD); Aaron Johnson (DSRSD); David Stoops (EBDA); Dillon Cowan (EBMUD); Jordan Damerel, Meg Herston (FSSD); Andrew Damron (Napa Sanitation District); Paul Bonitz (SFPUC); Saeed Shams (City of San Jose WPCP)

Introductions: <ul style="list-style-type: none">▪ Chair shared with attendees that our group is now sponsored by BACWA and thanked David Stoops for recommending that to the Executive Board.▪ Attendees introduced themselves (see above).
Presentation: <ul style="list-style-type: none">▪ Implementing Mobile Devices for Warehouse and Tool Room (Paul Bonitz, SFPUC)<ul style="list-style-type: none">○ Slides were distributed (and can be e-mailed upon request)○ Participants discussed implementation of mobile technology and associated hurdles, need to test new software and hardware to make sure it's working before asking field staff to pilot it, how to handle re-order points and connection between inventory system and purchasing, if minimum thresholds were set for inventory tools, identifying critical assets and associated spare parts, barcoding, expensing tools against work orders as you would equipment, etc.
Announcement: <ul style="list-style-type: none">▪ CWEA SF Bay Section Professional Development Committee (Dillon Cowan, EBMUD)<ul style="list-style-type: none">○ The PDC will be putting together a seminar next Spring and is looking for case studies of maintenance optimization, where an agency has implemented a Best Practice and documented the results.○ Discussion followed regarding use of predictive maintenance, such as vibration, thermography, oil analysis, with examples from several agencies.
Discussion: <ul style="list-style-type: none">▪ Participants continued discussions from the presentation regarding quick turnover of technology, buy-in from end-users or lack thereof, challenge of interface and integration between different software platforms, managing and inventorying software licenses and levels of licensing, etc.
Suggestions for Future Agenda Items: <ul style="list-style-type: none">▪ David Stoops suggested setting lifecycles/ service life of assets. Attendees were requested to bring any tables or guidelines they use within their organizations to the next meeting in February.
Next Regular Meeting: <ul style="list-style-type: none">▪ Thursday, February 4, 2016 at EBMUD. Dillon Cowan will present either on force main condition assessments that were conducted a few years ago or on Pumping Stations.▪ The group discussed setting a regular meeting schedule. All agreed to quarterly meetings in Feb, May, Aug, and Nov. Dana Lawson will check the schedule of the other BACWA meetings and with David Stoops to avoid any conflicts and then set a regular date within those months. Meetings will continue be held 11am-1pm at a host agency. CCCSD will be the default location unless another agency can host a specific meeting.
Next BACWA <u>InfoShare Asset Management</u> Committee Meeting: <u>02/04/2016</u> , at <u>EBMUD</u> .

Operations and Maintenance Infoshare Group Report to BACWA Board

Committee Meeting on: 10/28/15
Executive Board Meeting Date: 11/20/15
Committee Chair: David Stoops

Committee Request for Board Action: None

23 attendees representing 12 member agencies

Highlights of New Items Discussed and Action Items

This Operations and Maintenance Infoshare Group meeting was the first under the new format, with support from the RPM and ED. Agency staff from both the operations and maintenance groups attended. The group will meet quarterly in the future, agenda topics will focus on the impacts to both operations and maintenance staff. This will provide a venue for both operations and maintenance staff to share what their agency has done.

Ideas for future meeting topics:

- Nutrient removal issues
- Asset management software (via joint meeting with Asset Management group)
- Computer maintenance management system
- NFPA70E –Electrical Safety
- Paperless operation & maintenance
- Management of the knowledge base: SOPs, manuals, record drawings, etc.
- Succession planning
- Alarm notification best practices
- State operator advisory committee
- Operator training best practices
- New technology information sharing
- Equipment (pumps, pipes, assets) condition assessment
- Impact of drought on facilities
- Hydrogen sulfide control
- Yard piping: As-built drawings/ field verification
- Central repository of data
- Recycled water issues
- Outfall condition assessment
- Instrumentation for lab analyses

Peracetic Acid as an alternative disinfectant

David Stoops recently traveled to the Maynard C. Stiles facility in Memphis TN, to see their peracetic acid disinfection facility, prior to starting up the peracetic acid pilot study at Oro Loma. EBDA and Oro Loma staff are working with the Regional Water Board and aims to begin the testing in February 2016. Switching to peracetic acid from chlorine disinfection has the following implications:

- Need for new instrumentation
- No need for quenching (with sodium bisulfite or other) since there is not a toxicity problem (although Oro Loma will do toxicity testing during their pilot study). If there were peracetic acid effluent limits in the future, then they could be calculated allowing dilution, which the Basin Plan does not allow for chlorine.
- Peracetic acid is being used in conjunction with UV at Las Gallinas. It does not impact transmittance.

Chlorine Decay in the Outfall

Lorien Fono described the discussion between BACWA leadership and the Regional Water Board at the BACWA Pardee Technical Seminar the previous week. The discussion was about developing an allowable concentration of chlorine residual at the treatment facility that could be linked to a 0.0 mg/L concentration at the outfall. Many agencies would be interested in participating in these studies. Several attendees made the point that changing the compliance period (i.e., hourly average instead of instantaneous maximum) would be more meaningful than an increase concentration in terms of allowing them to reduce sodium bisulfite overuse.

El Nino Preparations

The group held a round-table discussion about preparing for potential severe storms this winter. Key/common features included:

- Proving sandbags and submersible pumps to low-lying areas
- Stockpiling supplies in case there is a disruption in distribution
- Flushing rags and grit out of interceptors
- Training new operations staff since many have never seen a large storm
- Improving communications reliability so they do not get interrupted during a storm
- Train fire and emergency personnel not to pop manholes to drain flooded areas
- Contingency planning for when flows exceed treatment capacity or hydraulic capacity for part of the system

Next Meeting: Feb 21, 2016 at OLSD

Laboratory Committee – Report to BACWA Board

Laboratory committee meeting on: 14 October 2015
Executive Board Meeting Date: October 2015
Committee Chair : Nirmela Arsem

Committee Request for Board Action: None

Aquatic toxicity testing – presentation by Nautilus Environmental:

- Peter Arth, Laboratory Manager and Adrienne Cibor, Senior Project Manager, gave a presentation titled, “Toxicity Testing Tools Including Toxicity Identification Evaluation Case Studies”. The following are some of the ideas discussed:
- Factors contributing to a successful bioassay: Proper handling, acclimating and caring for test organisms in culturing, holding and during test; understanding test design (proper controls, adequate replication, loading rates, randomization); being observant of both organisms and water quality, and following Good Laboratory Practices (GLP).
- The disadvantage of NOEC/LOEC: It relies heavily on relationship between percent effect and within-concentration variability, which can have the drawback of detecting statistically significant differences at very low percent effect.
- Test of Significant Toxicity (TST): Guidance came from EPA in 2010, but the State is yet to provide guidance. While this statistical analysis offsets the NOEC/LOEC disadvantages, consideration must be given to inherent variability with test organisms. Multiple dilutions are recommended to obtain context of toxicity.
- Three cases of successful TIE projects were discussed as a model for conducting TIEs.
- Pyrethroids, which are a common toxicant found in storm water, is easily lost from samples within 48 hours. Adding Hexane to the sample as a preservative at sampling improves recovery.
- Based on these discussions, Lab committee will develop a template for TRE/TIE generic work plan that agencies submit with NPDES permit renewal.

Environmental Laboratory Accreditation Program (ELAP) updates:

- ELAP fee workshop took place on October 8, at Cal EPA headquarters. The recommendation was to increase ELAP fees to make the agency self-funding through fees. The mechanism for fee increase was discussed: increasing base fee only or Fields of Testing (FOT) based fee increase. Immediately after the workshop a survey was sent out from ELAP to determine the opinion of stakeholders.
- The Third and final Expert Review Panel meeting was held on October 14; final report is expected within a month.

Audits:

- Delta Diablo received a ‘no findings’ report and their ELAP certificate was renewed. There was no site audit; the determination was based on the renewal application packet.

General discussions:

- Composite sample temperature was discussed. Agencies maintain the temperature of the refrigerator within acceptable range, but do not monitor the sample temperature, which is checked in the laboratory upon receipt.
- Microplastics methods were discussed. An SOP provided by Dr. Sherri Mason (The State University of New York and Fredonia) was shared by a member.
- Request to verify the frequency of analysis performed under NPDES permit was discussed and discrepancies were to be reported to Lorient Fono. Cost savings achieved will be passed on to SFEI for RMP emerging contaminants work group. There was discussion about BACWA contributions to special studies; in particular, the high cost of nutrient research in addition to supporting various special studies was considered substantial and members expressed the need to understand requests for additional funding.

Upcoming Meetings:

- Lab committee meeting on November 18th will be a special 4-hour training session. We will review line by line the new microbiology checklist ELAP is using to audit laboratories.

Next BACWA Laboratory Committee Meeting: Wednesday, November 18, 2015, at EBMUD Laboratory Library.

Committee Request for Board Action: None

Attendees:

21 attendees representing 15 member agencies

16 attendees representing 12 member agencies

Adoption of Permits/Permit Amendments:

November – Union City Wet Weather Discharge – No issues.

January – St. Helena – St. Helena’s permit adoption got pushed from October to January. They are reportedly happy with their Administrative Draft. They will need to do a plant upgrade to achieve advanced secondary standards, for the purposes of the discharge prohibition exception, and to allow them to develop a recycled water program, rather than continuing their practice of irrigating onsite.

February - Calistoga – Calistoga has high boron, arsenic and antimony concentrations, which limits their ability to deliver recycled water. Their administrative draft order contains numeric chronic toxicity limits since the permit writer did not use dilution to calculate reasonable potential. Their highest chronic toxicity value in the past four years was 4 TUc, and they are not permitted to discharge unless the Napa River flow is high enough to receive a 10:1 dilution.

SFPUC’s Oceanside’s permit is being held up indefinitely due to EPA Work Load.

Microplastics

- Following SFEI’s [poster](#) at the State of the Estuary meeting, the issue of microplastics has gained a lot of attention. The poster showed large loads of microplastics in POTW effluent, and high concentrations in the San Francisco Bay. This was a \$10K preliminary study, and has raised more questions that need further study. BACWA managers have met with Diane Feinstein’s staff to educate them about the meaning of the results and how there are still many questions that need to be addressed.
- BACWA managers are interested in pursuing an in-house study to verify the results of the SFEI report, and to better understand the loads and types of microplastics in wastewater effluent. They are asking the laboratory committee to form a workgroup to lay out a work plan for this study. Lorien Fono will work with Nirmela Arsem (EBMUD) to recruit lab committee members to the workgroup.

Chlorine Compliance

The Basin Plan contains a maximum instantaneous effluent limit of 0.0 mg/L for chlorine residual. Chlorine is measured continuously by most agencies, and readings at the top of each hour are used for compliance. Any exceedance during the remainder of the hour is reported to the Regional Water Board for informational purposes. Chlorine violations are the single most common cause of violations for BACWA member agencies, making up approximately a quarter of all violations. Between May 2011 and May 2015 there were 32 chlorine residual violations.

Agencies that chlorinate their effluent significantly overdose with the dechlorination agent, sodium bisulfite, in order to avoid chlorine residual violations. This practice wastes millions of dollars each year in our Region. The Regional Water Board may be open to an alternative implementation of the 0.0 mg/L limit, if BACWA can correlate concentrations at the plant to those at the outfall accounting for chlorine decay. At the BACWA Operations and Maintenance Infoshare Group meeting, operators reported that a higher limit at the plant would allow them to reduce sodium bisulfite dosing, but a longer compliance period (i.e. hourly, rather than instantaneous), would be helpful as well. BACWA will also solicit input from BayKeeper.

Significant Noncompliance List

A review of the ECHO database showed several agencies in “significant noncompliance” although the records do not match CIWQS violations reports. Additionally, the ECHO database does not give a definition for significant noncompliance other than “*Violation, noncompliance, significant noncompliance, high priority violation, and serious violator are all terms used by the ECHO site to describe the facility status in regard to compliance with the law. In many cases, these terms reflect determinations made by EPA or states when conducting inspections or reviewing facility self-reports. These determinations assist the government in tracking resolution of violations through the enforcement process and do not necessarily represent a final adjudication by a judicial or administrative body. In such cases, these characterizations should be considered alleged violations.*” If the Regional Board is instructed by EPA to pursue enforcement actions on agencies in significant noncompliance, then they will first contact the agencies to ensure that the ECHO database is correct.

Triennial Review

A [Triennial Review Staff Report](#) has been issued. The projects that are highly ranked and will be allocated resources are as follows:

1. Review and Refine Dissolved Oxygen Objectives for San Francisco Bay
2. Climate Change and Water Resources Policy
3. Develop Numeric Nutrient Endpoints (NNEs) in Freshwater Streams and Estuaries
4. Develop Nutrient Water Quality Objectives for San Francisco Bay Estuaries
5. Using Wastewater to Create, Restore, and Enhance Wetlands
6. Lake Merced Dissolved Oxygen and pH Objectives (this project can only be accomplished with additional resources).

Comments on the Staff Report are due by November 23. The [public hearing](#) on the Triennial Review will be held on December 16.

Monitoring Reductions

Effluent Monitoring Reductions are being explored as an alternative for offsetting increased funding to the RMP. There are seven tests that have been identified for monitoring reductions. The final three tests in **bold** are sent out to contract labs by all agencies.

- EPA 624 (VOCs)
- EPA 625 (BNAs)
- EPA 608 (PCBs and Pesticides)
- Acute Toxicity
- **EPA 1613 (Dioxins)**
- **1668C (PCB Congeners)**
- **Sensitive Species Screening**

The cost saving associated with reducing monitoring for the last three tests range from \$270-390K per year for all agencies in aggregate (the range reflects variability in costs charged by the lab performing the analysis, and uncertainty in the final number of samples required). These estimates do not include staff time for sampling or data management. The remaining four tests are performed in-house by many agencies, so the real cost savings are more difficult to quantify. As such, funding offsets will be calculated based on the tests that are contracted out. The Regional Water Board seems to be serious about pursuing this route and has stated they are willing to go to their Board to implement these monitoring reductions. Lorien Fono will work with Regional Water Board staff to develop a joint proposal for monitoring reductions.

Nutrients

- *Nutrient Group Annual Report* – A Draft Group Annual Report for the Nutrient Watershed permit was circulated to agency points of contact. The [Annual Report](#) will be submitted November 12.
- *Optimization/Upgrade Studies* – At Pardee, HDR did a presentation showing how the range of existing facilities and other constraints at different plants leads to different optimization alternatives.
- *Discussions for next Nutrient Watershed Permit* – At Pardee, Regional Water Board staff indicated that they may be willing to forgo the no net loading increase in exchange for early actions to remove nutrients and a modest increase in funding for science. Several facilities are already pursuing early actions, such as San Mateo. It will be a challenge to figure out how to ensure that a few agencies are not shouldering the “early action” burden for the entire POTW community and that these agencies see a regulatory or financial benefit for their actions.
- *Nutrient Technical Workgroup* – The [nutrient technical workgroup](#) met on November 5. An Executive Summary of the [Lower South Bay Synthesis](#) was distributed. One key finding was Mine Berg’s studies on the “ammonia paradox” do not show that ammonia is significantly inhibiting to ocean phytoplankton species, and that light limitation is 7-8 times as important as ammonia.
- *Other Nutrient Studies* - The Bay Delta Workshop, which will look at important outstanding questions has been pushed back to March 2016. SFEI will be purchasing a boat for sampling to replace the USGS boat. This means that \$200K of studies will need to be deferred.

Report-out from Pardee Technical Retreat -

Most of the meeting was covered elsewhere in the agenda, except the following items:

- The Regional Water Board is interested in revisiting MMPs for SSO to provide some protection against third party lawsuits. They would like BACWA’s help in developing criteria for what constitutes a well-functioning collection system
- The Regional Water Board is interested in developing fact sheets for CEC monitoring with POTW participation
- The Regional Water Board will be meeting with staff from EPA and DPR headquarters. They will look for constructive ways to engage them on issues of pesticide impacts on POTWs and receiving waters.

Announcements

- BACWA Annual Members Meeting, January 15
- [Nominations](#) for Arleen Navarret Award due November 13
- Member Agency [Budget Survey](#) results – Regionally, wastewater agencies spend \$2B annually for operations and have a 5-year capital budget of \$7.5B.
- The Regional Water Board is collecting information on which agencies have sewer lateral ordinances with point of sale or major remodel triggers for inspection and repair.
- [Selenium TMDL Adoption 11/18](#) – Regional Water Board proposed change in wording on meeting wastewater allocations to “consistent with wasteload allocations”. This change means that loads don’t need to be below the number in the TMDL as long as the data continues to be at about the same level as in the 2010-2014 time period that was used to develop the TMDL. CCCSD switched analytical methods and their apparent Selenium is thus twice as high as in 2010-2014. They will be allowed to develop a translator for their Selenium data to demonstrate the new data is equivalent to their previous data.
- Stormwater MRP Set for adoption 11/18

Next BACWA Permits Committee Meeting: Tuesday, December 15, 11-2pm, at EBMUD Plant Library. Holiday Luncheon and Regional Water Board Staff to attend.

Pretreatment Committee – Report to BACWA Board

Pretreatment Committee Training
Executive Board Meeting Date: November 20, 2015
Committee Chairs: Tim Potter, Kirsten Struve

Committee Request for Board Action: None

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

Trainer	Diane Lawver, Quality Assurance Solutions, LLC
Subject and Outline	<p>Generating Legally Defensible Field Sampling and Test Data for Environmental Compliance Professionals</p> <ul style="list-style-type: none"> • Legal Responsibilities as the Control Authority under 40 CFR Part 403 Regs covering changes prompted by Method Update Rule (MUR) • Maintaining proper Chain of Custody • Assuring pollutant integrity for testing and enforcement <ul style="list-style-type: none"> ○ proper containers ○ required preservation techniques ○ transporting samples ○ holding time requirements ○ sample storage requirements • Field Testing practices (chlorine residual, pH, temperature) • Legal Consequences of misrepresenting field testing activities
Dates	<p>October 13, 2015 at CCCSD, Martinez, CA October 22, 2015 at the Environmental Innovation Center, San Jose, CA</p>
Duration	3 hours
Cost	\$600 for trainer plus \$191.70 for refreshments for both sessions
Contact hours	CWEA contact hours (3); certificates distributed by Diane Lawver
Attendees	<p>October 13: 42 attendees from 13 agencies</p> <p>October 22: 44 attendees from 10 agencies</p> <p>Totals: 86 attendees from 20 agencies</p>
Feedback	<p>Surveys were collected and feedback was very positive with almost all attendees rating the training at either above average or outstanding. Summaries of the survey responses for each session are attached. Multiple comments were appreciative of BACWA sponsoring this training session and supported the Pretreatment Committee sponsoring future sessions.</p>

**BACWA PRETREATMENT COMMITTEE SPONSORED TRAINING:
GENERATING LEGALLY DEFENSIBLE FIELD SAMPLING AND TESTING DATA
FEEDBACK SURVEY - OCTOBER 13, 2015**

Rating: 5=Outstanding; 4=Above Average; 3=Average; 2=Below Average; 1=Unacceptable

Question	5	4	3	2	1
1. Please rate the Training Session overall.	18	5	4		
2. Did the Training Session address your goals, concerns and/or expectations and were the presentations relevant to your responsibilities?	19	6	3		
3. Was the trainer prepared and knowledgeable about the subject?	23	3	1		

Comments to Questions 1 through 3	
<p>1. Presenter has great knowledge of subject matter and presents it clearly. I truly benefited. I feel like a better inspector from the training. Excellent! Informative and thorough. Fantastic. Very informative. Very informative. Very informative. Worthwhile investment of time. Great to get updated regs. I like it a lot. Very good class.</p>	<p>2. This training exceeded my expectations. Diane's background and presentation style made the seminar. Thank you for the handouts. Very relevant! I appreciate this. Yes. Yes. Yes. Exceeded expectations. Yes, Very informative. Thanks, Diane.</p>
<p>3. Yes, her background in labs and consulting experience gave her great credibility. Lots of good info presented in 3 hours, clearly and concisely – very good instructor. Great examples. Very knowledgeable and presents in an easy manner. Absolutely! Outstanding. Very-used easy to follow examples. Absolutely. Hand-outs were great! Very knowledgeable and very accessible. Very much so. Yes, very knowledgeable of all materials.</p>	

- 5. Is there a training topic you would like the Committee to sponsor? Please specify.**
- How to address the drought-water conservation with industrial/commercial businesses.
 - Yes! 1. Sampling (grab, composite (flow, time, etc.) decon/cleaning of equipment; categorical vs. local limit. 2. Mass balance calculations for categorical basic/adv PT math calculations. 3. Analytical methods (AA, gravimetric, lcp gems,) and associated

results; detection limits geared to PT inspections.

- Applying proper conventions for rounding and significant figures in determining and applying sample data to regulatory limits. Comments on the Pretreatment list serve have indicated a lack of understanding of math/data conventions and their appropriate application in enforcement.
- Permitting CIUs, SIUs (non C), IUs.
- More training for Env. Compliance Inspectors, maybe a review of flow meters commonly found in the field, inspections of targeted industries i.e. hospitals.
- Hands on sampling.
- I can't think of one right now.
- Enforcement actions taken once you have noted violations in the field! How soon are violations to be issued.
- Proper procedure for sampling.
- SOP basics.

6. Would you recommend this Training Session to a colleague? Yes: 26 No: 0 Undecided: 1

Comments:

- I like the ½ day with breaks to get to call and emails. I feel I did not miss a day at the office.
- The presentation.
- Excellent for both sampling techs and inspectors.
- Everybody that does out type of work highly recommended.

Any other comments:

- Any clarification – call Dan Duffield 931-541-4844.
- More training opportunities from BACWA/CWEA other than annual conference is greatly desired.
- Good job!
- Could use visuals.
- Interested in any other courses taught by this presenter.
- Speak louder. Involve the audience more.
- Great topic and presenter!
- Been waiting for training like this (and the Nov. 12 training) for a long time. Thanks for extra copy of Cert!
- Thank you BACWA.
- Thank you.
- Thank you for having us!
- Thanks for snacks.
- More training classes like this.
- Spell out acronyms.

Total Attendance: 42. Surveys Received: 27

**BACWA PRETREATMENT COMMITTEE SPONSORED TRAINING:
GENERATING LEGALLY DEFENSIBLE FIELD SAMPLING AND TESTING DATA
FEEDBACK SURVEY - OCTOBER 22, 2015 – SAN JOSE, CA**

Rating: 5=Outstanding; 4=Above Average; 3=Average; 2=Below Average; 1=Unacceptable

Question	5	4	3	2	1
1. Please rate the Training Session overall.	22	10			
2. Did the Training Session address your goals, concerns and/or expectations and were the presentations relevant to your responsibilities?	21	11			
3. Was the trainer prepared and knowledgeable about the subject?	28	4			

Comments to Questions 1 through 3	
<p>1. Great training. Diane's understanding and knowledge of the material was outstanding. Excellent and informative. Good work linking the regulations to practical applications in the field. Keeping us on our toes to make sure time is spent on doing procedures correctly. Enjoyed this. Always good to have a refresher course. You can never get too much knowledge. Very informative. Good topic for staff. Was expecting more sample technique info and less regulations.</p>	<p>2. Was relevant and excellent Yes. Refresher on new/updated regulations keeps us informed. This was very helpful. Will be updating QA/QC manual. Will use this material. Yes.</p>
<p>3. Yes, very good. Trainer understood the lab and pretreatment requirements. Good slides and use of examples. Very knowledgeable. Very well prepared. Always bring relevant info to the table. Yes.</p>	

- 5. Is there a training topic you would like the Committee to sponsor? Please specify.**
- How IUs cheat/falsify data – illicit dumping.
 - Differences, pros and cons, of various pretreatment systems used.
 - Categorical industry 433 for example and emerging technologies.
 - Proper sampling (field) techniques.
 - Stormwater sampling QA/QC under state CA general permit, industrial activity.
 - Monitoring for fluoride.
 - Yes, this is an important topic for all pretreatment programs.
 - Groundwater remediation – inspection and how it works.

6. Would you recommend this Training Session to a colleague? Yes: 28 No: 0 Undecided: 0

Comments:

- Very good training.
- If they dealt with pretreatment or lab.
- Valuable training.
- Would be great for this course to be part of conferences.

Any other comments:

- There was a lot of chatter from a couple people in the back of the room (table). Suggest having an individual assigned to quell this.
- This is a top notch training that is very valuable. Thank you.
- Excellent instructor.
- Very important but often overlooked points were covered.
- Could strive to offer same presentation to all water quality personnel, i.e. stormwater inspectors, etc.
- I got quite a bit of information!
- Diane was outstanding! And still is!
- Very good!
- Great presentation, great presenter.
- Great to meet people from the same industry and exchange experiences and opinions.
- Discussion of splits and IU requests for data qualification/justification that doesn't reach a court case level.

Total attendance: 44 Surveys received: 32

Committee Request for Board Action: None

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

19 attendees (including 7 on phone) representing 6 member agencies

Surface Water Augmentation Regulation in Development

The draft surface water augmentation (SWA) regulations for indirect potable reuse are being developed. It is anticipated that one of the proposed requirements may be that surface water reservoirs must provide a minimum six-month theoretical retention time. This requirement may limit eligibility of surface water reservoirs to qualify for indirect potable reuse through surface water augmentation, and therefore trigger agencies to have to comply with future direct potable reuse regulations, which are yet to be developed.

WaterReuse California is asking for assistance from agencies that have surface water reservoirs to provide information on reservoir retention time. Whether agencies are planning or not planning indirect potable reuse projects, this data would be helpful to WaterReuse to determine reservoir eligibility and inform discussions with the expert panel and regulatory agencies to hopefully lead to more flexibility or alternative permitting provisions. The committee chair will circulate an email to members requesting data on their reservoir retention times. Members should forward this email to their water agency counterparts.

The committee will be cosponsoring a workshop featuring speakers from San Diego, which has been involved in the development of these regulations. The workshop has been added as an afternoon session at the next regularly scheduled WaterReuse meeting, from 1:00 pm to 4:30 pm on December 4, 2015 at the [Amador Ranch Center at Rancho San Ramon Community Park](#).

New Water Bill

A new water bond is proposed to address the projects that fall outside of the purview of Proposition 1. A non-Legislative water bond (“The Water Supply Reliability and Drought Protection Act of 2016 (Version 8)”) was filed with the Attorney General’s office on October 19 to be on the ballot in 2016. The sponsor is Jerry Meral. The amount proposed was \$4.895 billion.

Some of the features:

- \$1.5 B for stormwater capture and use (of this, up to \$50 million for stormwater resource plans)
- \$100 million for stormwater capture and use in specific areas/agencies
- \$400 million for Recycled Water
- \$400 million for desalination of brackish groundwater
- At least 50% cost share (reduced for disadvantage communities (DACs) and economically disadvantaged areas (EDAs))
- At least 35% of funds received must go to projects that benefit DACs
- \$400 million for water conservation – turf removal, repair leaking distribution systems, leak detection
- \$1.86 billion for watershed protection, restoration and improvement (allocated by specific areas)
- \$100 million for land management for water improvements
- \$400 million for flood management/reservoir operations

Truck Fill Program Updates

Residential Truck Fill Programs - South Bay Water Recycling has developed an agreement with the State Water Board to deliver to onsite storage for construction projects, and have developed engineering guidelines for the tanks. They are not permitting tanks on residential properties. They do permit trucks to disperse recycled water directly to residential landscaping. DSRSD has begun doing inspections of residential properties and has taking permit cards away from homeowners who have put in illegal storage tanks and cross-connections.

BACWA Truck Fill Guide - The Regional Water Board issued a [press release](#) on Residential Truck Fill Programs and mentioned the BACWA Truck fill guide. There is interest in the committee in updating the Truck Fill Guide once per year each March when agencies are making plans for the dry season. The committee will announce a call for updates at the BACWA Annual Meeting.

Next Meeting – January 6, 2015 from 10:00 am to 12:00 pm, 2nd Floor Small Training Room at EBMUD Headquarters.



NUTRIENTS:

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

- Attended and participated in conference calls as well as the 14th meeting of the Steering Committee's Planning Subcommittee and provided BACWA in-kind services by serving as scribe. Following the meeting prepared detailed meeting minutes and summary of action items. Materials delivered to the Steering Committee Facilitator.
- Chaired the monthly CMG meeting with the main topic being the review of the Annual Report and the Optimization/Upgrade study.
- Met with the leadership of the Pisces Foundation to brief them on POTWs issues including nutrients.

BACWA BOARD MEETING AND CONFERENCES:

- Worked with the AED in preparing for the October BACWA Pardee Retreat including reviewing the agenda with the full Board.
- Attended the BACWA September Board meeting and worked with the AED and RPM in preparing the minutes and Action Items.
- Prepared for and attended the BACWA Pardee Retreat and worked with the AED and RPM in preparing the Action Items.
- Continuing to track all action items to completion.
- Continued planning for the upcoming 2016 Annual Membership Meeting.

ASC/SFEI:

- As a member of the Executive Committee, coordinated with SFEI Executive Director on Board activities.
- met with Senator Feinstein's staff on POTW's concerns about microplastics as part of a follow-up effort on the poster presented by SFEI at the State of the Estuary Conference.

COLLABORATION:

- Participated in planning for the Winter Conference as the Past President of CASA

RECYCLED WATER COMMITTEE:

- Attended the monthly Recycled Water Committee Meeting and provided feedback from the Pardee Retreat.

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 16 member invoices.

PERMIT COMMITTEE:

-Attended and the monthly Permit Committee meeting and provided updates on a variety issues.

INFO SHARE COMMITTEE:

-Attended the joint Operations/Maintenance Info Share meeting and discussed several POTW priority issues.

-Attended the inaugural meeting of the Asset Management group of the Info Share Committee.

AIR COMMITTEE:

-Discussed progress on the plan for the AIR Committee becoming a full-fledged Committee of BACWA at the Pardee Retreat.

SUMMIT PARTNERS

-Coordinated with the Summit Partners on reviewing the very preliminary draft of the White Paper on SSO.

ADMINISTRATION:

-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.

-Held the monthly face-to-face BACWA staff meetings to review priorities and enhance communication.

-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:

-Paul Gilbert Snyder on Prop 50 and Prop 84

-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

BACWA ACTION ITEMS

Number	Subject	Task	Deadline	Status
Action Items from September 25, 2015 BACWA Executive Board Meeting				
2015.9-22	Committee Recognition at Annual Meeting	1-page Handout of 3 top accomplishments for the Annual Meeting (RPM)	12/15/2015	completed
2015.9-21	Monitoring Reduction	Develop a Proposal to present to the Water Board at Pardee (RPM)	10/9/2015	completed
2015.9-20	Microbeads/Plastics	Set up subcommittee conf call (ED/AED)	9/28/2015	completed
2015.9-19	Annual Report	Submit Annual Report letter to WB noting participants	10/1/2015	completed
Action Items Remaining from Previous BACWA Executive Board Meetings				
2015.5-82	Energy Generation	Setup Workshop with PG&E and AIR Board (RPM/EBMUD)	10/16/2015	pending

FY 16: 22 of 22 Action Items completed.
 FY 15: 89 of 90 Action Items completed.
 FY 14: 128 of 128 Action Items completed.
 FY 13: 67 of 67 Action Items completed.



BACWA BOARD CALENDAR

DATE	AGENDA	NOTES
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December 2015 to May 2016

<p>12/1/2015 Joint Meeting Water E Items due: ? Pagano; Connor; Horenstein; Ervin; Bailey Williams; Fono</p>	<p><u>Other Business: Discussions</u></p>	
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<p>12/18/2015 Monthly Board Mtg Items due: 12/11 Pagano; Connor; Horenstein; Ervin; Bailey Williams; Fono; Hull</p>	<p><u>Consent</u> Previous Board Meeting Minutes (AED) Monthly Treasurer's Report (EBMUD Accounting) <u>Reports</u> Committee Reports (Committee Chairs) Board Reports (Executive Board) ED Report (ED) RPM Report (RPM) Chair/ED Authorizations (AED) <u>Authorizations & Approvals</u> <u>Other Business - POLICY/STRATEGIC</u> Discussion: HDR Quarterly Update on Optimization/ Upgrade studies <u>Other Business - OPERATIONAL</u> Discussion: Annual Meeting Planning (FINAL) Discussion: FY17 Budget Planning</p>	
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<p>1/15/2016 Annual Members Mtg Pagano; Connor; Horenstein; Ervin; Bailey Williams; Fono; Hull</p>		
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<p>2/?/2016 Joint Meeting Items due: ? Pagano; Connor; Horenstein; Ervin; Bailey Williams; Fono</p>	<p><u>Other Business: Discussions</u></p>	
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2/19/2015 Consent

Monthly Board Mtg
Items due: 2/12/15
Pagano; Connor;
Horenstein; Ervin; Bailey
Williams; Fono; Hull

Previous Board Meeting Minutes (AED)
Monthly Treasurer's Report (EBMUD Accounting)

Reports

Committee Reports (Committee Chairs)
Board Reports (Executive Board)
ED Report (ED)
RPM Report (RPM)
Chair/ED Authorizations (AED)

Authorizations & Approvals

Other Business - POLICY/STRATEGIC

Water Board Jt Mtg Debrief

Other Business - OPERATIONAL

Annual Members Meeting Debrief
First Draft of FY17 Budget

3/18/2016 Consent

Monthly Board Mtg
Items due: 3/11
Pagano; Connor;
Horenstein; Ervin; Bailey
Williams; Fono; Hull

Previous Board Meeting Minutes (AED)
Monthly Treasurer's Report (EBMUD Accounting)

Reports

Committee Reports (Committee Chairs)
Board Reports (Executive Board)
ED Report (ED)
RPM Report (RPM)
Chair/ED Authorizations (AED)

Authorizations & Approvals

Other Business - POLICY/STRATEGIC

Discussion: HDR Quarterly Update on Optimization/ Upgrade studies
Discussion: Draft Agenda April Water Board Jt Mtg

Other Business - OPERATIONAL

Second Draft of FY17 Budget

4/?/2016

Joint Meeting
Items due: ?
Pagano; Connor;
Horenstein; Ervin; Bailey
Williams; Fono

Other Business: Discussions

<p>4/15/2016</p> <p>Monthly Board Mtg</p> <p>Items due: 4/10</p> <p>Pagano; Connor; Horenstein; Ervin; Bailey Williams; Fono; Hull</p>	<p><u>Consent</u></p> <p>Previous Board Meeting Minutes (AED)</p> <p>Monthly Treasurer's Report (EBMUD Accounting)</p> <p><u>Reports</u></p> <p>Committee Reports (Committee Chairs)</p> <p>Board Reports (Executive Board)</p> <p>ED Report (ED)</p> <p>RPM Report (RPM)</p> <p>Chair/ED Authorizations (AED)</p> <p><u>Authorizations & Approvals</u></p> <p>Approval: Final FY17 Budget</p> <p><u>Other Business - POLICY/STRATEGIC</u></p> <p><u>Other Business - OPERATIONAL</u></p>
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<p>5/20/2016</p> <p>Monthly Board Mtg</p> <p>Items due: 5/13</p> <p>Pagano; Connor; Horenstein; Ervin; Bailey Williams; Fono; Hull</p>	<p><u>Consent</u></p> <p>Previous Board Meeting Minutes (AED)</p> <p>Monthly Treasurer's Report (EBMUD Accounting)</p> <p><u>Reports</u></p> <p>Committee Reports (Committee Chairs)</p> <p>Board Reports (Executive Board)</p> <p>ED Report (ED)</p> <p>RPM Report (RPM)</p> <p>Chair/ED Authorizations (AED)</p> <p><u>Authorizations & Approvals</u></p> <p><u>Other Business - POLICY/STRATEGIC</u></p> <p>Discussion: Biannual Update on CWCCG (SDeslauriers)</p> <p><u>Other Business - OPERATIONAL</u></p>
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CURRENTLY UNSCHEDULED AND SIGNIFICANT

- * BACWA Membership Engagement Opportunities
- * Tech Seminar/Workshop: CCCSD Cogen explosion need to schedule; SFPUC force main leak and repair, need to schedule.
- * Chlorine Residual Analyzer Investigation
- * Suggestions for Monthly Meeting Guest Speakers/Presenters: i.e. Jim McGrath, State Water Board; ?
- * CEC's (Kelly Moran).
- * Optimization/Upgrade Studies Quarterly Report to Board (CMG).



Regulatory Program Manager's Report to the Board

September 28 – November 18, 2015

Prepared for the November 20, 2015 Executive Board Meeting

NUTRIENT SUPPORT: Reviewed draft Group Annual Report and provided comments to consultant team. Coordinated with consultant team to allow them to remotely provide a presentation at the Pardee Technical Seminar. Distributed Group Annual Report to Agency Points of Contact and posted on BACWA website. Revised recycled water survey, to be used to estimate nutrient loads removed by recycled water, after consulting Regional Water Board staff.

TOXICITY Discussed potential cost-saving measures with Pacific Ecorisk Labs.

BACWA BULLETIN: Drafted and distributed October and November BACWA Bulletins.

TRIENNIAL REVIEW: Developed draft BACWA talking points for triennial review hearing.

REDUCTION IN MONITORING: Developed a proposal of monitoring reductions and associated costs and delivered to Regional Water Board. Discussed proposal and next steps with Regional Water Board staff. Obtained list of RMP fees from SFEI.

MICROPLASTICS: Participated in BACWA Conference Call on microplastics. Consulted with SFEI on proposed follow-up studies. Contacted Laboratory Committee to recruit members to put together a work plan to study microplastics in effluent.

BUDGET SURVEY: Developed budget survey and distributed to members. Calculated estimated total capital and operational budgets.

CASA REGULATORY COMMITTEE: Participated in October and November conference calls and gave the regional association update for BACWA. There was a discussion about microplastics, and LACSD found very few in their effluent. CASA is interested in getting more information about BACWA's budget survey.

IT: Made minor updates to website. Reviewed alternatives for file backup.

COMMITTEE SUPPORT:

AIR – Consulted members to see if any agency is considering pipeline injection of biogas.

BAPPG – Attended committee meeting and drafted Board Report. Set up new BAPPG webpage and provided training to BAPPG members on how to use it. Reviewed and distributed draft BACWA comment letter on diquat dibromide.

Collections – Drafted and distributed agenda and drafted Board Report. Communicated with Regional Water Board staff on conducting a survey to see which agencies have inspection/repair triggers in their private sewer lateral ordinances.

Permits – Drafted agenda and Board Report for meeting. Proposed meeting dates for 2016.

Infoshare – Sent out invitation to kickoff meeting to broader BACWA membership. Collected RSVPs and arranged for lunch at the meeting. Worked with Group Chair to develop a list of topics for future meetings. Drafted agenda and Board Report.

Recycled Water – Attended meeting and drafted notes and Board report.

Executive Board – Developed materials for the Pardee Technical Seminar handout packet, and took meeting notes and action items. Reviewed agenda for Executive Board meeting.

MEETINGS ATTENDED: Microplastics conference call (10/5), BAPPG (10/7), CASA Regulatory conference call (10/8 and 11/12), CMG conference call (10/9 and 11/13), staff meeting (10/13 and 11/10), Permits Committee (10/13 and 11/10), Group Annual Report conference call (10/16), Pardee Technical Seminar (10/21-23), Infoshare Group (10/28), Recycled Water Committee (11/4), Collection Systems Committee (11/12).