

Executive Board Meeting AGENDA

Friday, December 16, 2016, 9:00 a.m. – 12:30 p.m. EBMUD Treatment Plant, Lab Library 2020 Wake Ave. Oakland, CA

Agenda Item	<u>Time</u>	<u>Pages</u>
CLOSED SESSION - Conference Room B		
1 ROLL CALL	9:00 AM	
2 ANNOUNCE CLOSED SESSION (pursuant to Government Code Section 54957.7)		
3 CLOSED SESSION		
a. Discussion: Lawsuit by SCAP and CVCWA against EPA on the TST		
4 RECESS TO OPEN SESSION		
OPEN SESSION - Lab Library	<u>, </u>	
ROLL CALL AND INTRODUCTIONS	9:10 AM	
PUBLIC COMMENT	9:13 AM	
CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER	9:14 AM	
REPORT OUT OF CLOSED SESSION	9:14 AM	
CONSENT CALENDAR	9:15 AM	
1 November 18, BACWA Executive Board Meeting Minutes		3-9
2 October, 2016 Treasurer's Reports		10-17
APPROVALS & AUTHORIZATIONS	9:16 AM	
3 Approval: Adoption of FY16 Annual Reports Fin'l Stmts Memo	0.201	18-27
4 Approval: TDC Pesticide Agreement		28-32
5 Approval: Alternative Investment Proposal		33-34
OTHER BUSINESS - POLICY/STRATEGIC		
6 <u>Discussion</u> : Reg 11-18 White Paper	9:25 AM	35-54
7 <u>Discussion</u> : Nutrients	9:40 AM	33 34
a. Regulatory		
i. CMG Meeting		55-56
ii. 2nd WS Permit		57-58
iii. Trading Meeting Debrief		
iv. NST Agenda		59-60
b. Technical Work		
i. Suisun Synthesis <u>Summary</u>		
c. Governance Structure		
i. Steering Committee Meeting #11		61-73
ii. Joint Strategy for Scenario Planning (SFEI/ReNUWIt)		
8 <u>Discussion</u> : Jt Meeting Agenda Draft	11:00 AM	74

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ОТ	HER BUSINESS - OPERATIONAL			
9	<u>Discussion</u> : Biosolids Presentation & Survey Results		11:10 AM	75-80
10	<u>Discussion</u> : Risk Reduction Update	<u>Reports</u>	11:30 AM	81-104
11	<u>Discussion</u> : Pesticide Comment Letter	<u>Letter</u>	11:40 AM	
12	Discussion: CASA Regulatory Workgroup Report		11:50 PM	105
13	<u>Discussion</u> : Annual Meeting Agenda		12:00 PM	106-107
14	<u>Discussion</u> : Recycled Water Policy Update		12:10 PM	108-114
15	<u>Discussion</u> : Prop 50 Close & Reporting Update		12:15 PM	115-123
RE	PORTS		12:20 PM	
16	Committee Reports			124-130
17	Member Highlights			
18	Executive Director Report			131-139
19	Regulatory Program Manager Report			140
20	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	Tim Potter		
	State Plan			
	i. Nutrient Technical Workgroup	Eric Dunlavey		
	j. NACWA Taskforce on Dental Amalgam	Tim Potter		
	k. BAIRWMP	Cheryl Munoz; Linda Hu; Dave William	S	
	I. NACWA Emerging Contaminants	Karin North; Melody LaBella		
	m. CASA Statewide Pesticide Steering Committee	Melody LaBella		
	n. CASA State Legislative Committee	Lori Schectel		
	o. CASA Regulatory Workgroup	Lorien Fono		
	p. ReNUWIt	Mike Connor; Ben Horenstein		
	q. RMP Microplastics Liaison	Nirmela Arsem		
	r. AWT Certification Committee	Maura Bonnarens,		
	s. Bay Area Regional Reliability Project	Roger Bailey; Mike Connor		
	t. WateReuse Working Group	Cheryl Munoz;		
21	SUGGESTIONS FOR FUTURE AGENDA ITEMS		12:27 PM	
	XT MEETING - BACNA 2017 Annual Mambars' Masting is schoduled for	January 27, 2017 From 9:20 2:00	12:28 PM	
	e BACWA 2017 Annual Members' Meeting is scheduled for	•		
_	n at The Metropolitan Golf Course, 10051 Doolittle Drive, O the Board is scheduled for February 17th, 2017 from 9:00 a			
	the Board is scheduled for February 17th, 2017 from 9:00 a tchy Room, 13th Floor, 525 Golden Gate Ave., San Francisc	- · · · · · · · · · · · · · · · · · · ·		
	•	-,	40.00.	
AD	JOURNMENT		12:30 PM	

BACWA BAY AREA CLEAN WATER AGENCIES

Executive Board Meeting Minutes

November 18, 2016

ROLL CALL AND INTRODUCTIONS

<u>Executive Board Representatives</u>: Laura Pagano (San Francisco Public Utilities Commission); Jim Ervin (San Jose); Michael Connor (East Bay Dischargers Authority); Ben Horenstein (East Bay Municipal Utility District); Lori Schectel (Central Contra Costa Sanitary District).

Other Attendees:

<u>Name</u>	Agency/Company
Linda Sawyer	Brown & Caldwell
Jean-Marc Petit	CCCSD
Karin North	City of Palo Alto
Amanda Roa	Delta Diablo
Nirmela Arsem	EBMUD
Tom Hall	EOA
Greg Baatrup	FSSD
lan Wren	For SFEI
Holly Kennedy	HDR
Jen Keene	PME
Tricia McGovern	PME
Jennie Pang	RMC
David Senn	SFEI
Amy Chastain	SFPUC
Cheryl Munoz	SFPUC
Bhavani Yerrapotu	Sunnyvale
David Williams	BACWA
Lorien Fono	BACWA
Sherry Hull	BACWA

PUBLIC COMMENT

None.

CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER

A Board Member requested that Item #16, AIR Committee Report be taken out of order.

As noted in the BACWA AIR Committee Report from their meeting on September 21, 2016, BAAQMD is inviting input on Regulation 11, Rule 18 (i.e., Rule 11-18) – Reduction of Risk from Air Toxic Emissions at Existing Facilities. The Staff Report provides information about how different agencies will be regulated.

This is an opportunity to provide input on the definition of TBARCT, and possibly on the implementa tion timeframe - given the long lead time in which POTWs need to plan and budget capital projects. The timeframe for compliance is very aggressive, so one comment will be to request extension of the compliance period. The BACWA AIR Committee is developing comments and in the letter will

also request more time to respond given the impacts to members. Board members suggested the possibility of a BACWA workshop, a White Paper from the consultant supporting the AIR Committee to send to Members, and a meeting with BAAQMD in February or March.

CONSENT CALENDAR

- **1**. September 16, 2016, BACWA Executive Board Meeting Minutes The approved minutes will be placed on the BACWA website.
- **2 4.** July, August and September, 2016 Treasurer's Reports and Financial Summary A Financial Summary Report was included in the Packet. A copy of the FY17 Budget as of September 30, 2016 (25% of the fiscal year) was included. It, along with the Summary, provides the Board with a concise overview of the Fund Balances and the current status of the Annual Budget and points out any variances in the budget to date.

Consent Calendar items 1 and 2 were approved in a motion made by Jim Ervin and seconded by Lori Schectel. The motion carried unanimously.

AUTHORIZATIONS & APPROVALS

5. Approval: Extension of PCB Abeyance Petition – A Board Action Request along with a copy of the previous Petition was included in the Packet. The Executive Director gave an overview of the request.

Item 5 was approved in a motion made by Mike Connor and seconded by Jim Ervin. The motion carried unanimously.

OTHER BUSINESS-POLICY/STRATEGIC

Agenda Item 6 – Discussion: Nutrients

- a. Technical Work
 - i. Science Plan 2024 SFEI provided a Science Plan overview. Major issues covered in the presentation were: 1) Feedback from reviewers; 2) Realistic options for how to proceed given funding constraints; 3) Current emphasis of research vs. projects given limited resources; 4) Key assumptions in deciding how to direct funds; 5) Current major science gaps, such as understanding biological endpoints, that are needed to inform policy decisions for the next Watershed Permit; 6) Additional funds needed to address the gaps. Funding decisions will need to be in place by spring 2017. A Board member requested that the most recent version of the Science Plan be distributed for review. It was noted that it is posted on the SFEI NMS website.

ii. NMS Report Updates – Links to the Annual Report, Modeling Progress and Charts were included in the Packet.

b. Governance Structure -

- i. Steering Committee Meeting # 10 A Meeting Summary was included in the Packet. The Executive Director gave an overview of the meeting.
- ii. Planning Subcommittee Meeting # 21 & # 22 –Meeting Summaries were included in the Packet. The key item was priorities for FY18 and what can be accomplished with available funds.
- iii. Revised Scenario Planning Ian Wren, representing SFEI, gave an overview of the updated Scenario Planning proposal, which would inform planning no regrets actions that are regional in scope, conceptual and quantitative. Four tasks are proposed: 1) analysis of regulatory drivers for projects with mutual benefits including nutrient removal; 2) analysis of recycled water regulations; 3) analysis of the main drivers of nutrient management decisions; 4) multi-year workplan. ReNUWIt has a separate but similar effort which should be integrated. A suggestion was made that case studies on natural systems, such as salt pond restoration, should be included, and that this study could be used to inform studies to be included in the next Watershed Permit. It was agreed that SFEI and ReNUWIt should be invited to attend the December 2016 BACWA Executive Board meeting to discuss a joint strategy.

c. Regulatory

- i. Comment Letter to EPA on CWA 308 based data request A letter from the EPA regarding the National Study of Nutrient Removal and Secondary Technologies, BACWA's Comment Letter on the study, and a LINK to an analysis on mining existing databases as an alternative were included in the Packet. The Board approved sending the Comment Letter to EPA.
- ii. Opt/Upgrade Update HDR discussed incorporating the cost drivers of Level 2 and Level 3 upgrades, flexibility for future regulations in choosing treatment alternatives and looking at the impacts of mass versus concentration-based limits. For NNLI the original scope included a single loading scenario and an individual report to each plant. HDR asked if they should increase the scope to two scenarios. The Board agreed that the scope should stay at one scenario, looking at growth out to 2039, with no individual report for each plant.
- iii. Watershed Permit Proposal The Executive Director presented an overview of alternatives related to additional funding for science that were discussed at the Pardee Technical Seminar, along with their financial impacts on member agencies. Some of the additional funding for scientific studies will come from other contributors outside of the POTW community. A question was raised as to whether the mass of total nitrogen discharged would be a more appropriate basis for calculating the Principal's Nutrient Surcharge. In response a comment was made that the Principals have always equally split their contributions to BACWA and that it may not be in the best interest of the organization to begin to deviate from that approach on a case-by-case basis. If there was a desire to deviate on nutrients,

other factors such as resident time and extent of the discharge plume would also need to be considered. This issue can be discussed further, if desired, at the next Nutrient Strategy Team meeting.

Agenda Item 7 – Discussion: Selenium Criteria Comment Letters – A Comment Letter from the State Water Resources Control Board, along with links to comment letters from WSPA, BACWA, Baykeeper, LSB, LSB Data, and the Fish & Wildlife Service were included in the Packet. The Regulatory Program Manager gave an overview of the different responses and will keep the Board apprised of new comments or opportunities to respond.

OTHER BUSINESS-OPERATIONAL

Agenda Item 8 – Discussion: Lystek Presentation – Greg Baatrup from FSSD gave a presentation on their new partnership with Lystek. FSSD is participating in a public/private partnership for biosolids to be used in the creation of fertilizer products. The simplicity of the process is attractive and Lystek does all the distribution and marketing. They began operating in August 2016 and currently produce three fertilizer products. The fertilizer is not regulated as biosolids under the Solano County Ordinance. To date FSSD deems it a very successful partnership. There is still significant capacity at that facility for accepting additional biosolids from agencies who may be interested.

Agenda **Item 9** – Discussion: Update on ELAP standards – The EBMUD Laboratory Manager recapped the history and gave an update on the process. There has been consideration of a proposal for TNI-lite standards package, which would put less onerous demands on laboratories than the full TNI, although details of this proposal have not yet been developed. Currently there is a lot of uncertainty but one thing is certain: fees will increase. ELAP expects to have a draft proposal to the State Water Board by 2017, with adoption in 2018, followed by a 3-year implementation period. The BACWA Laboratory Committee will continue to keep the membership updated and are planning to prepare the members for the transition.

Agenda **Item 10** – Discussion: Microplastics – The Executive Director referred the Board to the comments submitted via email and included in the packet.

Agenda Item 11.a – Discussion: Proposition 1 – Four pages from the Draft Consultant Agreement to develop a Reverse Osmosis Concentrate Management Plan were included in the Packet along with a LINK to the entire Agreement. The Regulatory Program Manager noted that Santa Clara is funding and moving forward with part of the scope even before knowing whether there will be grant funding available from the State Water Board. BACWA will continue to monitor the work.

Agenda **Item 12** – Discussion: Pardee Technical Seminar Debrief – A survey of attendees to the seminar was included in the Packet. The Executive Director gave an overview of the responses and asked the Board for direction on whether to continue the split seminar in 2017. The Board agreed that the split seminar would continue in 2017.

Agenda Item 13 – Discussion: Draft Agenda for Annual Meeting 2017 – A Draft Agenda was included in the Packet. The Executive Director asked the Board to comment on the agenda, particularly on what to include under hot topics. Board members mentioned adding Biosolids and possibly removing New Enforcement Policy and Selenium.

Agenda **Item 14** – Discussion: FY18 Budget Adoption Schedule – The schedule was included in the Packet. The Executive Director gave an overview of the schedule.

Agenda **Item 15** – Discussion: Updates/Changes to 2017 Board Calendar – The updated calendar was included in the Packet. The Executive Director asked the Board to review the latest calendar.

REPORTS

Agenda **Item 16** – Committee Reports – BACWA Committee Reports were included in the Packet.

<u>AIR Committee:</u> A report from the September 21, 2016 meeting was included in the Packet. See discussion under Consideration to Take Items Out of Order.

BAPPG: A report from the October 5, 2016 meeting was included in the Packet.

<u>Biosolids Committee</u>: A report from the October 20, 2016 meeting was included in the Packet. <u>Collections Committee</u>: Reports from the September 8, 2016 and the November 10, 2016 meetings were included in the Packet.

<u>InfoShare - Asset Management:</u> A report from the August 31, 2016 meeting was included in the Packet.

<u>InfoShare – Operations & Maintenance:</u> No meeting.

<u>Lab Committee:</u> A report from the November 9, 2016 meeting was included in the Packet. <u>Permits Committee:</u> Reports from the September 13, the October 11, and the November 8, 2016 meetings were included in the Packet.

<u>Pretreatment Committee</u>: A report on the August 30, 2016 Pretreatment was included in the Packet.

Recycled Water Committee: Reports from the September 7, 2016 and the November 2, 2016 meetings were included in the Packet.

Agenda **Item 17** - Discussion: Member Highlights - Executive Board Representatives (Board) were given an opportunity to provide updates from each of the Principal agencies. Non-

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

EBMUD: No comment. **EBMUD:** No comment.

Central Contra Costa: Suggested that a discussion of the Hertzberg Bill be added to the Annual

Meeting Agenda.

San Francisco: No comment.

San Jose: Provided a report on a study done on phytoplankton in the Lower Coyote Creek

indicating that effluent does not create HABS.

Delta Diablo: No comment.
Palo Alto: No comment
Sunnyvale: No comment.
Fairfield Suisun: No comment.

Agenda Item 18 - The Executive Director's Report, along with the Board Calendar, and BACWA Action Items, were included in the Packet. It was noted that 92 of the 97 action items from FY16 and 15 of the 16 action items from FY17 have been completed.

Agenda Item 19 - The Regulatory Program Manager (RPM) Report was included in the Packet.

Agenda Item 20 - Other BACWA Representative Reports — BACWA Representative were given an opportunity to provide updates. No actions were taken based on the reports.

- a. RMP-TRC: Rod Miller; Laura Pagano No report.
- b. RMP Steering Committee: Karin North; Jim Ervin No report.
- c. **Summit Partners: Dave Williams** A letter regarding Proposed Collaboration on Toxicity Testing Laboratory Study was included in the Packet.
- 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 No report.
- I. NACWA Emerging Contaminants: Karin North, Melody La Bella No report.
- m. CASA Statewide Pesticide Steering Committee: Melody La Bella No report.
- n. CASA State Legislative Committee: Lori Schectel No report.
- o. CASA Regulatory Workgroup No report.
- p. RMP Microplastics Liaison: Nirmela Arsem No report.
- q. ReNUWIt: Mike Connor; Ben Horenstein No report.
- r. AWT Certification Committee: Maura Bonnarens No report.

s. Bay Area Regional Reliability Project: Roger Bailey; Mike Connor – No report.

Agenda Item 21 - SUGGESTIONS FOR FUTURE AGENDA ITEMS: None.

ANNOUNCEMENTS:

The next regular meeting of the Board is scheduled for **December 16, 2016 from 9:00 am – 12:30 pm** at the **EBMUD Treatment Plant, Lab Library, 2020 Wake Ave., Oakland, CA. A Holiday Lunch will follow.**

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

The meeting adjourned at 12:44 pm.



MONTHLY FINANCIAL SUMMARY REPORT – October 2016

Fund Balances

In FY 16 BACWA had seven funds of which three were operating funds (BACWA, Legal, and CBC) and four were pass-through funds for which BACWA provided only contract administration services. Beginning in FY17, with the AIR Committee becoming a regular BACWA committee supported by BACWA dues, the balance from the Pass-through AIR Fund has been consolidated into the BACWA Fund. The remaining three pass-through funds are not of particular concern as these funds simply track expenses and revenues to ensure that receipts are adequate to pay all expected expenses.

BACWA Fund: This fund provides the resources for BACWA staff, its committees, and other administrative needs. The ending fund balance on October 31, 2016 was \$1,442,157 which is significantly higher than the target reserve of \$160,000 which is intended to cover 3 months of normal operating expenses. \$400,993 of the ending fund balance is obligated to meet on-going operating line item expenses for BAPPG Committee Support, Legal services, IT services, Board meeting expenses, accounting services and BACWA staff support. This leaves an unobligated excess fund balance of \$1,041,164. As the details of what regulatory requirements will be included in the next Nutrient Watershed Permit, these excess funds may be used to offset potential dues increases to the BACWA members.

<u>CBC Fund</u>: This fund provides the resources for completing special investigations as well as meeting regulatory requirements. The ending fund balance on October 31, 2016 was \$1,239,246 which is significantly higher than the target reserve of \$400,000. However, \$405,464 of the ending balance is obligated to meet line item expenses for completion of the Optimization/Upgrade Studies contract, the Risk Reduction contracts, and for technical support. Total Disbursements for FY17 from the CBC Fund include the annual payment of \$880,000 to SFEI for the Nutrient Watershed Permit commitment. As the details of what regulatory requirements will be included in the next Nutrient Watershed Permit, any excess CBC funds may be used to offset potential dues increases to the BACWA members.

<u>Legal Fund:</u> This fund provides for needed legal services. The ending balance was \$300,000 which is at the target reserve of \$300,000.

Budget To Actual

The BACWA Annual Budget includes all expected revenues as well as budgeted expenses. Transfers are made from the BACWA Fund and/or the CBC Fund to balance the Annual Budget if expenses exceed revenues and vice versa. It is therefore important to achieve the anticipated revenues and not exceed the budgeted expenses on an annual basis in order to maintain the BACWA and CBC Fund balances at the levels projected in the 5 Year Plan.

Revenues as of October 31, 2016 (33% of the FY) are at 80% primarily due to the payment of FY17 invoices by the Principal members and higher than budgeted interest earnings.



MONTHLY FINANCIAL SUMMARY REPORT – October 2016

Overall Expenses as of October 31, 2016 (33% of the FY) are at 74% and are tracking in accordance with the Annual Budget due to payment of Watershed Permit commitment early in the fiscal year. Individual expense categories with a plus or minus 10% variance at this point in the fiscal year are as follows:

Administration: This category is 9% expended at 33% of the FY due to the timing of invoices.

Communications: This category is under-expended (i.e. 18%) due primarily to timing of invoices.

Legal Support: Budget of \$4,500 and expenditures to date of \$0 resulting in a favorable variance of \$4,500 due to a low need for legal administrative advice.

Collaboratives: This category is under-expended (i.e. 0%) due to timing of invoices.

Tech Support: This category is 106% expended at 33% of the FY partly due to timing of the Watershed Permit Commitment invoice and to the payment of Optimization/Upgrade obligations. The Opt/Upgrade expenditures were significantly below budget in FY16 and will, therefore, be significantly above budget in FY17.



December 6, 2016

MEMO TO:

Bay Area Clean Water Agencies Executive Board

MEMO FROM:

D. Scott Klein, Controller, East Bay Municipal Utility District

SUBJECT:

Fourth 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, 2016 through October 31, 2016** (four months of Fiscal Year 2016-2017). 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 October 31, 2016

DESCRIPTION	BEGINNING FUND BALANCE 07/1/16	TOTAL RECEIPTS	TOTAL DISBURSEMENTS	ENDING FUND BALANCE 10/31/16	OUTSTANDING ENCUMBRANCES	UNOBLIGATED FUND BALANCE 10/31/16
BACWA	1,060,239	562,657	180,739	1,442,157	400,993	1,041,164
LEGAL RSRV	300,000	-	-	300,000	-	300,000
CBC	1,252,817	1,145,266	1,158,838	1,239,246	405,464	833,782
AIR	13,698	-	13,698	0	-	0
TOTAL	2,626,754	1,707,924	1,353,275	2,981,402	806,456	2,174,946
WOT	33,608	12,100	16,100	29,608	-	29,608
TOTAL	33,608	12,100	16,100	29,608	-	29,608
PRP84	118,356	181,028	181,601	117,783	2,525	115,258
PRP50	150,663	472,872	472,532	151,003	-	151,003
TOTAL	269,019	653,900	654,133	268,786	2,525	266,261

BACWA Revenue Report as of October 31, 2016

					Cl	JRRENT PERI	OD		YEAR TO	DATE		
FILLE				AMENDED	0 مالمسلم		Interest,	A aluacion O		Interest,		
FUND		IOD		AMENDED	Admin & General	Contributons	Transfers,Ot hers	Admin & General	Contributons	Transfers,Ot hers	ACTUAL	
#		JOB	REVENUE TYPE	BUDGET	General	Contributoris	ners	General		ners		UNOBLIGATED
800	BACWA	1011099	Principal's Contributions	477,544	-	=.	-	=.	477,545	=.	477,545	(1)
800	BACWA	1011133	Assoc.& Affiliate Contr	175,072	-	-	-	=	-	-	-	175,072
800	BACWA	0408511	Administrative & General	-	-	-	-	-	-	(905)	(905)	905
800	BACWA	1014251	Non-Member Contributions (BAPPG)	3,700	-	=.	-	-	-	-	-	3,700
800	BACWA	1011109	Fund Transfers	2,500	-	-	-	-	-	-	-	2,500
800	BACWA	1011117	BDO Interest Income	4,000	-	-	2,239	=	-	4,669	4,669	(669)
800	BACWA	1011108	BDO Other Receipts	-	-	-	-	-	-	13,698	13,698	(13,698)
800	BACWA	1014252	BDO Non-Member Contr AIR	6,350	-	-	-	-	-	-	-	6,350
800	BACWA	1014511	BDO-Alternative Investment Inc	-	908	-	(908)	1,105	-	(1,105)	-	-
800	BACWA	1014550	BDO-Other Receipts (PHARM)	=	-	57,965	-	=	67,650	-	67,650	(67,650)
	BACW	A TOTAL		669,166	908	57,965	1,332	1,105	545,195	16,357	562,657	106,509
804	LEGAL	1011117	Interest Income	-	-	-	-	-	-	-	-	
	LEGAL	TOTAL		-	-	-	-	-	-	-	-	-
805	WQA-CBC	1011099	BDO Member Contributions	675,000	-	-	-	-	510,000	(60,000)	450,000	225,000
805	WQA-CBC	1011108	BDO Other Receipts	800,000	-	-	-	=	533,335	-	533,335	266,665
805	WQA-CBC	1011117	BDO Interest Income	=	-	-	2,077	=	-	4,431	4,431	(4,431)
805	WQA-CBC	1014528	BDO-Voluntary Nutrient Contrib	-	-	97,500	-	=	97,500	60,000	157,500	(157,500)
	WQA C	BC TOTAL		1,475,000	-	97,500	2,077	-	1,140,835	4,431	1,145,266	329,734
	TOTAL			2,144,166	908	155,465	3,408	1,105	1,686,030	20,789	1,707,924	436,242

					С	CURRENT PERIOD			YEAR TO	DATE		
						Interest,				Interest,		
				AMENDED	Admin &		Transfers,	Admin &		Transfers,		
	DEPARTMENT	JOB	REVENUE TYPE	BUDGET	General	Contributons	Others	General	Contributons	Others	ACTUAL	UNOBLIGATED
810	WOT	1011099	BDO Member Contributions	-	-	-	-	-	12,000	-	12,000	(12,000)
810	WOT	1011117	BDO Interest Income	=	-	=	49	-	=	100	100	(100)
	WOT TOTAL			-	-	-	49	-	12,000	100	12,100	(12,100)

					CURRENT PERIOD			YEAR TO	DATE			
							Interest,			Interest,		
				AMENDED	Admin &		Transfers,	Admin &		Transfers,		
	DEPARTMENT	JOB	REVENUE TYPE	BUDGET	General	Contributons	Others	General	Contributons	Others	ACTUAL	UNOBLIGATED
811	PROP 84			=	-	=	185	-	180,687	341	181,028	(181,028)
815	PROP 50			=	-	472,500	176	-	472,500	372	472,872	(472,872)
	PROP TOTAL			-	-	472,500	361	-	653,187	713	653,900	(653,900)
	Grand Total			2,144,166	908	627,965	3,818	1,105	2,351,217	21,602	2,373,924	(229,758)

BACWA Expense Detail Report as of October 31, 2016

				CURRENT	PERIOD			YEAR TO	DATE			
EXPENSE TYPE	JOB	AMENDED BUDGET	ENC	PV	DA	JV	ENC	PV	DA	JV	OBLIGATED	UNOBLIGATED
LABOR	•											
AS-Executive Director	1011123	189,370	(15,781)	15,781	-	-	126,247	63,123	-	-	189,370	-
AS-Assistant Executive Directo	1011124	85,000	(7,084)	7,084	-	-	55,758	29,242	-	-	85,000	-
AS-Regulatory Program Manager	1011149	112,500	(8,145)	8,145	-	-	82,710	29,790	-	-	112,500	-
ADMINISTRATION												
AS-EBMUD Financial Services	1011125	40,000	-	-	-	-	40,000	-	3,070	(3,666)	39,404	596
AS-Audit Services	1014512	6,200	-	-	-	-	6,200	-	-		6,200	-
AS-BACWA Admin Expense	1011118	7,500	-	-	772	-	-	-	1,302	-	1,302	6,198
AS-Insurance	1011126	4,500	-	-	-	-	-	-	4,266	-	4,266	234
MEETINGS												
GBS-Meeting Support-Exec Bd	1014513	2,500	-	-	-	-	747	253	100	-	1,100	1,400
GBS-Meeting Support-Annual	1014514	7,000	-	-	-	-	-	-	1,348	-	1,348	5,652
GBS-Meeting Support-Pardee	1014515	6,000	-	-	761	-	-	-	1,209	-	1,209	4,791
GBS-Meeting Support-Misc	1014516	1,100	-	-	1,441	-	-	-	1,491	-	1,491	(391)
GBS- Meeting Support	1011122	-	-	-	-	-	-	-	-	-	-	-
COMMUNICATION												
CAR-BACWA Website Hosting	1014517	600	-	-	-	-	-	-	600	-	600	-
CAR-BACWA File Storage	1014518	750	-	-	-	-	-	-	-	-	-	750
CAR-BACWA IT Support	1014519	2,600	(135)	135	-	-	2,465	135	-	-	2,600	-
CAR-BACWA IT Software	1014520	800	-	-	94	-	-	-	326	-	326	474
CAR-BACWA Website Development/	1011116	1,200	-	-	-	-	-	-	-	-	-	1,200
LEGAL												
LS-Regulatory Support	1011107	2,500	-	-	-	-	2,500	-	-	-	2,500	-
LS-Executive Board Support	1011110	2,000	-	-	-	-	2,000	-	-	-	2,000	-
COMMITTEES												
AIR-Air Issues&Regulation Grp	1011109	-	-	-	-	-	-	-	-	-	-	-
AIR-Air Issues&Regulation Grp	1014253	50,000	(2,457)	2,457	-	-	45,541	4,459	250	-	50,250	(250)
BC-BAPPG	1011147	86,000	(10,906)	10,906	-	-	36,825	23,176	20,000	-	80,000	6,000
BC-Biosolids Committee	1011101	3,100	-	-	-	-	-	-	104	-	104	2,996
BC-Collections System	1011097	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-InfoShare Groups	1011102	1,200	-	-	-	-	-	-	162	-	162	1,038
BC-Laboratory Committee	1011103	6,000	_	-	-	-	_	-	_	_	_	6,000
BC-Permit Committee	1011098	1,000	_	_	-	_	_	_	_	_	_	1,000
BC-Pretreatment Committee	1011146	7,000	_	_	_	_	_	_	_	_	_	7,000
BC-Water Recycling Committee	10111100	1,000	_	_	_	_	_	_	_	_	_	1,000
BC-Miscellaneous Committee Sup	1011104	35,000	_	_	_		_	_	_		_	35,000
COLLABORATIVES	1011104	33,000									<u>-</u>	33,000
	4040004											
CAS-Arleen Navaret Award	1012201	-	-	-	-	-	-	-	-	-	-	
CAS-FWQC	1012202	7,500	-	-	-	-	-	-	-	-	-	7,500
CAS-Stanford ERC	1011969	10,000	-	-	-	-	-	-	-	-	-	10,000
CAS-CWCCG	1011148	-	-	-	-	-	-	-	-	-	-	-
CAS-PSSEP	1011112	20,000	-	-	-	-	-	-	-	-	-	20,000
CAS-Misc Collaborative Sup	1014521	3,000	-	-	-	-	-	-	-	-	-	3,000
BACWA TOTAL		703,920	(44,507)	44,507	3,068	-	400,993	150,177	34,228	(3,666)	581,732	122,188
TECH SUPPORT												
WQA-CE Addl Work Under Permit	1014254	50,000	-	-	5,000	-	57,000	12,367	5,000	-	74,367	(24,367)
WQA-CE-Technical Support	1011127	50,000	-	-	-	-	28,409	-	-	-	28,409	21,591
WQA-CE CASA Chem of Concern	1011128	15,000	-	-	-	-	-	2,500	-	-	2,500	12,500
WQA-CE Opt-Upgrade Studies	1014255	18,128	-	-	-	-	293,503	96,923	-	-	390,426	(372,298)
WQA-CE Risk Reduction	1014023	32,500	-	-	-	-	26,552	4,548	-	-	31,099	1,401
WQA-CE-Nutrient WS Permit Comm	1014021	880,000	_	_	_	_	,	-	880,000	_	880,000	-
WQA-CE-Program Mgmt	1011131	50,000	_	_	_	_	_	_	,	_	,	50.000
WQA-CE Voluntary Nutr Contrib	1014529	-	_	_	97,500	_	_	_	157,500	_	157,500	(157,500)
TECH SUPPORT (CBC) TOTAL	.0020	1,095,628			102,500		405,464	116,338	1,042,500		1,564,301	(468,673)
GRAND TOTAL		1,799,548	(44,507)	44,507	105,568		806,456	266,515	1,076,728	(3,666)	2,146,033	(346,485)
Signi2 15172		1,100,010	(11,001)	. 1,00	.00,000		TOTAL	AIR	1,339,577 13,698	(0,000)	2,110,000	(0.0,100)
									1,353,275			
WOT	4044440											
Administrative Support	1011142	-	-	-	. 46 400	-	-	-	-	-	- 40.400	. (40.400)
BDO Contract Expenses	1011143	•	-	-	16,100	-	-	•	-	•	16,100	(16,100)
		-	-	-	16,100	-	-	-	-	-	16,100	(16,100)

Proposition Revenue Report as of October 31, 2016

					Cl	JRRENT PERIOD)		YEAR TO	DATE		
DEPTID	DEPARTMENT	JOB	REVENUE TYPE	AMENDED BUDGET	Admin & General	Contributons	Interest, Transfers,Ot hers	Admin & General	Contributons	Interest, Transfers,O thers	ACTUAL	UNOBLIGATED
811	Prop84BayAreaIntegRegnlWtrMgmt	1011117	BDO Interest Income	-	-	-	185	-	-	341	341	(341)
811	Prop84BayAreaIntegRegnlWtrMgmt	1011142	Administrative Support	-	-	-	-	-	30,000	_	30,000	(30,000)
811	Prop84BayAreaIntegRegnlWtrMgmt	1011705	Regional Green Infrastructure	-	-	-	-	-	36,691	-	36,691	(36,691)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012212	High Efficiency Toilet & UR	-	-	-	-	-	22,119	-	22,119	(22,119)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012215	Napa Co. Rainwater HP	-	-	-	-	-	6,806	-	6,806	(6,806)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012216	Conservation Program Admin	-	-	-	-	-	13,417	-	13,417	(13,417)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012219	Flood Infrastructure Mapping T	-	-	-	-	-	53,943	-	53,943	(53,943)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012223	Restoration Guidance, San FC	-	-	-	-	-	8,069	-	8,069	(8,069)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012224	SF Estuary Steelhead MP	-	-	-	-	-	6,941	-	6,941	(6,941)
811	Prop84BayAreaIntegRegnlWtrMgmt	1012225	Watershed Program Admnstrtn	-	-	-	-	-	2,701	-	2,701	(2,701)
	PROP 84 TOTAL			-	-	-	185	-	180,687	341	181,028	(181,028)
815	Prop50BayAreaIntegRegnIWtrMgmt	1011117	BDO Interest Income	-	-	-	176	-	-	372	372	(372)
815	Prop50BayAreaIntegRegnlWtrMgmt	1011542	EBMUD Ca. Waterstar Initiative	-	-	472,500	-	-	472,500	-	472,500	(472,500)
	PROP50 TOTAL			-	-	472,500	176	=	472,500	372	472,872	(472,872)
	GRAND TOTAL			-	-	472,500	361	-	653,187	713	653,900	(653,900)

Proposition Expense Detail Report for October 2016

			AMENDED		CURRENT	PERIOD			YEAR T	O DATE			
DEPTID	DEPARTMENT	EXPENSE TYPE	BUDGET	ENC	PV	DA	JV	ENC	PV	DA	JV	OBLIGATED	UNOBLIGATED
811	Prop84BayAreaIntegRegnIWtrMgmt	BDO Fund Transfers	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	Administrative Support	-	-	-	-	-	-	-	53,033	-	53,033	(53,033)
811	Prop84BayAreaIntegRegnIWtrMgmt	BDO Contract Expenses	-	-	-	-	-	2,525	-	-	-	2,525	(2,525)
811	Prop84BayAreaIntegRegnIWtrMgmt	Regional Green Infrastructure	-	-	-	-	-	-	-	36,691	-	36,691	(36,691)
811	Prop84BayAreaIntegRegnIWtrMgmt	Water Efficient LRP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	Bay Friendly Landscape TP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	Weather Based Irrigation Cntrl	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	High Efficiency Toilet & UR	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	High Efficiency Toilet & UI	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	High Efficiency Clothes Washrs	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	Napa Co. Rainwater HP	-	-	-	-	-	-	-	6,806	-	6,806	(6,806)
811	Prop84BayAreaIntegRegnIWtrMgmt	Conservation Program Admin	-	-	-	-	-	-	-	13,417	-	13,417	(13,417)
811	Prop84BayAreaIntegRegnIWtrMgmt	Flood Infrastructure Mapping T	-	-	-	-	-	-	-	53,943	-	53,943	(53,943)
811	Prop84BayAreaIntegRegnIWtrMgmt	Stormwater Improvements & PBP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	Richmond Shoreline & San PFP	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	Pescadero Integrated FRAH	-	-	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnIWtrMgmt	Restoration Guidance, San FC	-	-	-	-	-	-	-	8,069	-	8,069	(8,069)
811	Prop84BayAreaIntegRegnIWtrMgmt	SF Estuary Steelhead MP	-	-	-	-	-	-	-	6,941	-	6,941	(6,941)
811	Prop84BayAreaIntegRegnIWtrMgmt	Watershed Program Admnstrtn	-	-	-	-	-	-	-	2,701	-	2,701	(2,701)
	PRP84 TOTAL		-	-	-	-	-	2,525	-	181,601	-	184,126	(184,126)
815	Prop50BayAreaIntegRegnlWtrMgmt	BDO Fund Transfers	-	-	-	-	-	-	-	-	-	-	-
815	Prop50BayAreaIntegRegnIWtrMgmt	Administrative Support	-	-	-	32	-	-	-	32	-	32	(32)
815	Prop50BayAreaIntegRegnIWtrMgmt	BDO Contract Expenses	-	-	-	-	-	-	-	-	-	-	-
815	Prop50BayAreaIntegRegnIWtrMgmt	EBMUD New Biz Guidebook	-	-	-	-	-	-	-	-	-	-	-
815	Prop50BayAreaIntegRegnIWtrMgmt	South Bay Advanced Regional RW	-	-	-	-	-	-	-	-	-	-	-
815	Prop50BayAreaIntegRegnIWtrMgmt	Pacifica RWP	-	-	-	-	-	-	-	-	-	-	-
815	Prop50BayAreaIntegRegnIWtrMgmt	Direct Install HET	-	-	-	-	-	-	-	-	-	-	-
815	Prop50BayAreaIntegRegnlWtrMgmt	Sonoma - Napa Marsh RWP	-	-	-	-	-	-	-	-	-	-	-
815	Prop50BayAreaIntegRegnlWtrMgmt	EBMUD Ca. Waterstar Initiative	-	-	-	472,500	-	-	-	472,500	-	472,500	(472,500)
	PRP50 TOTAL		-	-	-	472,532	-	-	-	472,532	-	472,532	(472,532)
GRAND TO	DTAL		-	-	-	472,532	-	2,525	-	654,133	-	656,658	(656,658)



BACWA EXECUTIVE BOARD AUTHORIZATION REQUEST

	ACWA EXECUTIVE	DOARD AUTHORIZATIO	JN REQUEST
		AGENDA NO).: 3
		FILE NO).: <u>17-25</u>
		MEETING DAT	
	of Audited Financial Report Report to its Members for F	rts for the Years Ended June 30 Y2016.), 2015 and 2016, and the
□ RECEIPT	□ DISCUSSION	□ RESOLUTION	⊠ APPROVAL
Memorandum of I	udited Financial Report fo	r 2015 and 2016 (Basic Financia by EBMUD acting as Treasurer p for FY2016.	
reports to BACWA significant issues for	A. The two audits are provound in either audit. In add	ts an audit of the BACWA final rided for Board approval (see at dition BACWA is required to pl cal and financial activities of the	tached). There were no repare and Annual Report
FISCAL IMPACT			
	ed by EBMUD and paid for t to its members is prepare	under the accounting fees paid d by BACWA staff.	by BACWA to EBMUD.
		and the Annual Report to the material eport are required by the BAC	
Memorandum on It Agenda		to BACWA website on Agenda ed Communications – see link to	BACWA website on
Approved:			
		Date:	
Laura Pagano, Cha BACWA	air		_



BACWA Annual Report

Fiscal Year 2015/16

As water quality regulation becomes increasingly complex and stringent, BACWA provides technical expertise and a venue for collaboration to its membership, and a public utility perspective to negotiations and partnerships with regulators. With forty POTWs and more than a hundred collection systems in the San Francisco Bay region, BACWA provides a necessary mechanism for effective coordination to ensure good regulation and continued water quality improvements throughout the Bay Area.

The clean water community's focus is now expanding rapidly beyond its historical mission of pollutant reduction to renewable energy generation and resource recovery. New challenges are also emerging such as better understanding the potential impacts of micro-constituents, compounds detected at often miniscule levels that may present human health or environmental concerns. Nutrient science and policy continues to be a major focus for BACWA. Member contributions will continue to support BACWA's goal of ensuring that any future nutrient regulations are well-supported by science and that any necessary reductions in nutrient loading will lead to quantifiable improvements in water quality. Even as the issues change, BACWA continues to offer the services to our members and the public that over the years have garnered the agency much respect and success.

Below are a list of BACWA's accomplishments over the previous fiscal year.

List of Accomplishments

Nutrient Activities

- BACWA and the Nutrient Contract Management Group completed the following tasks associated with the Nutrient Optimization and Upgrade Studies:
 - o Participated in monthly conference calls and provided direction to the consulting team conducting the Nutrient Optimization and Upgrade Studies
 - O Attended site visits along with the consultant team to identify optimization, sidestream treatment, and upgrade opportunities at individual facilities
 - Reviewed a selection of draft Facility Reports to make recommendations about their formats and the assumptions used to develop treatment alternatives for individual facilities
 - Reviewed assumptions to study the cost of implementing no increase in net loading of nutrients to the SF Bay
 - o Hosted a workshop to discuss Facility Reports with member agencies
 - O Submitted Nutrient Optimization and Upgrade Studies Progress Update to the Regional Water board in compliance with the Nutrient Watershed Permit
- Submitted Science Plan Progress Update to the Regional Water Board in compliance with the Nutrient Watershed Permit



- Submitted the first Nutrient Group Annual Report in compliance with the Nutrient Watershed Permit
- Funded \$880K in scientific studies and \$100K for Nutrient Management Strategy program coordination
- Participated in the Nutrient Management Strategy Steering Committee and Planning Subcommittee governing the scientific studies
- Participated in the Nutrient Technical Workgroup and Stakeholder Advisory Group
- Convened a kickoff meeting for the BACWA Nutrient Strategy team to begin to discuss the Nutrient Watershed Permit reissuance
- Circulated a survey to members to gauge agency positions with respect to negotiating the next Nutrient Watershed Permit
- Developed a survey on agencies' plans for recycled water, and their capital budgeted projects to estimate the nutrient load reductions these projects may entail
- Coordinated sidestream sample analysis for nutrients
- Contracted with national experts to provide a third party review of the Scientific Basis to Assess the Effects of Nutrients on San Francisco Bay Beneficial Uses and associated documents

Permit Compliance Activities

- Conducted a competitive selection process and selected two community-based organizations to receive grants to conduct risk reduction activities. These projects will be conducted to comply with the mercury/PCB watershed permit.
- Prepared a letter to the Regional Water Board, on behalf of our members, demonstrating compliance with special studies requirements in NPDES permits

Regulatory Advocacy

- North SF Bay Selenium TMDL Worked with Regional Water Board and member agencies to ensure integrity of data used to calculate load allocations
- Shallow discharge prohibition Held discussions with Regional Water Board on how to permit near shore discharges to facilitate marshland enhancement for habitat and sea level rise protection
- Alternate monitoring plan Worked with Regional Water Board to develop option for POTWs to reduce monitoring frequencies for low value specified chemical analyses, and eliminate the requirement to perform routine sensitive species screening for chronic toxicity. For agencies that opt into the Alternate Monitoring Plan, the cost savings from the monitoring reductions will be transferred directly to the Regional Monitoring Program in the form of a fee surcharge.
- Comprehensive Conservation Management Plan (CCMP) Coordinated with SFEP on the CCMP to provide input on actions pertaining to wastewater or recycled water
- Conducted regular bimonthly meetings with Regional Water Board staff to discuss regulatory issues of interest to the BACWA community
- Held a meeting with BAAQMD staff and BACWA member Agency Staff to discuss how air and water regulations impact initiatives to mitigate greenhouse gas emissions



- Submitted the following comment letters:
 - Water Quality Control Plan for the San Francisco Bay Basin 2015 Triennial Review –
 Commented on the prioritization of issues in the Triennial Review and proposed two new projects
 - North Bay Selenium TMDL Provided comments recommending a small change in language recognizing the variability in the selenium data used to calculate wasteload allocations
 - Pesticides Submitted letters to EPA and California DPR requesting that they review
 pesticide applications before registration to fully assess the potential for pesticides to
 impact water quality and wastewater treatment plant processes and biosolids
 - o BAAQMD Rule 11-10 Commented that setting a hydrocarbon limit in cooling tower water without regard to the baseline hydrocarbon concentration of the source water may inadvertently restrict the use of recycled water
 - o *Alternate Monitoring Requirements* Commented on implementation of the Alternate Monitoring Plan.
 - O State Water Board General Order for Recycled Water Recommended that language in the January 2016 draft of the State General Order be revised to clarify that existing, expanded, and new projects may elect to seek coverage under either their existing permits or the State General Order. Upon the April 2016 revision of the draft General Order with a new Finding 34, stating that enrollment would be mandatory for all Regional permittees, BACWA submitted a comment letter urging the State Water Board not to incorporate Finding 34, and recommending ways to mitigate the administrative burden if Regional enrollees are required to seek coverage under the State General Order
 - O Scientific Basis to Assess the Effects of Nutrients on San Francisco Bay Beneficial Uses Commented to the Regional Water Board and the manuscript's authors highlighting data gaps, and requesting that the manuscript's publication be delayed until it is peer reviewed as part of the Nutrient Management Strategy
 - State CECs Pilot Monitoring Plan Submitted a joint letter to the State Water Board strongly encouraging them to work within the framework and budget of the RMP CECs program
 - o FDA Recommendation to flush certain medications Joined over 100 environmental and health organizations, agencies, activists, and state legislators from around the country in signing a letter urging the FDA to end its recommendation that certain medications be disposed by flushing, and to clarify that secure medicine take-back programs provide the best disposal method for leftover household medications
 - o Surface Water Augmentation Regulations Recommended the use of a clause in the regulations that would allow consideration of equivalent level of public health protection where there is less than the minimum retention time stipulated by the regulations
 - Support for SB1229 through BAPPG Submitted a letter to Bay Area Senators in support of SB1229, which offers liability protections for pharmacies that have pharmaceutical take-back bins
 - o Support for AB 888 though BAPPG Submitted a letter to Bay Area Senators in support of a bill to ban the use of plastic microbeads in personal care products



Communication with members

- Conducted routine communication with our membership through the Annual Meeting and Monthly Board meetings.
- Published the monthly BACWA Bulletin
- Conducted a regional POTW Budget Survey
- Conducted a Private Sewer Lateral Survey
- Maintained the BACWA Website to improve usability and access to documents
- Updated the BACWA Regulatory summary matrix
- Produced a Pesticide Regulatory "Call to Action" Summary sheet
- Updated the Truck Fill Guide for contractors and Caltrans to identify agencies that could supply recycled water for construction projects
- Reviewed and distributed the BACWA-funded Wheeler Institute White Paper on Citizen Enforcement in Sanitary Sewer Overflows in California

Support Educational, Research, and Advocacy Efforts

- Conducted regional outreach campaigns related to flushable wipes, copper, pharmaceutical disposal, household hazardous waste, building demolition, and FOG
- Provided funding for the California Product Stewardship Council and the Product Stewardship Institute
- Provided funding for the Reinventing the Nation's Urban Water Infrastructure (ReNUWIt), an
 interdisciplinary, multi-institution research center whose goal is to change the ways in which we
 manage urban water
- Provided funding for the Federal Water Quality Coalition to help represent BACWA on national issues
- Provided administrative assistance for member agency funding of the Wastewater Operator Training courses offered through Solano Community College
- Awarded the Arleen Navarret Award for leadership in the local POTW community
- Explored developing a method to more accurately identify and quantify microplastics in wastewater
- Coordinated with SFEI to arrange CEC sampling by volunteer member agencies

External Representation and Collaboration

- Provided representation at external groups such as:
 - o RMP Technical Review Committee
 - o RMP Steering Committee
 - o ASC/SFEI Governing Board
 - o San Francisco Bay Nutrient Governance Steering Committee
 - o San Francisco Bay Nutrient Technical Workgroup
 - o SWRCB Nutrient Stakeholder advisory group
 - o SWRCB Bacterial Objectives stakeholder group
 - o SWRCB Mercury Amendments to the State Plan stakeholder group
 - o Statewide Pesticide Steering Committee
 - Summit Partners
 - o BAIRWMP



- o NACWA Emerging Contaminants
- o CASA State Legislative Committee
- o CASA Regulatory Workgroup
- o NeNUWIt
- o RMP Microplastics Science Strategy Liaison
- o Bay Area Regional Reliability Task Force
- o AWT Certification Committee

Grant Efforts

- Managed administration of Proposition 84, Round 1, grant funds
- Participated in EBMUD's EPA nutrient sidestream treatment grant research activities
- Developed a joint proposal, with the Santa Clara Valley Water District, and researchers at SFEI, Stanford, and UC Berkeley, to study treatment of reverse osmosis concentrate

BACWA Committees

Support for BACWA's committees is a key means for BACWA to ensure communication between our members, and to formulate positions on emerging issues that accurately reflect the needs of our membership. BACWA maintains the following active committees:

- Collection Systems
- Permits
- Recycled Water
- Laboratory
- Biosolids
- Operations/Maintenance and Asset Management Infoshare
- Pretreatment
- Bay Area Pollution Prevention Group
- Air Issues and Regulations (partial support)



Financial Report

BACWA FY16 BUDGET	<u>Line Item Description</u>	FY2016 Budget Amended	FY2016 Actuals June 2016	Actual % of Budget June 2016	Variance
REVENUES & FUNDING					
Principals' Contributions		\$468,180	\$468,180	100.00%	\$0
Associate & Affiliate Contributions		\$171,639	\$173,199	100.91%	\$1,560
Fees	Clean Bay Collaborative	\$675,000	\$674,250	99.89%	-\$750
	Nutrient Surcharge	\$600,000	\$600,608	100.10%	\$608
Other Receipts					
	AIR Committee Phase-in	\$50,000	\$48,080	96.16%	-\$1,920
	AIR Non-Member	\$6,200	\$6,200	100.00%	\$0
	BAPPG Non-Members	\$3,600	\$3,600	100.00%	\$0
	Other	\$0	\$16,100		
Fund Transfer	Special Program Admin Fees	\$2,500	\$4,938	197.52%	\$2,438
Interest Income	Funds	\$1,500	\$14,104	940.27%	\$12,604
	Total Revenue	\$1,978,619	\$1,993,159	100.73%	\$14,540
<u>EXPENSES</u>					
	<u>Line Item Description</u>	FY2016 Budget Amended	FY2016 Actuals June 2016	Actual % of Budget June 2016	<u>Variance</u>
Labor					
	Executive Director	\$183,498	\$183,498	100.00%	\$0
	Assistant Executive Director	\$78,642	\$78,632	99.99%	\$10
	Regulatory Program Manager	\$123,360	\$118,025	95.68%	\$5,335
	Total	\$385,500	\$380,155	98.61%	\$5,345
Administration					
	EBMUD Financial Services	\$40,000	\$44,446	111.12%	-\$4,446
	Administrative Expenses	\$7,500	\$4,077	54.36%	\$3,423
	Insurance	\$4,500	\$4,147	92.16%	\$353
	Total	\$52,000	\$52,670	101.29%	-\$670



	<u>Line Item Description</u>	FY2016 Budget Amended	FY2016 Actuals June 2016	Actual % of Budget June 2016	<u>Variance</u>
Meetings					
	EB Meetings	\$2,500	\$1,707	68.28%	\$793
	Annual Meeting	\$8,000	\$4,131	51.64%	\$3,869
	Pardee	\$5,000	\$5,753	115.06%	-\$753
	Misc. (Summit Partners)	\$1,100	\$1,590	144.55%	-\$490
	Total	\$16,600	\$13,181	79.40%	\$3,419
Communication	Website Development/Maintenance				
	Website Hosting (Computer Courage)	\$600	\$600	100.00%	\$0
	File Storage (Box.net)	\$720	\$720	100.00%	\$0
	Website Development/Maintenance	\$1,200	\$436	36.33%	\$764
	Subtotal	\$2,520	\$1,756	69.68%	\$764
	IT Support & Software				
	Managed Services	\$1,800	\$0	0.00%	\$1,800
	IT Support (As Needed)	\$2,000	\$2,223	111.15%	-\$223
	Email (Office 365/MS Exchange)	\$480	\$480	100.00%	\$0
	Other Communication (Survey Monkey)	\$288	\$288	100.00%	\$0
	Subtotal	\$4,568	\$2,991	65.48%	\$1,577
	Total	\$7,088	\$4,747	66.97%	\$2,341
Legal					
	Regulatory Support	\$2,500	\$70	2.80%	\$2,430
	Executive Board Support	\$2,000	\$1,392	69.60%	\$608
	Total	\$4,500	\$1,462	32.49%	\$3,038

	Line Item Description	FY2016 Budget Amended	FY2016 Actuals June 2016	Actual % of Budget June 2016	Variance
Committees					
	AIR	\$50,000	\$50,857	101.71%	-\$857
	BAPPG	\$86,000	\$77,864	90.54%	\$8,136
	Biosolids Committee	\$3,100	\$1,183	38.16%	\$1,917
	Collections System	\$10,000	\$1,050	10.50%	\$8,950
	InfoShare Groups	\$1,000	\$1,133	113.30%	-\$133
	Laboratory Committee	\$6,000	\$2,291	38.19%	\$3,709
	Permit Committee	\$1,000	\$0	0.00%	\$1,000
	Pretreatment	\$1,000	\$989	98.90%	\$11
	Recycled Water Committee	\$1,000	\$0	0.00%	\$1,000
	Misc Committee Support	\$30,000	\$0	0.00%	\$30,000
	Total	\$189,100	\$135,367	71.59%	\$53,733
Collaboratives					
	Collaboratives				
	State of the Estuary (biennial)	\$0	\$0	0.00%	\$0
	Arleen Navarret Award	\$1,000	\$1,577	157.70%	-\$577
	FWQC (Fred Andes)	\$5,000	\$5,000	100.00%	\$0
	Stanford ERC (ReNUWIt)	\$10,000	\$10,000	100.00%	\$0
	CWCCG	\$35,000			\$0
	Total	\$51,000	\$51,577	101.13%	-\$577



	Line Item Description	FY2016 Budget Amended	FY2016 Actuals June 2016	Actual % of Budget June 2016	<u>Variance</u>
Tech Support	Technical Support				
	Nutrients				
	Watershed	\$880,000	\$870,000	98.86%	\$10,000
	Additional work under permit	\$100,000	\$30,633	30.63%	\$69,367
	Opt/Upgrade/Annual Reporting Studies	\$559,000	\$220,203	39.39%	\$338,797
	Nutrient Program Coordination	\$50,000	\$100,000	200.00%	-\$50,000
	General Tech Support	\$136,779	\$64,432	47.11%	\$72,347
	Chemicals of Concern	\$15,000	\$15,000	100.00%	\$0
	Risk Reduction	\$17,500	\$18,901	108.01%	-\$1,401
	Total	\$1,758,279	\$1,319,169	75.03%	\$439,110
	TOTAL EXPENSES	\$2,464,067	\$1,958,328	79.48%	\$505,739
	NET INCOME BEFORE TRANSFERS	-\$485,448	\$34,831		
	TRANSFERS FROM RESERVES	\$485,448	\$0		
	NET INCOME AFTER TRANSFERS	\$0	\$34,831		

List of BACWA Members as of June 30, 2016

Principals

East Bay Municipal Utility District East Bay Dischargers Authority

- Castro Valley Sanitary District
- City of Hayward
- City of San Leandro
- Oro Loma Sanitary District
- Union Sanitary District

San Francisco Public Utilities Commission Central Contra Costa Sanitary District City of San Jose

Associates

Central Marin Sanitation Agency
City of Livermore
City of Palo Alto
City of Sunnyvale
Delta Diablo Sanitation District
Dublin-San Ramon Services District
Fairfield Suisun Sewer District
Napa Sanitation District
Silicon Valley Clean Water
San Mateo Wastewater Treatment Plant
South San Francisco
Vallejo Sanitation and Flood Control District
West County Agency



Afilliates

City of Alameda

City American Canyon

City of Albany

City of Antioch

City of Belmont

City of Benicia

City of Berkeley

City of Brisbane

City of Burlingame

City of Calistoga

City of Crockett

City of Fairfield

City of Millbrae

City of Milpitas

City of Mountain View

City of Petaluma

City of Piedmont

City of Pleasanton

City of Redwood City

City of Richmond

City of San Bruno

City of San Carlos

City of St. Helena

Cupertino Sanitary District

Las Gallinas Valley Sanitary District

Mt. View Sanitary District

North San Mateo Sanitation District

Novato Sanitary District

Pacifica

Pinole/ Hercules Wastewater Treatment Plant

Rodeo Sanitary District

San Francisco International Airport

San Mateo County, Department of Public Works

Sanitary District of Marin County No. 1

Sanitary District of Marin No. 2

Sanitary District of Marin No. 5

Sausalito/Marin City Sanitary District

Sewer Authority Mid-Coastside

Sewerage Agency of Southern Marin

Sonoma County Water Agency

Stege Sanitary District

Tamalpais Community Services District

Treasure Island

West Bay Sanitary District

West Valley Sanitation District

Yountville



EXECUTIVE BOARD AUTHORIZATION REQUEST

AGENDA NO.:	4		
FILE NO.:	17-24		
TEETING DATE:	Dec. 16, 2016		

TITLE: Request for BACWA Executive Board Approval to Execute Agreement with TDC Environmental, LLC for BACWA/BAPPG Pesticide Regulatory and Technical Support, not to exceed \$12,500 for FY17.

□ RECEIPT	□ DISCUSSION	\square RESOLUTION	☒ APPROVAL

RECOMMENDED ACTION

Authorize execution of an agreement with TDC Environmental, LLC to continue work to track pesticide regulatory activities through the US EPA and CA Department of Pesticide Regulation; provide key points for comment letters; communicate with pesticide regulatory agencies; and seek opportunities to prevent pollution at the source, in an amount not to exceed \$12,500 for FY17.

SUMMARY

In June 2016, the BACWA Board authorized execution of an agreement with TDC Environmental, LLC, in amount not to exceed \$17,500 for FY 17, to provide to assistance to BACWA and BAPPG on regulatory, technical, and outreach issues related to emerging pollutant priorities, mainly focused on pesticides. Work under the current contract includes tracking pesticide-related regulatory activities by the EPA and Department of Pesticide Regulation (DPR) and making recommendations regarding regulatory participation and other follow-up steps, including recommending key points for comment letters, reviewing draft comment letters, setting up meetings with key staff at the pesticide regulating agencies to continue educating them about downstream wastewater impacts from their actions to register and/or reregister pesticide uses, and working to change the tools and information used in the registration processes to be protective of wastewater. The current agreement also included funding for Dr. Kelly Moran's time to attend and present at a symposium entitled "Environmental Risk Assessment of Downthe-Drain Chemicals" at the 2016 Fall American Chemical Society Meeting in Philadelphia, PA. Funding for the current \$17,500 TDC contract came from two BACWA FY 17 budget line items (\$2,500 from Chemicals of Concern approved budget of \$15,000 and \$15,000 from BAPPG Committee approved budget of \$86,000).

Due to a flurry of relevant pesticide regulatory activity at US EPA during the first half of FY17, the budget associated with the current Agreement is estimated to be exhausted within the next month. As of December 1, 2016, the remaining budget in the current Agreement was \$2,877.50.

A new Agreement is being sought to continue funding routine pesticide tracking and support tasks through the end of FY17, in addition to funding the following activities:

- Scientific review and providing key points for comment letters for several high-priority ecological risk assessments for pyrethroids, imidacloprid, and fipronil
- Review draft regulations (anticipated this month) for TSCA reform implementation (prioritization process, risk assessment procedures) and coordinate with NACWA on providing comments
- Continue follow-up work to convince EPA to modify its procedures for POTW modeling used for the pesticide registration process
- Continue efforts to change EPA standard procedures that currently ignore the contribution of pet flea control products (spot-ons and collars) to wastewater
- Continue follow-up up work to "seal the deal" on swimming pool, spa, and fountain product label language to direct owners to contact their local sanitation agency prior to discharging treated water

The work under this contract will be carried out under the supervision of Melody LaBella of Central San and Karin North of the City of Palo Alto.

FISCAL IMPACT

There is no fiscal impact associated with this request since this contract will utilize the remaining \$12,500 in the approved budget line item for Chemicals of Concern.

ALTERNATIVES

- 1. Do not complete this work. This alternative is not recommended since this work will assist BACWA/BAPPG with comment letters on important regulatory actions that can reduce wastewater pollution from pesticides and other products at the source.
- 2. Select another consultant to conduct the work. This alternative is not recommended since the selected consultant has unique expertise and knowledge in the subject area desired for supporting BACWA. No other consultant knows the pesticide regulatory process better nor has the contacts/relationships at the pesticide regulating agencies (EPA Region IX, US EPA and California Department of Pesticide Regulation) than Dr. Moran of TDC Environmental. As a result, BACWA/BAPPG achieves much more effectiveness and impact for a modest investment by retaining her firm for this work.

Attachments:	TDC Environmental, LLC Scope Work FY17 Agreement with TDC Environmental, LLC			
Approved:		_ Date:		
	ra Pagano, Chair, CWA Executive Board			

Date: 12/16/2016

BAY AREA CLEAN WATER AGENCIES

CONSULTING AGREEMENT

TO:	TDC Environmental, LLC 462 E. 28th Ave. San Mateo, CA 94403	Dr. Kelly Moran kmoran@tdcenvironmental.com (650) 627-8690
FROM:	David Williams, Executive Director BACWA PO Box 24055, MS702 Oakland, CA 94623	dwilliams@bacwa.org Phone: 925-765-9616 FAX: (510) 287-1351
	Agreement for FY17 with TDC Environr ort to BACWA and the BAPPG Committee	nental, LLC, to provide pesticide regulatory and
pesticide regula key points for of to prevent pollu of Melody LaBe services to be p	atory activities through the US EPA and one comment letters; communicate with pesticution at the source. The work under this cella of CCCSD and Karin North of the City	ormed TDC Environmental, LLC in order to track CA Department of Pesticide Regulation; provide side regulatory agencies; and seek opportunities contract will be carried out under the supervision of Palo Alto. The total cost of professional not to exceed \$12,500. This contract will be concern line item.
event of termi	nation by BACWA, BACWA shall pay	time for convenience with 30 day's notice. In the TDC Environmental, LLC for professional and bon delivery of assigned work products to BACWA
the BACWA As	ssistant Executive Director via e-mail alor ices shall indicate hours associated with	APPG Project Managers, who will then forward to ng with a recommendation for invoice payment by each task. Invoices will be paid within thirty (30
	er Emails: Melody LaBella <u>mlabella@ce</u> arin.north@cityofpaloalto.org	ntralsan.org
BACWA AED E	E-mail: Sherry Hull <u>shull@bacwa.org</u>	
Approved:		
By Laura Paga Chair, BAC\	no VA Executive Board	By Dr. Kelly Moran TDC Environmental, LLC
Date		Date
BACWA EIN: 9	4-3389334	

Scope of Work TDC Environmental, LLC Pesticide Regulatory and Technical Support Dec. 2016-June 2017

- Coordinate with BAPPG representatives to maintain a list of highest priorities pesticides for BACWA's attention (currently copper, silver, fipronil, imidacloprid, and pyrethroids).
 Periodically update (to the extent possible) a schedule of anticipated pesticide regulatory activities on these pesticides.
- Track pesticide-related regulatory activities by EPA and Department of Pesticide Regulation (DPR) that have significant potential to affect BACWA member agencies. Notify BAPPG of such items as they arise. On the basis of regulatory documents, relevant scientific information, and the regulatory context, make recommendations regarding regulatory participation or other follow-up steps. When so directed and as resources allow, provide key points for comments and review draft comment letters.
- Based on existing lines of communication with pesticide regulators and pesticide manufacturers (which are maintained for other clients), notify BAPPG of important information obtained through these contacts.
- Provide technical information to support BACWA's coordination with NACWA on Federal pollution prevention topics, including pesticides.
- Coordinate and provide scientific support for communications with EPA and DPR about wastewater pesticides discharges, wastewater pesticides monitoring, and improving wastewater pesticides predictive modeling to support registration decisions.
- Coordinate scientific review with other agencies (DPR, Water Board) and work with other BACWA and member agency consultants to provide key points for comment letters for high-priority ecological risk assessments: pyrethroids (currently in public review period), imidacloprid (anticipated in Dec. or Jan.), and fipronil (anticipated in June). (This work will also be partially funded by the City of Palo Alto, the City of San Diego, and CASQA)
- Review two draft regulations for TSCA reform implementation (prioritization process, risk assessment procedures) and support BACWA's coordination with NACWA on providing comments.
- Continue follow-up work to convince EPA to modify its procedures for POTW modeling used for the pesticide registration process.
- Continue efforts to change EPA standard procedures that currently ignore the contribution of pet flea control products (spot-ons and collars) to wastewater.
- Continue follow-up up work to finalize new swimming pool, spa, and fountain product label language to direct owners to contact their local sanitation agency prior to discharging treated water.
- Based on the above tasks, develop an agenda and materials for a monthly BACWA
 Pesticides Workgroup teleconference meeting to determine appropriate actions and to
 coordinate actions with NACWA and San Francisco Bay Regional Water Board staff.
 Provide staff support during the meetings and an action item list after each meeting.
- Provide technical and regulatory advice to support development of BAPPG program(s) or materials to address pesticides, such as planned pet flea control-related outreach.
- Upon request, provide responses to pesticide-related regulatory or scientific questions.

All services identified in this Scope of Work shall be compensated on a time and materials basis at \$190 per hour, not to exceed \$12,500.

Contractor

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



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: <u>5</u>
FILE NO.: <u>17-26</u>
MEETING DATE: <u>12/16/16</u>

TITLE: Board Authorization to Increase the Maximum Amount of BACWA Invested Reserves in Alternative Investments

□ RECEIPT	□ DISCUSSION	\square RESOLUTION	☒ APPROVAL

RECOMMENDED ACTION

Approve an increase from a maximum of \$500,000 invested in Alternative Investments to a maximum of \$1,000,000 invested in Alternative Investments.

SUMMARY

The Board approved the investment of excess BACWA Reserves in Alternative Investments up to \$500,000 on April 17, 2015. Since then the Investment Division of EBMUD, acting as Treasurer for BACWA, has invested up to \$495,000 in instruments allowed under BACWA Financial Policy. This has resulted in an increase in interest income over the Budgeted amount of \$4,000 in FY15 to \$7,283 in FY15 and \$14,104 in FY16. The latest Treasurer's Report of October 31, 2016 indicates interest income earned in FY17 of \$8,195. All but \$165,000 of the original alternative investments have matured or been called. BACWA staff has worked with the Investment Division of EBMUD to estimate BACWA cashflows for the remainder of FY17, FY18 and FY19 and has determined that BACWA could conservatively invest up to \$1,000,000 in Alternative Investments which would provide a significant increase in interest income for those years. Investment would be limited to U.S. Treasury or Agency instruments which are very liquid but which may suffer a loss if sold.

Staff has completed a cashflow projection using revenues and expenditures shown in the 5 Year Plan which demonstrated that increasing the amount in higher interest earning financial instruments would not present a cashflow problem through the end of FY 19. BACWA staff would direct EBMUD Investment division to invest in Alternative Investments with a maturity just prior to the end of each fiscal year (i.e. FY 17, 18 and 19). BACWA staff, with the guidance of the BACWA Financial Committee, would review the cashflows and projected budgets each year prior to reinvesting any maturing Alternative Investments. Additionally, the EBMUD Investment Division will provide to BACWA an addendum to the Monthly Treasurer's Report that would provide the status of the funds invested in Alternative Investments. This report would be included in the monthly Financial Report to the Board.

FISCAL IMPACT

Based on current information available BACWA could double the interest currently being earned which was previously estimated to yield roughly \$20k over the 3-year investment term. In addition, since interest rates have been depressed for several years, if rates increase BACWA could earn significantly more interest on its investments.

evenly between 1, 2, and 3 year terms	authorized amount of investment of up to a maximum of \$500,000 in Alternative Investments. This is not recommended since doing sy \$6,000 or more in additional interest income per year.	
Attachments: None		
Approved:		
	Date:	
Laura Pagano, Chair BACWA		
	Dags 24 of 140	
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White Paper

Bay Area Air Quality Management District Proposed Regulation 11, Rule 18 Reduction of Risk from Air Toxic Emissions at Existing Facilities

Prepared by Courtney Mizutani, PE Mizutani Environmental

Sarah Deslauriers, PE Carollo Engineers

Draft date: December 14, 2016

Summary

Draft Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Draft Rule, Rule 11-18) is the Bay Area Air Quality Management District's (BAAQMD's) effort to protect public health from toxic air pollution from existing facilities. BAAQMD expects Rule 11-18 would substantially reduce health risks from various existing facilities by requiring the implementation of all technically and economically feasible risk reduction measures by significant sources of toxic air contaminants (TACs). The Draft Rule will affect publicly owned treatment works (POTWs). BAAQMD staff has identified diesel particulate matter, hydrogen sulfide, cadmium, and mercury as the primary risk drivers for POTWs.

Concerns POTWs have related to this Draft Rule include its compliance schedule, potential fiscal impact, control technology determinations, public notification, cross media impacts, and renewable energy production.

The Bay Area Clean Water Agencies (BACWA) provided written comment to BAAQMD staff regarding this Draft Rule on December 2, 2017 (see attached letter). BACWA, in coordination with the California Association of Sanitation Agencies (CASA), San Francisco Public Utilities Commission (SFPUC), and Central Contra Costa Sanitary District (CCCSD) addressed verbal comments to the Board (12/7/2016).

BAAQMD staff is currently on schedule to bring this Draft Rule to their Board for consideration in May 2017. However, due to comments from impacted facilities, staff may recommend that the evaluation of Rule 11-18 be extended (per BAAQMD 12/7/2016 Board meeting).

Background

In order to address concerns regarding health impacts to communities located near facilities such as refineries, metal melting plants, POTWs, and stationary diesel generators, BAAQMD staff has drafted a rule that targets significant reductions in emissions of toxic air contaminants (TACs) from those sources. The Draft Rule applies to facilities whose emissions of TACs are projected to pose a significant risk to nearby residents and workers. Reductions of TACs would be achieved by setting a cap on the allowable risk for facilities across the Bay Area. BAAQMD staff is tasked with performing Health Risk Assessments (HRAs) to identify risk levels at facilities with potential to exceed the cap and then require appropriate measures to reduce risk to acceptable levels.

Approach and Schedule

The Draft Rule would use the annual toxic emissions inventories reported to the BAAQMD by sources that emit TACs. From the toxic emissions inventory data, BAAQMD would conduct a site-specific Health Risk Screening Analysis (HRSA). The

HRSA assesses the potential for adverse health effects from public exposure to routine and predictable emissions of TACs.

From these HRSAs, BAAQMD would determine each facility's priority score (PS).

BAAQMD would conduct HRAs for all facilities with a cancer PS of ten or greater, or a non-cancer PS of one or greater. Once BAAQMD creates a model for the HRA, BAAQMD would validate the model using site specific parameters, including but not limited to meteorological data, receptor type and location, toxic emission rates and stack location and heights, and topography. The facility will be consulted in this validation step. Once the model is validated, BAAQMD would conduct HRAs to obtain preliminary results that would be shared with the interested public for review and comment before finalization.

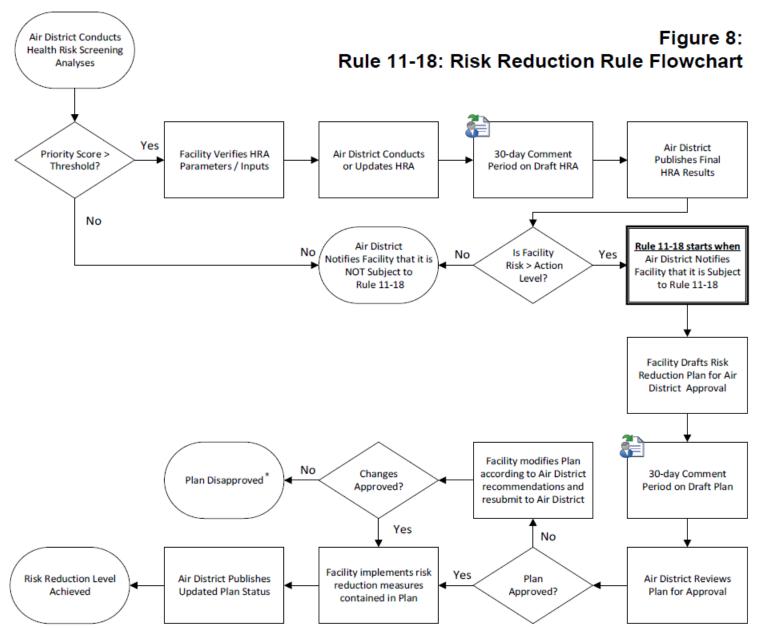
Based on HRA results, BAAQMD would determine whether a facility is affected by Rule 11-18. The Draft Rule will affect facilities exceeding any of the risk action level thresholds – ten per million (10/M) cancer risk or 1.0 hazard index for both chronic and acute risk. BAAQMD is required to notify facilities of their health risk score.

Facilities that pose a health risk in excess of the risk action level threshold would be required to reduce that risk below the threshold. The risk reduction is achieved through the implementation of a Risk Reduction Plan prepared by the facility and approved by BAAQMD. Facilities would have three years to implement the approved plan or demonstrate that all significant sources of TACs are controlled by Best Available Retrofit Control Technology (TBARCT). The Draft Rule is to be implemented in four phases based on either a facility's PS or the source type (see Table 1).

Table 1. Implementation Phases of Rule 11-18

Phase	Criterion	# of Facilities (est)	HRAs	Risk Reduction Plans	Plan Implementation
1	PS>250 cancer or PS>2.5 non-cancer	80	2017-2018	2018-2019	2019-2022
2	PS> 100 cancer or PS>1.0 non-cancer	350	2019-2021	2021-2022	2022-2025
3	PS> 250 cancer or PS>2.5 non-cancer	600	2021-2023	2023-2024	2024-2027
4	Retail Gas Stations	130	2023-2024	2024-2025	2024-2028

PS= Prioritization Score (determined by Health Risk Screening Analysis)
See Figure 8 (below) copied from the BAAQMD draft staff report (October 2016) providing a flowchart of the Draft Rule implementation process.



^{*} A disapproved plan would result in a violation of the Rule.

Potential Areas of Concern for POTWs

Health Risk Assessments

Rule 11-18 proposes a 30-day deadline after the initial request by BAAQMD to provide the necessary information to complete a site specific HRA. Data collection for a facility-wide HRA can be complex, and time-consuming, and may require hiring a consultant. This process will likely cost POTWs between \$20,000 and \$200,000 to collect the data.

• Development of Risk Reduction Plan

Draft Rule 11-18 allows for 180 days to complete a Risk Reduction Plan for BAAQMD's review and approval. The development of risk reduction measures requires elaborate characterization studies, careful planning, and preliminary design of the air pollution control technologies to reduce toxic emissions. TBARCT for certain processes is not known and would require research to determine availability and appropriateness.

• Risk Reduction Compliance Schedule

Rule 11-18-proposes a three-year time frame to implement risk reduction measures. Impacts include planning, design and construction timelines; determination of TBARCT; financial feasibility; potential rate increases, lack of clarity about addressing projects that are already underway, etc.

• Public Notification

BAAQMD proposes public outreach to educate the public about existing facilities and the associated risk. Recent changes to risk factors and modeling protocols will most likely cause increased calculated health risk from facilities, even if the emissions are unchanged. This could bring increased public attention on POTWs.

• Cross Media Considerations

Complying with potentially conflicting discharge requirements has fiscal and operational impacts that warrant further consideration and investigation. Removal of TACs from the air emissions could impact discharge water/solids quality.

• Renewable Energy Production

The proposed rule may discourage the production and beneficial use of biogas for the generation of renewable energy or fuel, resulting in a wasted

(flared) resource.

Current Rule Adoption Schedule

BAAQMD staff is currently on schedule to bring this rules to their Board for consideration in May 2017. However, due to comments from impacted facilities, staff may recommend that the evaluation of Rule 11-18 be extended (per BAAQMD 12/7/2016 Board meeting).

Recent and upcoming milestones are as follows:

- August 19, 2016: Project description for EIR posted for public review and comment.
- October 14, 2016: Publication of draft rules, and Initial Study for the EIR
- October 27, 2016: Publication of draft staff report
- November 9-17, 2016: Rule 11-18 Open Houses
- December 2, 2016: End of initial comment period for draft rules and EIR Initial Study
- March 3, 2017: Publication of rules, staff analysis, socioeconomic analysis, EIR
- May 17, 2017: Board Hearing

Attachments

- BACWA comment letter to BAAQMD dated December 2, 2016
- Draft Rule 11-18

Draft

REGULATION 11 HAZARDOUS POLLUTANTS RULE 18 REDUCTION OF RISK FROM AIR TOXIC EMISSIONS AT EXISTING FACILITIES INDEX

11-18-100	GENERAL
11-18-101	Description
11-18-200	DEFINITIONS
11-18-201 11-18-202 11-18-203 11-18-204	Acute Hazard Quotient or Acute HQ Airborne Toxic Control Measure, or ATCM
11-18-205 11-18-206 11-18-207 11-18-208 11-18-210 11-18-211 11-18-211 11-18-213 11-18-214 11-18-215 11-18-215 11-18-217 11-18-218 11-18-219	Chronic Hazard Index, or Chronic HI Chronic Hazard Quotient, or Chronic HQ Community Air Risk Evaluation (CARE) Designated Area Facility Health Risk Health Risk Assessment, or HRA Maximum Achievable Control Technology, or MACT Owner or Operator Risk Action Levels Risk Reduction Plan, or Plan Risk Reduction Measures Significant Risk Threshold Source
11-18-220	Toxic Risk Facility
11-18-300	STANDARDS
11-18-301 11-18-302	Risk Reduction Plan Requirements Risk Reduction Plan Implementation Requirement
11-18-400	ADMINISTRATIVE REQUIREMENTS
11-18-401 11-18-402 11-18-403 11-18-404 11-18-405	

REGULATION 11 HAZARDOUS POLLUTANTS RULE 18

REDUCTION OF RISK FROM AIR TOXIC EMISSIONS AT EXISTING FACILITIES (ADOPTED [DATE])

11-18-100 GENERAL

11-18-101 Description: The purpose of this rule is to ensure that facilities that emit toxic air contaminants do not pose an unacceptable health risk to nearby residents, workers, or students.

11-18-200 **DEFINITIONS**

- **11-18-201** Acute Hazard Index, or Acute HI: Acute hazard index is the sum of the individual acute hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system. [Source: Rule 2-5, Section 2-5-201]
- **11-18-202** Acute Hazard Quotient, or Acute HQ: Acute hazard quotient is the ratio of the estimated short-term average concentration of the toxic air contaminant to its acute reference exposure level (estimated for inhalation exposure). [Source: Rule 2-5, Section 2-5-202]
- **11-18-203 Airborne Toxic Control Measure, or ATCM**: A recommended method and, where appropriate, a range of methods, established by the California Air Resources Board (CARB) pursuant to the Tanner Act, California Health and Safety Code beginning at Section 39650, that reduces, avoids, or eliminates the emissions of a toxic air contaminant. [Source: Rule 2-5, Section 2-5-203]
- 11-18-204 Best Available Retrofit Control Technology for Toxics, or TBARCT: For any existing source of toxic air contaminants, except cargo carriers, the most stringent of the following retrofit emission controls, provided that under no circumstances shall the controls be less stringent than the emission control required by any applicable provision of federal, State or District laws, rules, regulations or requirements:
 - 204.1 The most effective retrofit emission control device or technique that has been successfully utilized for the type of equipment comprising such a source; or
 - **204.2** The most stringent emission limitation achieved by a retrofit emission control device or technique for the type of equipment comprising such a source; or
 - 204.3 Any retrofit control device or technique or any emission limitation that the APCO has determined to be technologically feasible for the type of equipment comprising such a source, while taking into consideration the cost of achieving health risk reductions, any non-air quality health and environmental impacts, and energy requirements; or
 - 204.4 The most stringent emission control for a source type or category specified as MACT by U.S. EPA, or specified in an ATCM by CARB.
- **11-18-205 Cancer Risk:** An estimate of the chance that an individual may develop cancer as a result of exposure to emitted carcinogens at a given receptor location, and considering, where appropriate, Age Sensitivity Factors to account for inherent increased susceptibility to carcinogens during infancy and childhood. [Source: Rule 2-5, Section 2-5-206]
- **11-18-206 Chronic Hazard Index, or Chronic HI:** Chronic hazard index is the sum of the individual chronic hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system. [Source: Rule 2-5, Section 2-5-208]
- **11-18-207 Chronic Hazard Quotient, or Chronic HQ:** Chronic hazard quotient is the ratio of the estimated annual average exposure of the toxic air contaminant to its chronic reference exposure level (estimated for inhalation and non-inhalation exposures). [Source: Rule 2-5, Section 2-5-209]

Bay Area Air Quality Management District

DRAFT October 14, 2016

- 11-18-208 Community Air Risk Evaluation (CARE) Designated Area: An area where levels of toxic air contaminants are higher than other areas and where people may be particularly vulnerable and may bear disproportionately higher adverse health effects. [Source: Rule 2-5, Section 2-5-227: Priority Community]. The boundaries of the CARE Areas are shown in the March 2014 version of the Air District Document entitled "Identifying Areas with Cumulative Impacts from Air Pollution in the San Francisco Bay Area." [For illustrative purposes only, the CARE areas are shown on the following map: http://www.baagmd.gov/plans-and-climate/community-air-risk-evaluation-care-program.]
- **11-18-209 Facility:** Any property, real or personal, which may incorporate one or more plants all being operated or maintained by a person as part of an identifiable business on contiguous or adjacent property, and shall include, but not be limited to manufacturing plants, refineries, power generating plants, ore processing plants, construction material processing plants, automobile assembly plants, foundries and waste processing sites. [Source: Regulation 1, Section 1-215]
- **11-18-210 Health Risk:** The potential for adverse human health effects resulting from exposure to emissions of toxic air contaminants and ranging from relatively mild temporary conditions, such as eye or throat irritation, shortness of breath, or headaches, to permanent and serious conditions, such as birth defects, cancer or damage to lungs, nerves, liver, heart, or other organs. Measures of health risk include cancer risk, chronic hazard index, and acute hazard index. [Source: Rule 2-5, Section 2-5-210]
- **11-18-211 Health Risk Assessment, or HRA:** An analysis that estimates the potential for increased likelihood of health risk for individuals in the affected population that may be exposed to emissions of one or more toxic air contaminants, determined in accordance with Rule 2-5, Section 2-5-603. [Source: Rule 2-5, Section 2-5-211]
- **11-18-212 Maximum Achievable Control Technology, or MACT:** An emission standard promulgated by U.S. EPA pursuant to Section 112(d) of the Clean Air Act.
- **11-18-213 Owner/Operator:** Any person who owns, leases, operates, controls, or supervises a facility, building, structure, installation, or source which directly or indirectly results or may result in emissions of any air pollutant. [Source: Regulation 1, Section 1-241]
- 11-18-214 Risk Action Levels: Any of the following health risk levels:
 - 214.1 A cancer risk of 10 per million (10/M);
 - 214.2 A chronic hazard index of 1.0; or
 - 214.3 An acute hazard index of 1.0.
- **11-18-215 Risk Reduction Plan or Plan:** A document meeting the requirements of Section 11-18-403 that identifies, among other things, sources, quantities, and causes of emissions responsible for exceedance of any of the risk action levels set forth in Section 11-18-214 and details measures that will be implemented to reduce risk below that threshold.
- **11-18-216 Risk Reduction Measures:** Changes to production processes, feedstocks, product formulations, emission point locations, emissions capture and dispersion mechanisms, and other practices that reduce toxic air contaminant emissions or that reduce health risks at the facility being evaluated.
- 11-18-217 Significant Risk Threshold: Any of the following toxic health risk levels:
 - **217.1** A cancer risk of 1.0 per million (1.0/M); or
 - 217.2 A chronic hazard index of 0.20; or
 - 217.3 An acute hazard index of 0.20.
- **11-18-218 Source:** Any article, machine, equipment, operation, contrivance or related groupings of such that may produce and/or emit air pollutants.

- 11-18-219 Toxic Air Contaminant or TAC: An air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health. For the purposes of this rule, TACs consist of the substances listed in the most recent health risk assessment guidelines adopted by the Office of Environmental Health Hazard Assessment (OEHHA). [Source: Rule 2-5, Section 2-5-222]
- **11-18-220 Toxic Risk Facility:** A facility for which the APCO has determined that a health risk may equal or exceed one or more of the Risk Action Levels.

11-18-300 STANDARDS

- **11-18-301 Risk Reduction Plan Requirements:** Upon notification by the APCO that a facility health risk, as determined by an APCO-approved HRA, equals or exceeds one or more of the risk action levels set forth in Section 11-18-214, the facility owner/operator shall:
 - **301.1** Obtain and maintain an APCO approval of a Risk Reduction Plan (Plan) in accordance with Sections 11-18-402 and 403; or
 - **301.2** Demonstrate to the satisfaction of the APCO that all sources of risk at the facility either:
 - 2.1 Are controlled with current TBARCT, or
 - 2.2 Do not pose a health risk that equals or exceeds of one or more of the significant risk thresholds set forth in Section 11-18-217.
- **11-18-302** Risk Reduction Plan Implementation Requirement: A owner/operator of a toxic risk facility shall implement all risk reduction measures identified in an approved Plan prepared in accordance with Sections 11-18-402 and 403.

11-18-400 ADMINISTRATIVE REQUIREMENTS

- **11-18-401 Health Risk Assessment Information Requirement**: Within 30 days of a request from the APCO, a facility owner/operator shall submit to the APCO any information necessary to complete an HRA of the facility.
- 11-18-402 Risk Reduction Plan Submission Requirements: Unless a facility operator has complied with Subsection 11-18-301.2, within 180 days of notification from the APCO that an APCO-approved HRA indicates a facility health risk exceeds one or more of the risk action levels set forth in Section 11-18-213, the notified facility owner/operator shall submit a draft Plan to the APCO in accordance with Section 11-18-403 that details risk reduction measures that will reduce the health risk from the facility to a level below the risk action level as soon as feasible, but by no later than three (3) years from the date of submission:
 - 402.1 The APCO may extend this time period up to three (3) additional years if the facility owner/operator demonstrates to the APCO that requiring implementation of the Plan within three (3) years places an unreasonable economic burden on the facility operator or is not technically feasible;
 - **402.2** The APCO may shorten the time period proposed by the facility owner/operator for Plan implementation to less than three years if the APCO finds that:
 - 2.1 It is technically feasible and economically practicable to implement the Plan to reduce emissions below the Risk Action Level more quickly; or
 - 2.2 That the toxic risk facility impacts a CARE designated area at a level that exceeds one of the significant risk thresholds.
 - **402.3 Progress on Emissions Reductions**: The facility owner/operator shall report annually to the APCO progress on the emission reductions achieved by the Plan until:
 - 3.1 The Plan is fully implemented; or
 - 3.2 The facility owner/operator can demonstrate to the APCO compliance with Subsection 11-18-301.2.

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Draft

The report shall be made no later than the anniversary date of the approval date of the Plan pursuant to Subsection 11-18-404.3 and shall be made in a manner consistent with a format developed by the APCO.

- **11-18-403 Risk Reduction Plan Content Requirements:** A facility owner/operator subject to Section 11-18-402 shall submit to the APCO a Plan that includes all of the following:
 - **403.1** The name and address of the facility.
 - **403.2** The North American Industry Classification System (NAICS) code for the facility.
 - 403.3 A source characterization including:
 - 3.1 Summary data from the applicable APCO-approved air toxic emission inventory.
 - 3.2 Summary data from the related health risk assessment.
 - 3.3 Identification of the processes/emission points contributing to the facility health risks.
 - **403.4** An evaluation of the risk reduction measures to be implemented including:
 - 4.1 Identification of risk reduction measure(s),
 - 4.2 Anticipated emission reductions,
 - 4.3 Anticipated health risk reduction.
 - **403.5** A schedule for implementing the risk reduction measures as expeditiously as feasible, but no later than the timeframes established in Section 11-18-402, including:
 - 5.1 Dates for filing applications for permits to construct.
 - 5.2 Dates equipment will be installed (if applicable).
 - 5.3 Dates process changes will be completed (if applicable).
 - 5.4 Dates for demonstrating the effectiveness of risk reduction measures.
 - 403.6 An estimate of residual health risk following implementation of the risk reduction measure(s) specified in the Plan. If the health risk cannot be reduced to below the risk action level within three years, the Plan shall also include the following:
 - 6.1 A demonstration that all sources of risk at the facility are either controlled with TBARCT, or do not pose a health risk in excess of the significant risk threshold, or
 - 6.2 A demonstration of technical infeasibility or unreasonable economic burden associated with reducing the facility health risk below the risk action level or controlling all significant sources with TBARCT within three years and
 - 6.3 Identification of activities to identify or develop additional risk reduction measures to enable the operator to comply by the specified date.
 - **403.7** A certification that the Plan meets all requirements. The person who makes this certification shall be one of the following:
 - 7.1 An engineer who is registered as a professional engineer pursuant to Section 6762 of the Business and Professions Code;
 - 7.2 An individual who is responsible for the operations of the source; or
 - 7.3 An environmental assessor registered pursuant to Section 25570.3 of the Health and Safety Code.
- **11-18-404** Review and Approval of Risk Reduction Plans (Plan): The procedure for determining whether a draft Plan submitted pursuant to Section 11-18-402 or meets the applicable requirements of this Rule is as follows:
 - **404.1 Completeness Review:** Within 20 business days of receipt of the draft Plan, the APCO will conduct a completeness review of the draft Plan. The APCO will notify the facility owner/operator in writing if the submitted Plan is lacking information necessary to make an approval determination. The facility owner/operator shall submit a complete draft Plan within 45 days or receipt of this notification. If the APCO determines that the resubmitted draft Plan is still incomplete, the APCO may disapprove the Plan or may notify the facility owner/operator that the draft Plan continues to lack necessary information and provide another opportunity to submit a complete draft Plan in 45 or fewer days.

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- **404.2 Public Comment:** The draft Plan, including any revisions made to correct deficiencies, will be made available to the public for 45 days (with exception of confidential information). The APCO will consider any written comments received during this period prior to approving or disapproving the final draft Plan.
- 404.3 Final Action:
 - 3.1 The APCO will approve the draft Plan if the APCO determines that the draft Plan meets the requirements of Section 11-18-402 and will provide written notification to the facility owner/operator.
 - 3.2 If the APCO determines that the draft Plan does not meet the requirements of Section 11-18-402, the APCO will notify the facility owner/operator in writing and will specify the basis for this determination. Upon receipt of such notification, the facility owner/operator shall correct the identified deficiencies and resubmit the draft Plan within 45 days.
 - 3.3 If the APCO determines that the facility owner/operator failed to correct any deficiency identified in the notification, the APCO will determine that the facility owner/operator has failed to meet the requirements of Section 11-18-402, and will disapprove the draft Plan.
- **404.4 Public Inspection:** Within 30 days of the approval of a Plan under Subsection 11-18-404.3, the APCO shall post the Plan on the Air District's website, and shall notify any member of the public, who submitted comments under Subsection 11-18-404.2, or who otherwise requested such notification of this action in writing. In making information available for public inspection, the confidentiality of trade secrets, as designated by the refinery owner/operator, shall be handled in accordance with Section 6254.7 of the Government Code.
- 11-18-405 **Updated Risk Reduction Plan:** If information becomes available after the initial APCO approval of a Plan regarding health risks posed by a facility or emissions reduction technologies that may be used by a facility that would significantly impact health risks to exposed persons, the APCO may require a facility owner/operator to update the Plan to reflect the information and resubmit the Plan to the APCO for approval pursuant to Section 11-18-401.



December 2, 2016

SUBMITTAL VIA EMAIL TO: vdouglas@baaqmd.gov

Mr. Victor Douglas Principal Air Quality Specialist Technical Services Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105

SUBJECT: COMMENT LETTER ON PROPOSED BAAQMD

REGULATION 11, RULE 18: REDUCTION OF RISK FROM AIR TOXIC

EMISSIONS AT EXISTING FACILITIES

Dear Mr. Douglas:

The Bay Area Clean Water Agencies Air Issues and Regulations Committee (BACWA AIR) appreciates the opportunity to comment on the Bay Area Air Quality Management District's (BAAQMD) proposed Regulation 11, Rule 18 (Rule 11-18). BACWA is a joint powers agency whose members own and operate publicly-owned wastewater treatment works (POTWs) 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. The AIR Committee is a coalition of SF Bay Area POTWs working cooperatively to address air quality and climate change issues, under the guidance of BACWA.

It appears that the proposed Rule 11-18 has been developed in reaction to community concern about only a few existing facilities, and the BAAQMD's proposed regulatory response impacts more agencies than necessary to reach its air quality goals. BAAQMD staff estimate that hundreds of facilities could be affected by this rule (Notice of Preparation/Initial Study; Regulation 11, Rule 18 and Regulation 12, Rule 16; Page 1-9 October 2016). While BACWA appreciates the outreach that BAAQMD staff has done, there are dozens of POTWs that have not been engaged on this issue, and have only very recently become somewhat aware of this significant regulatory initiative. Based on this sector, it seems likely that there are far more, perhaps hundreds, of potentially impacted facilities who are not aware nor have considered the impact and cost of this Regulation, and have thus not had the opportunity to provide meaningful comments for your consideration. Therefore, we ask that the BAAQMD to consider a more robust effort to meet in workshop formats with all affected facilities to review the basis for the Regulation, describe the proposed compliance routes, and collectively understand its potential

impacts. BACWA would also like an opportunity to discuss this proposed Regulation directly with BAAQMD staff and will be in contact to set up a meeting.

The BACWA AIR Committee's specific comments on the proposed Rule 11-18 are as follows:

1) The timeframe for submission of HRA information should be extended

Draft Section 11-18-401 proposes a 30-day deadline after the initial request by BAAQMD to provide the necessary information to complete a Health Risk Assessment (HRA) of the facility. The data collection phase for a facility-wide HRA can be complex, and time-consuming, and may require hiring a consultant to help perform this work in an expedient manner. It is essential to incorporate accurate site-specific data for input into the HRA. This process will likely cost POTWs between \$20,000 and \$200,000 to collect the data, which requires budgetary approval from their Board who meet monthly.

BACWA recommends extending the response time for the HRA information requirement to 90 days, in order for POTWs to get approval of funds and provide accurate site-specific data.

2) The schedule for compliance is too short for a major capital project at a public agency

Draft Section 11-18-402 proposes a three-year implementation timeline for risk reduction measures to reduce a facility's health risk. For the protection of its rate payers and to address technical and financial feasibility challenges associated with any project a POTW is considering carrying forward, the planning process for capital projects at public agencies requires a multi-year process, with rate increases being voted on in three to five year increments. In most cases, the timeline associated with identifying, planning, funding, designing, and constructing a capital project in response to reducing risk through the installation of a Toxics Best Available Control Retrofit Technology (TBARCT) will require more than three years.

Early estimates of what could be required as risk reduction measures at POTWs in response to Rule 11-18 range up to tens of millions of dollars for installation of yet to be identified advanced control technologies. As public agencies governed by Proposition 218, POTWs rely on local residents to approve and fund the capital improvement program. Additionally, rate increases require the approval of each POTW's Board of Directors. If TBARCT requires a significant expense to the point where agencies would need to borrow loans or raise rates, Proposition 218 will not allow an agency to raise its sewer service charges aggressively with limited notice to the public.

POTWs make long term investments in public infrastructure, using careful financial analysis to maximize the usefulness of public funds over the functional lifetime of facilities. Depending on the type of facility, equipment and process structures are designed to function for up to several decades. If structural or equipment changes are required shortly into the planned life of a facility, public funds will not be used effectively. Given the uncertainty of appropriate process specific control technology and the associated planning horizon that would be necessary to research, design, and construct an undefined TBARCT, the proposed timeline is extremely aggressive.

Without reasonable time to develop the Risk Reduction Plan with the required approvals, the proposed Rule 11-18 may lead to inadequate financial planning for implementation.

Additionally, there are concerns related to projects already underway (i.e., facilities that are in design or under construction). If it is determined that a POTW is required to implement a project in response to Rule 11-18 on a project already in progress, redesign or change orders to these projects may take years as site specific issues and the necessity of keeping the essential public service fully operational makes construction sequencing a key concern.

In the past, BAAQMD has recognized the need for longer response times by the regulated community. For example, when Regulation 9, Rule 8 was amended in 2007, facilities were provided a compliance horizon of nearly a decade, until 2016. This rule provided agencies the needed time to plan and budget for their compliance response.

BACWA recommends a minimum five-year implementation timeline for the risk reduction measures, with a possible extension of an additional five years.

3) Risk Reduction Plan submission deadline should be extended

Draft Section 11-18-402 allows for 180 days to complete a Risk Reduction Plan for BAAQMD's review and approval. The Risk Reduction Plan, as described in draft Section 11-18-403, requires a detailed characterization of each source of toxic emissions, an evaluation of risk reduction measures to be implemented, and a schedule to implement the proposed risk reduction measures. The development of risk reduction measures requires elaborate characterization studies, careful planning, and preliminary design of the air pollution control technologies to reduce toxic emissions. Allowing only 180 days to complete a Risk Reduction Plan may result in insufficient characterization and planning, with higher potential for unnecessary engineering.

BACWA recommends extending the response time to a full year (365 days) to complete the Risk Reduction Plan.

4) Facilities should be notified of cancer prioritization scores

The cancer prioritization scores are not currently available to the facilities. Given the accelerated implementation of the proposed Rule 11-18, BAAQMD needs to notify the impacted facilities as soon as possible to ensure proper planning and engineering.

BACWA recommends disclosing the cancer prioritization scores as soon as possible.

5) <u>Public notification by BAAQMD for Rule 11-18 should clarify that emissions have</u> not increased

Despite there being no change in a POTW's emissions levels, incorporating the updated California Air Pollution Control Officers Association (CAPCOA) risk factors and Page 49 of 140

guidelines may result in the first notification the public receives about an existing facility within its vicinity. This notification could result in greater public anxiety about health risks from existing stationary sources. Providing a clear explanation that the changes in facility risk estimates are due exclusively to changes in risk assessment methodology, not actual increases in emissions (and health risk), should be incorporated in the public notification.

BACWA recommends the public notification of risk include language providing context to the risk values to improve public understanding and reduce potential anxiety.

6) Proposed rule should not inadvertently discourage renewable energy production

While the purpose of the proposed Rule 11-18 is to reduce toxic air contaminants and protect public health, it may discourage the production and beneficial use of biogas for the generation of renewable energy or fuel, resulting in a wasted (flared) resource. Most BACWA members already beneficially use biogas generated from anaerobic digestion of sewage sludge or from nearby landfills to generate renewable electricity. Not only does this practice offset the treatment plant's dependence on fossil fuel based energy, it reduces the resulting anthropogenic greenhouse gas emissions.

The production of biogas, production of renewable energy, and the reduction of greenhouse gas emissions support statewide greenhouse gas reduction goals set under Assembly Bill 32 and Senate Bill 32. Furthermore, the State Air Resources Board would like to see POTWs accept additional organic waste streams (specifically, diverted food waste and fats, oils, and grease from landfills) for co-digestion with sewage sludge to increase generation of biogas, in turn increasing renewable energy/fuel production in support newly adopted mandates under Senate Bill 1383 (reducing methane emissions across the state). However, the proposed Rule 11-18 may restrict use of biogas since its combustion may contribute to a slight increase in some toxic air contaminants, potentially forcing POTWs to purchase fossil fuel based electricity or natural gas. This would result in an increasing in fossil fuel based greenhouse gas emissions statewide and is in direct contradiction with the Governor's goals for 2020, 2030, and beyond.

BACWA recommends BAAQMD consider providing exceptions in Rule 11-18 for projects that contribute toward achieving state goals for reductions in greenhouse gas emissions through the diversion of organic waste from landfills, and increased production of biogas for the generation of renewable energy or fuel.

7) BAAQMD should consider cross-media environmental impacts

POTWs are regulated by a number of different governmental agencies whose goals can result in contradictory impacts to the municipal wastewater treatment sector. While regulatory actions may be seen as effective when each media (air, water, land) is addressed separately, the deficiencies become evident when the regulations are viewed holistically for protecting the overall environment and public health. BACWA previously

submitted a letter to BAAQMD (addressed to Christy Riviere, June 6, 2014)¹ detailing the impact cross-media issues can have on wastewater treatment plants. There are increasing concerns about cross-media impacts and the potential operational and financial effects they will have on POTWs that are trying to provide an essential public service while maintaining compliance with regulations supporting contradictory goals.

BACWA recommends a holistic approach and asks BAAQMD to address the crossmedia environmental impacts of the proposed Rule 11-18 and in future proposed regulations.

Thank you for the opportunity to comment on the draft Rule 11-18. BACWA supports BAAQMD's intent to protect the Bay Area's air quality, and asks BAAQMD to carefully address BACWA's concerns. We would be happy to discuss any questions regarding these comments. Nohemy Revilla and Randy Schmidt, BACWA AIR Committee Co-Chairs, can be reached at NRevilla@sfwater.org and RSchmidt@centralsan.org, respectively.

Sincerely,

David R. Williams

David R. Williams

BACWA Executive Director

Cc: BACWA Executive Board
Nohemy Revilla, BACWA AIR Committee Co-Chair
Randy Schmidt, BACWA AIR Committee Co-Chair
Courtney Mizutani, BACWA AIR Committee Project Manager
Sarah Deslauriers, BACWA AIR Committee Project Manager

¹ See http://bacwa.org/wp-content/uploads/2014/06/BACWA14Foss-Media-Letter.pdf



December 2, 2016

SUBMITTAL VIA EMAIL TO: vdouglas@baagmd.gov

Mr. Victor Douglas **Principal Air Quality Specialist Technical Services** Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105

COMMENT LETTER ON PROPOSED BAAQMD SUBJECT:

REGULATION 11, RULE 18: REDUCTION OF RISK FROM AIR TOXIC EMISSIONS

AT EXISTING FACILITIES

Dear Mr. Douglas:

The California Association of Sanitation Agencies (CASA) appreciates the opportunity to comment on the Bay Area Air Quality Management District's (BAAQMD) proposed Regulation 11, Rule 18 (Rule 11-18). CASA is an association of local agencies, engaged in advancing the recycling of wastewater into usable water, generation of renewable energy, biosolids and other valuable resources. Through these efforts we help create a clean and sustainable environment for millions of Californians.

It appears that the proposed Rule 11-18 has been developed in reaction to community concern about only a few existing facilities, and the BAAQMD's proposed regulatory response impacts more agencies than necessary to reach its air quality goals. BAAQMD staff estimate that hundreds of facilities could be affected by this rule (Notice of Preparation/Initial Study; Regulation 11, Rule 18 and Regulation 12, Rule 16; Page 1-9 October 2016). While CASA appreciates the outreach that BAAQMD staff has done, there are dozens of POTWs that have not been engaged on this issue, and have only very recently become somewhat aware of this significant regulatory initiative. Based on this sector, it seems likely that there are far more, perhaps hundreds, of potentially impacted facilities who are not aware nor have considered the impact and cost of this Regulation, and have thus not had the opportunity to provide meaningful comments for your consideration. Therefore, we ask that the BAAQMD consider a more robust effort to meet in workshop formats with all affected facilities to review the basis for the Regulation, describe the proposed compliance routes, and collectively understand its potential impacts. CASA has further concerns that the action taken by the BAAQMD may be mimicked in other Air Districts and thus believes it is critical that any action be fully vetted and supported by science.

CASA's specific comments on the proposed Rule 11-18 are as follows:

1) <u>Public notification by BAAQMD for Rule 11-18 should clarify that</u> emissions have not increased

Despite there being no change in a POTW's emissions levels, incorporating the updated California Air Pollution Control Officers Association (CAPCOA) risk factors and guidelines may result in the first notification the public receives about an existing facility within its vicinity. This notification could result in greater public anxiety about health risks from existing stationary sources. Providing a clear explanation that the changes in facility risk estimates are due exclusively to changes in risk assessment methodology, not actual increases in emissions (and health risk), should be incorporated in the public notification. CASA, along with many other public and private entities raised this issue in a letter to CAPCOA on October 27, 2016. Please let me know if you would like a copy of that letter.

CASA recommends the public notification of risk include language providing context to the risk values to improve public understanding and reduce potential anxiety.

2) Proposed rule should not inadvertently discourage renewable energy production

While the purpose of the proposed Rule 11-18 is to reduce toxic air contaminants and protect public health, it may discourage the production and beneficial use of biogas for the generation of renewable energy or fuel, resulting in a wasted (flared) resource. Most CASA members already beneficially use biogas generated from anaerobic digestion of sewage sludge to generate renewable electricity. Not only does this practice offset the treatment plant's dependence on fossil fuel based energy, it reduces the resulting anthropogenic greenhouse gas emissions.

The production of biogas, production of renewable energy, and the reduction of greenhouse gas emissions support statewide greenhouse gas reduction goals set under Assembly Bill 32 and Senate Bill 32. Furthermore, the State Air Resources Board would like to see POTWs accept additional organic waste streams (specifically, diverted food waste and fats, oils, and grease from landfills) for co-digestion with sewage sludge to increase generation of biogas, in turn increasing renewable energy/fuel production in support newly adopted mandates under Senate Bill 1383 (reducing methane emissions across the state). However, the proposed Rule 11-18 may restrict use of biogas since its combustion may contribute to a slight increase in some toxic air contaminants, potentially forcing POTWs to purchase fossil fuel based electricity or natural gas. This would result in an increasing in fossil fuel based greenhouse gas emissions statewide and is in direct contradiction with the Governor's goals for 2020, 2030, and beyond. The practice of diverting this organic waste from landfills for co-digestion at wastewater treatment plants is increasing across the state making Rule 11-18 a significant factor in achieving these goals moving forward.

CASA recommends BAAQMD consider providing exceptions in Rule 11-18 for projects that contribute toward achieving state goals for Page 53 of 140 reductions in greenhouse gas emissions through the diversion of organic waste from landfills, and increased production of biogas for the generation of renewable energy or fuel.

3) BAAQMD should consider cross-media environmental impacts

POTWs are regulated by a number of different governmental agencies whose goals can result in contradictory impacts to the municipal wastewater treatment sector. While regulatory actions may be seen as effective when each media (air, water, land) is addressed separately, the deficiencies become evident when the regulations are viewed holistically for protecting the overall environment and public health. CASA hosted a cross-media roundtable with state regulatory agencies including the Air Resources Board in 2008 highlighting these issues. A regulatory checklist was developed as an outcome of that meeting which was intended to highlight cross-media issues during regulatory development. CASA would be pleased to provide a copy of the checklist to the BAAQMD. There are increasing concerns about cross-media impacts and the potential operational and financial effects they will have on POTWs that are trying to provide an essential public service while maintaining compliance with regulations supporting contradictory goals.

CASA recommends a holistic approach and asks BAAQMD to address the cross-media environmental impacts of the proposed Rule 11-18 and in future proposed regulations.

Thank you for the opportunity to comment on the draft Rule 11-18. CASA supports BAAQMD's intent to protect the Bay Area's air quality, but asks BAAQMD to carefully address our concerns. CASA also strongly supports the comments provided to you by the Bay Area Clean Water Agencies (BACWA). Please feel free to contact me with any questions at gkester@casaweb.org or at 916-844-5262.

Sincerely,

Greg Kester

Trey Hester

Director of Renewable Resource Programs

cc: Roberta Larson, Executive Director, California Association of Sanitation Agencies
Dave Williams, Executive Director, Bay Area Clean Water Agencies
Debbie Webster, Executive Officer, Central Valley Clean Water Association
Steve Jepsen, Executive Director, Southern California Alliance of POTWs

Project:	BACWA Nutrient Optimization and Upgrades Studies		
Subject:	Monthly CMG Call		
Date:	8:00 am – 9:00 am; Monday, December 12, 2016		
Location:	Phone #: 866-583-7984; code: 355-0210-881#		
Attendees:	 ☑ Greg Baatrup ☑ Amy Chastain ☑ Mike Conner ☐ Vince De Lange ☐ Mike Falk ☑ Lorien Fono ☒ Nitin Goel ☒ Teresa Herrera 	 □ Rion Merlo □ Jean-Marc Petit ⋈ Amanda Roa □ Lori Schectel ⋈ Yuyun Shang ⋈ Jason Warner ⋈ David R. Williams ⋈ Bhavani Yerrapotu 	
	☑ Holly Kennedy☑ JB Neethling		

Notes

I. Review Agenda

II. Project Update

A. Status of Plant Reports

- 1. Three draft reports are set to be distributed this this week (Petaluma, San Leandro, and CMSA).
- Only 6 reports are yet to be initiated nearing the end of the draft plant report preparation phase. The 6 include: Millbrae, Richmond, San Mateo, Sausalito-Marin, SASM, and West County.
- 3. The team is responding to comments received on the draft reports thus far. One comment that has been discussed in detailed within the team is related to the expression of discharge loading and ensuring clarity thereof.
- 4. Once the final report is complete and submitted, if, despite our process of reviews and plant sign-off, if the final report has an error, an addendum could be submitted if needed. However, there should be many opportunities to review and provide comments.
- 5. On the recent Group Annual Reports, there have been situations where plant data that was submitted was incorrect (3 plants in the 2016 report plan to provide corrected data).
- 6. CMG members expressed concern about the overall level of effort that the HDR team has undertaken in comparison to the budget.

B. Status of Coordination with SFEI

1. HDR has had several conversations and provided the predicted effluent NH4 and TN with sidestream implemented.

C. NNLI

- 1. After going back and forth, the BACWA Executive Board decided to stay with one NNLI scenario.
- 2. The initial assumption was a 2025 horizon, but we've settled now on a 2040 planning horizon.
- 3. HDR will submit a no cost change order to confirm the NNLI scenario and reporting approach.

III. Brainstorm Agenda Items for Annual Meeting

- A. HDR is on the agenda to provide an update on the Optimization / Upgrade Study
- B. Potential Agenda Topics
 - a. Brief summary of permit requirements and project approach.
 - b. Provide some additional information, above what has been previously presented, related to ammonia and TP. Discuss the potential tradeoffs and benefits.
 - c. Present a Case Study for the impacts of permit averaging period.
 - Seasonal avg (consistent with base approach) versus a max day limit and an annual average limit. Show the impact on facilities and costs.
 - d. Present a summary recycled water plans based on the questionnaire responses. It would be good to also identify other, non-traditional plans to reduce nutrient loading to the bay (e.g., wetlands).
 - 1. HDR has received questionnaires from 25 plants. Additional follow-up is needed to get the remaining 12.
 - e. Summary of the 2016 Group Annual Report.
 - f. BACWA will ask the Water Board what they think of the information they've received/heard so far, to help inform presentation topics / message for the Annual Meeting.
 - g. HDR will prepare a draft presentation for review during the next CMG call.

IV. Topics on Hold

V. Upcoming

- A. Next Board Meeting Briefing, March, 2017
- B. BACWA Annual Meeting, January 27

2nd Nutrient Watershed Permit

<u>Original Intended Requirements:</u>

- 1. monitoring at same level as required by the 1st WS Permit
- 2. individual plant reporting
- 3. Annual Reporting, group or individual option
- 4. funding for science equal to at least the level in the 1st WS permit
- 5. load caps

BACWA Proposal:

- 1. items 1, 2, 3, from above
- 2. doubling of science funding (2 x \$880k) in lieu of load caps

Counter Proposal:

- 1. items 1, 2, 3, from above
- 2. funding of the science at a level that will provide answers to key questions that will inform the need for management actions in the 3rd WS Permit
- 3. increased funding of the science program in the last two years of the 1st WS Permit to accelerate progress on the science program
- 4. further studies and/or data that will advance the concept of regional planning and multiple benefits associated with efforts to reduce nutrients

Key Questions/Issues:

1. what level of funding will be needed to advance the science to the level needed to inform management decisions for the 3rd WS Permit?

- 2. How to communicate and get buy-in from the BACWA membership for supporting the needed funding level?
- 3. What is BACWA's proposed increase in funding for FY 18 and 19?
- 4. With increased funding for FY 18 and 19, what guarantees are there for the 3rd WS Permit being issued as anticipated?
- 5. How will BACWA implement increased funding for FY 18 and 19 in an equitable manner given there is no regulatory mandate to increase the funding?
- Given the timing of BACWA annual budget approval (April 2017) and member's budget approval (June 2017), schedule will be a key consideration in reaching consensus on increased science funding for FY 18.
- 7. What would be included in a doable scope of work to further regional planning with an eye towards multiple benefits and what level of funding would BACWA consider committing?
- 8. Others key questions or issues?

Nutrient Strategy Team Meeting No.2

EBMUD Laboratory Library

9:00 - 11:00 am

January 5, 2017

Draft Agenda

- 1. Introductions and Purpose of Meeting
- 2. Review of Discussions with WB
 - a. Original Intended 2nd WS Permit Requirements
 - b. BACWA Proposal
 - c. Counter Proposal
 - d. Summary of Key Questions and Issues
- 3. 2nd WS Permit Science Funding
 - a. Options and Nutrient Surcharge Implications
 - b. Recommendations
- 4. Funding for FY 18 and 19
 - a. Options and Nutrient Surcharge Implications
 - b. Equity among members
 - c. Linkage to Anticipated Provisions in 3rd WS Permit
 - d. Implementation Challenges
 - e. Recommendations
- 5. Regional Planning/Multiple Benefits
 - a. Brainstorming on Potential Options
 - b. Anticipated Costs
 - c. Implementation Challenges
 - d. Recommendations
- 6. Schedule
- 7. Communication Plan
- 8. Next Steps/Meetings

Member	Representing	Subembayment	Size
Mike Connor	Principal	South Bay	large
Bhavani Yarraputo	Associate	Lower South Bay	medium
Amanda Roa	Associate	Suisun Bay	medium
Jim Ervin	Principal	Lower South Bay	large
Karin North	Associate	Lower South Bay	medium
Sandeep Karkal	Affiliate	San Pablo Bay	small
Ben Horenstein	Principal	Central Bay	large
Daniel Child	Associate	South Bay	medium
Greg Baatrup	Associate	Suisun Bay	medium
Laura Pagano	Principal	South Bay	large
Leah Walker	Affiliate	San Pablo Bay	small
Monte Hamamoto	Associate	South Bay	medium
Yuyun Shang	Principal	Central Bay	large
Steve Linsley	Associate	Central Bay	medium
Teresa Herrera	Associate	South Bay	medium





San Francisco Bay Regional Water Quality Control Board

San Francisco Bay Nutrient Management Strategy (NMS) Steering Committee Meeting

Date/Time: December 9, 2016, 9:00 AM to 3:00 PM

Location: SF Bay Regional Water Board, Oakland, CA

1515 Clay Street, Room 10

Facilitator: Phil Trowbridge

AGENDA

	AGENDA		
	Agenda Item	Lead	Time
1	Welcome, Introductions and Agenda Review	PT	9:00-9:05
2	Decision Item: Approve Prior SC Meeting Summaries Materials: September 9, 2016 meeting summary Revised Charter	DW	9:05-9:10
3	Action items • Update on action items from previous meetings Materials: Action Items Table	DW	9:10-9:15
4	Program Update:	IW DS	9:15-9:30
5	 Technical Update - Science Program HAB Multi-Year Workplan - Status, Funding, Scope Q&A Materials: The materials for this item will be distributed separately 	DS and staff	9:30-11:00
	Break		11:00-11:15
6	 Discussion Item: Monitoring Program Development Status, Funding, Scope Materials: Monitoring Program Development Summary Institutional Program Building Workplan 	DS/PT	11:15-12:15
	Lunch		12:15-1:00

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

Discussion Item: Update on South Bay Biota Monitoring	Jim Hobbs	1:00-2:00
Materials: None (slides will be presented at the meeting)		
Discussion Item: Update on Dissolved Oxygen in South Bay Project	DS/PT	2:00-2:35
Materials: None (slides will be presented at the meeting)		
Other Business	PT	2:35-2:50
 Updates from other activities 		
 Region 5 workshop 		
• Other		
Action Items and Wrap-up	PT	2:50-3:00
Confirm next meeting date: March 10, 2016 @ SFEI		
Following meeting June 9, 2017 @ SFEI		
Adjourn		3:00
	Materials: None (slides will be presented at the meeting) Discussion Item: Update on Dissolved Oxygen in South Bay Project Materials: None (slides will be presented at the meeting) Other Business Updates from other activities Region 5 workshop Other Action Items and Wrap-up Confirm next meeting date: March 10, 2016 @ SFEI Following meeting June 9, 2017 @ SFEI	Materials: None (slides will be presented at the meeting) Discussion Item: Update on Dissolved Oxygen in South Bay Project Materials: None (slides will be presented at the meeting) Other Business Updates from other activities Region 5 workshop Other Action Items and Wrap-up Confirm next meeting date: March 10, 2016 @ SFEI Following meeting June 9, 2017 @ SFEI

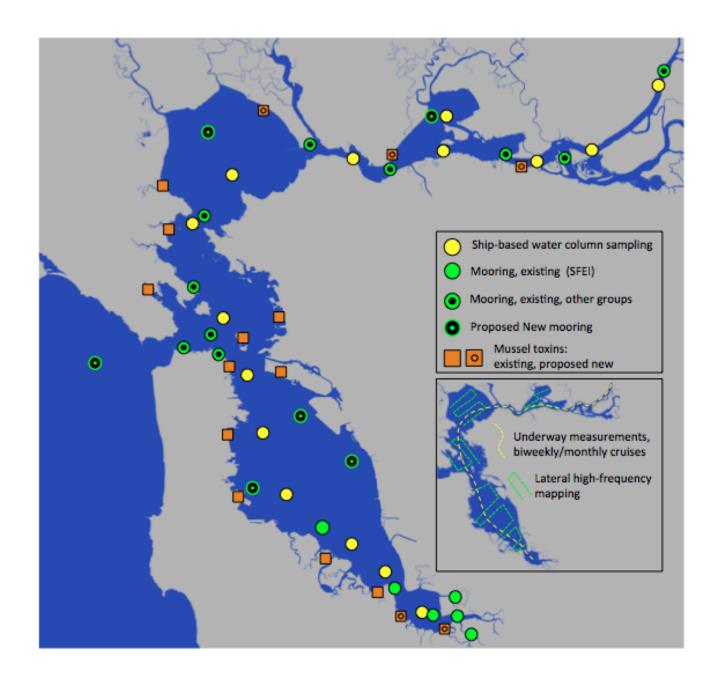
PARKING LOT: Topics to add to meeting agenda when appropriate.

- Periodic updates on Assessment Framework
- Plus/Delta on the NMS after 2 years
- Findings from Regional San's studies

NOTES:

- Public comment periods will be accommodated at the end of each agenda item (excluding item 1). The duration of each comment period will be at the discretion of the meeting facilitator.
- Breaks will be taken at the discretion of the meeting facilitator and the Steering Committee.

San Francisco Bay Nutrient Management Strategy Observation Program



1. Introduction

The San Francisco Bay Nutrient Management Strategy (SFB NMS; <u>SFBRWQCB 2012</u>) is a regional science program charged with building the scientific foundation to inform regional nutrient management decisions (Table 1.1). SFB receives large loads of nitrogen and phosphorous from treated wastewater effluent and agricultural inputs, but has historically exhibited resistance to classic symptoms of eutrophication. Recent studies have found that the SFB's response to nutrients is changing in some regions (e.g., Cloern and Jassby 2012; SFEI 2014), spurring the need for improved understanding of nutrient dynamics and ecosystem response in SFB, and spurring the NMS' launch.

Although SFB is a well-studied estuary, SFB's diversity of habitats, its complex physical and biogeochemical processes, and the relatively limited effort invested to date exploring nutrient dynamics and nutrient-related responses create a situation in which there are numerous high priority NMS data gaps (SFEI 2014a, SFEI 2014b, SFEI 2016a). Although SFB hosts several major research and monitoring programs (Figure 1.1), no program or combination of programs fully addresses the NMS needs in terms of data and sustainability. Developing and operating a sustainable nutrient-focused observation program, therefore, stand among the NMS' core objectives.

This document presents a planning-level description of the draft Nutrient Management Strategy Observation Program (NMSOP), including estimated budget and approach for phased growth. *The NMSOP represents the design that is needed to address NMS data needs, not an existing program.* The proposed design represents a balance between two key goals:

- Target high priority NMS data collection needs
- Where feasible, align field work and data collection efforts with other programs' established infrastructure, to enhance cost-effectiveness and sustainability.

While an inter-program collaborative approach is important for securing NMSOP's long-term sustainability, building a reliable consortium will require up-front effort to establish inter-program science, management, and financial agreements. This document focuses on the NMSOP scientific program design and growth, with institutional program development described in a companion work plan (SFEI 2016b).

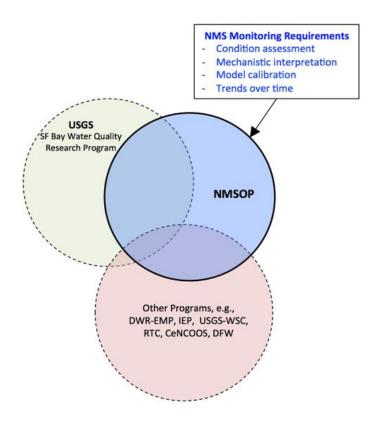
TABLE 1.1: MANAGEMENT QUESTIONS GUIDING NMS ACTIVITIES

- 1. What conditions indicate that beneficial uses are being protected? What conditions indicate that nutrient-related impairment is occurring?
- 2. Which habitats in SFB are currently supporting beneficial uses, and which are experiencing nutrient-related impairment?
- 3. Under what future scenarios could nutrient-related impairments develop?
- 4. What management actions are needed to mitigate or prevent nutrient-related impairment?

1

Figure 1.1 The Bay-Delta hosts multiple on-going and independently managed research and monitoring programs. Nutrient Management Strategy (NMS) monitoring requirements will be addressed through maximizing coordination with other science and monitoring efforts in San Francisco Bay-Delta, and by supporting a portion of the work with NMS funding.

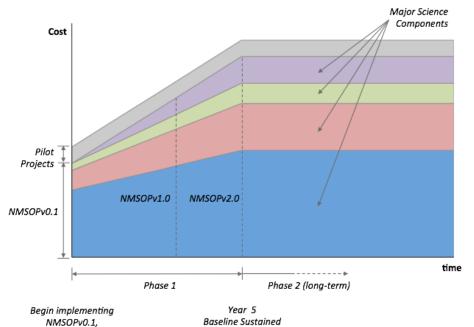
Figure 1.2 illustrates the proposed developing NMSOP: begin in CY2017 with the existing program (NMSOPv0.1); refine and build toward an intermediate design by 2020 (NMSOPv1.0); additional refinement and growth to establish the long-term sustained program design (NMSOPv2.0). The specific NMSOPv1.0 components detailed in Section 2 are proposed as a strawman design, with the expectation that they will be tested and modified during Phase 1 to improve program design. This approach --



modest beginnings, analysis and iterative refinement, gradual growth -- is proposed for a few practical reasons:

- The necessary resources and inter-program agreements to support NMSOPv1 and NMSOPv2 are not yet in place.
- Gradually growth will allow program logistics to expand sustainably.
- Pilot studies and on-going data interpretation over the next several years will help inform the remaining highest priority data and knowledge gaps, and guide program growth.

Page 65 of 140



Program Established NMSOPv2

Jun 2017

Figure 1.2 Schematic illustrating the anticipated timeline for NMSOP evaluation, growth, and refinement. Major science program components gradually grow during Phase 1, and stabilize in Phase 2. Although not included here, inflationary cost increases need to be factored into budgets.

2. Program Design

The NMSOP design is comprised of four major program areas:

- 1. Core measurements
- 2. Pilot Studies
- 3. Data analysis and interpretation
- 4. Program Management

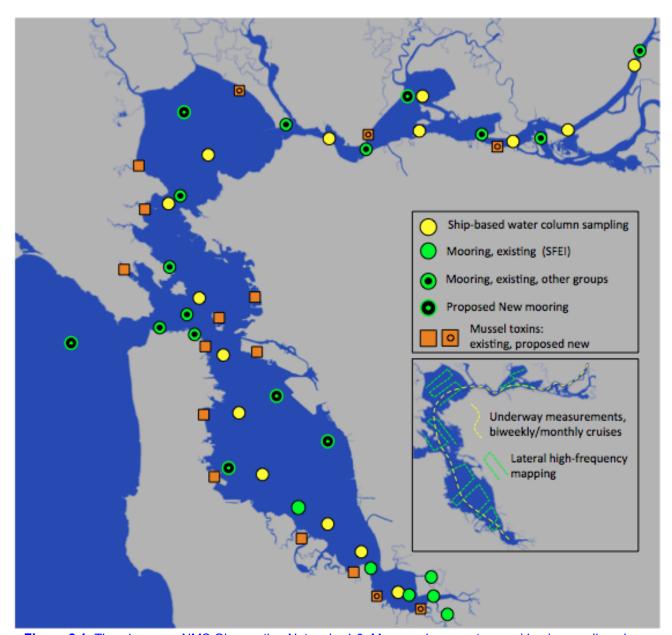


Figure 2.1 The *strawman* NMS Observation Network v1.0. Measured parameters and basic sampling plan are described in Figure 2.1. The specific NMSOPv1.0 components -- including station locations, sampling frequency, and analytes are proposed as a strawman design, with the expectation that they will be tested, modified, and improved during Phase 1.

2.1 Core Measurements

The NMSOPv1.0 Field Program has three major components (Figures 3.1-3.2):

- 1. Ship-based water column sampling: biweekly to monthly cruises along the Bay's deep channel; and monthly lateral biogeochemical "mapping"
- 2. Moored sensor network with high-frequency sensors
- 3. Biological sampling: initially, for toxins; future, possibly DO-related fish/benthos surveys

Figure 3.1 and 3.2 depict the spatial distribution of sampling stations and major parameters measured for NMSOPv1.0. In Figure 3.2, the designation of "Basic" indicates activities included in NMSOPv1.0, while "Advanced" presents examples of potential program additions for piloting or integration into the core program during Phase 2. The strawman set of Core Measurements is based on high-priority data and knowledge gaps identified through NMS data analysis, expert workgroups, and regulator and stakeholder input (SFEI 2014a, SFEI 2014b, SFEI 2016a). The intent is for NMSOPv1.0 to be rigorously tested, refined, and improved during Phase 1.

Ship-based sampling, Basic: biweekly to monthly cruises

Profiles: CTD, DO, chl, OBS, PAR

Underway: PAR_{surface}, salinity, T , D, chl, OBS, F_v / F_{m,} SPATT

Discrete: • NO₃₊₂-, NH₄+, o-PO₄, TN, TP, TDN

- DO, chl-a, pheo, SSC
- phyto-pigments
- microscopy + IFCB
- PTOX (DA, MCY, SAX)

Advanced:

- SUNA-NO3: CTD, underway
- · Productivity
- · DOC+POC, BOD
- . pCO2, pH: CTD, underway



Moorings

Basic: • Single depth,

+ CTD, DO, chl, turbidity, fDOM

Advanced: + SUNA-NO3, PAR, ADCP, IFCB

· multiple depths

Biological sampling, toxins

Basic:

- native bivalves, biweekly
- + toxins: DA, MCY, SAX
- basic WQ parameters

Advanced:

- other toxins: OA, others.
- co-deployed SPATT
- deployed mussels



Lateral mapping

Basic:

- Monthly
- SpC, T, DO, chl, turbidity, fDOM, SUNA-NO3

Advanced:

 Additional parameters, e.g., pigments, H₂O isotopes, NH4.

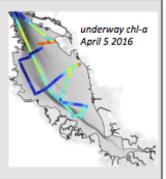


Figure 2.2 Details for the major NMS observation program components. Basic parameters are included in NMSOPv1; Advanced parameters are examples for possible program growth during Phase1. Images: R/V *Peterson*, USGS research vessel; native mussels attached to a floating dock; example lateral heterogeneity in chl-a data.

Table 2.1 presents a qualitative overview of NMSOP current status (through December 2016) relative to the NMSOPv1.0 design to indicate where capacity building efforts are needed.

Table 2.1 Current status (thru Dec 2016) of NMSOP core components toward NMSOPv1 Implementation. For example, a 50% grey circle would indicate that current work is addressing approximately half of the design depicted in Figures 3.1 and 3.2. The status of most components is 50% or less. At this point, ship-based lateral mapping has only been conducted through two modest pilot studies. The ship-based channel station field program has the most advanced status, because it is building primarily on the long-standing USGS SFB Water Quality Program, with additional support from the NMS. Although status and funding level are obviously related, the status estimates do not reflect long-term funding security.

	Field Program	Sample Measurements and Analysis	Data Management, Analysis, and Interpretation
Ship-based: Channel stations			
Ship-based: Lateral mapping			
Moored sensors			
Biological sampling			

2.2 Pilot Studies

Results from targeted pilot studies, conducted during Phase 1, will inform decisions related to refining NMSOPv0.1 and NMSOPv1.0. Pilot studies will fall into two broad categories:

- Field studies during which new parameters, stations, or measurement techniques are tested, and results are analyzed to determine the importance of the new data relative to NMS goals and the measurements' technical feasibility or cost-effectiveness.
- Data analysis (e.g., e.g., field data, or model simulations), with the goal of identifying ways to optimize program design (e.g., station locations, or sampling frequency), identify data gaps, and, in general, refine the strawman NMSOPv1.0.

Example priority pilot studies include:

- Apply numerical models to evaluate the efficiency and effectiveness of draft sampling program designs (site locations, sampling frequency)
- Lateral high-speed biogeochemical mapping to determine the temporal frequency and locations that yield the most valuable data.

- Develop a zooplankton sampling module for assessing community composition, abundance, and grazing rate estimates
- Develop a benthos sampling module for assessing community composition, abundance, and grazing rate estimates
- Deploy transplanted mussels/bivalves (i.e., similar to MusselWatch) and/or passive toxin samplers to test their utility relative to native bivalves, or augment bivalve sampling network in areas where native bivalves are not present.
- Test the added value from additional *in situ* sensors for ship-based measurements (vertical CTD casts, underway flow-through) or moorings.
- Test the potential for using remote-sensed data products (e.g., chl-a, suspended sediments, pigments, etc.) through field calibration studies (coincident with satellite flyovers) and/or through evaluating existing products relative to data

2.3 Data Management and QA/QC

Data generated through the NMS need to be efficiently managed, publicly available, and to pass through rigorous and consistent QA/QC protocols. While the long-standing datasets used by the NMS are already being managed and undergoing QA/QC (some by USGS, some by SFEI), new types of data, and much greater amounts, are being generated through early NMSOP work, and the diversity of data types and amounts will expand in the future.

A NMS data management plan is under development, and the adopted plan will build upon best practices developed regionally (e.g., SFEI RMP) and elsewhere (e.g., IOOS, NOAA). Although data management has been integrated into NMS science workflow, to date, data management has not been called out as a major budget line item. The resources directed to data management needs to increase substantially (Table 3.1), with clear need for ~1 FTE within the next 1-2 years, and likely greater need thereafter.

2.4 Data Analysis, Interpretation, and Reporting

The analysis, interpretation and reporting of NMSOP data is as important as the data collection, and will require substantial funding, perhaps at levels that match those directed to the data collection. Standard uses or applications of the data and work products will include:

- Annual reports describing water quality status and trends, and providing updates on new findings
- Develop robust ecosystem health indicators, and support the development of thresholds or criteria against which condition can be assessed.
- Use in periodic condition assessments
- Technical reports and peer reviewed papers documenting important findings.
- Hydrodynamic and biogeochemical model calibration and validation

2.5 Program Management

A large and complex science program that is supporting management decisions and funded by public dollars requires proactive, detail-oriented, and transparent program management. Major program management activities will include: financial management and reporting; contracts and project management; deliverable tracking; fundraising; and stakeholder communication and coordination. If a sizable portion of NMSOP's core work will be carried out through collaboration or coordination with other programs, substantial effort will need to be invested toward inter-program coordination and communication, proactively maintaining partnerships, and managing inter-program data sharing, data QA/QC, ensuring that consistent field and lab methods are used across programs.

4. Budget and Current Support

Figure 4.1 summarizes the estimated NMSOPv1.0 budget, which totals \$3.3 mill/yr. These estimates include a rough, and likely low, estimate of non-field scientific staff (~4 FTEs at various levels), in addition to the current USGS staff, to support the program's needs in terms of data analysis/interpretation, data management, and report preparation. The grey bars in Figure 4.1 provide an estimate of current funding levels in each of the program category, i.e., the current level of funding supporting NMSOPv0.1. The two main funding sources are in-kind funding from USGS support the ship-based channel sampling, and NMS other field work and an array of sample analysis. Although USGS supports most of the current ship-based channel sampling program costs, this funding is not guaranteed into the future, and that uncertainty needs to be factored into program planning and fundraising.

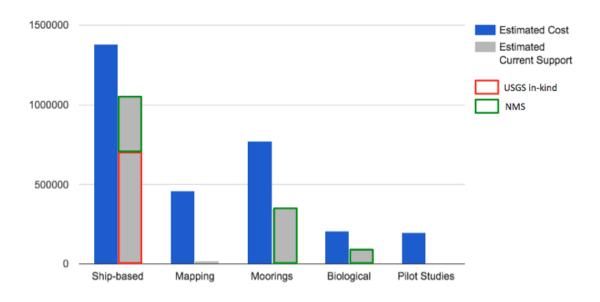


Figure 4.1 Estimated budget for NMSOPv1.0, and estimated current funding (i.e., essentially NMSOPv0.1). Red and green boxes indicate USGS in-kind support and NMS funding, respectively.

To:	NMS Steering Committee
From:	David Senn, SFEI
Re:	Dec 9 2016 Financial Update and Program Overview

1. Financial Update

- a. See Quarterly financial graphic update (through October 2016) below.
 - i. FY17 funds ~25% expended or encumbered.
 - ii. Additional funds requested for approval in FY 17 include:
 - 1. City of Palo Alto: \$30,000
 - 2. City of Sunnyvale: \$30,000
 - 3. Delta Science Program: \$97,500
 - 4. Central Contra Costa Sanitary District: \$100,000
 - 5. Water Board Region 2 SEP: \$120,000
 - 6. State Board: \$150,000

b. Core Program

i. Spending on core program activities are essentially on target in terms of both elapsed time and progress.

c. Projects

- i. Spending rates have been slower for the main projects that were funded at the beginning of FY17 (P1-P6). The slow start is primarily related to the need for hiring new staff, and those new hires needing to finish up current work before starting at SFEI. Two hires have been made, one already on-board and the second starting Jan 4. We expect those projects to be running at full speed in January, with some draft deliverables available by April.
- ii. The modeling projects will also be getting underway in January (P7-P9). Funding for the largest of those projects (P8) is still in contracting, and the funding agreements for the other projects were finalized in Sep-Nov. The interview process for those positions just wrapped up, with hiring decisions soon.

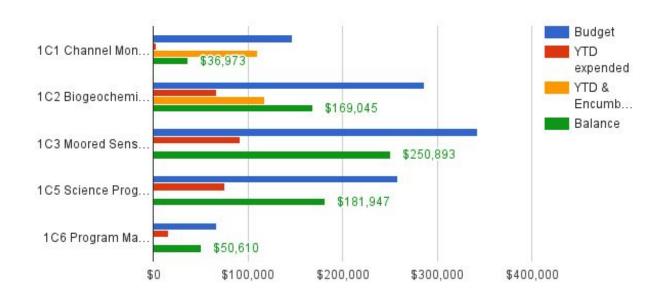




Figure 1. FY 17 project budgets, job to date spending, and budget balance for approved tasks

NMS Steering Committee Meeting No. 11 December 9, 2016 Summary of Action Items

- Provide pictures of the new USGS retrofitted vessel at the next meeting – USGS
- 2. Send the Program Plan from the June steering Committee Meeting to the MWD rep. Science Manager
- 3. Provide feedback to the Science Manager on the proposed Observation Program – Steering Committee Members
- 4. Engage in a conservation on monitoring coordination with other entities undertaking monitoring efforts NMS Program Facilitator



DRAFT

Executive Board Special Meeting Agenda

SF Bay Regional Water Board / BACWA Executive Board Joint Meeting December 22, 2016 10:00-12:00 PM

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

ROLL CALL AND INTRODUCTIONS – 10:00

PUBLIC COMMENT – 10:05

DISCUSSION/OTHER BUSINESS- 10:10

Topic		Goal	Time
1. Nutrients			10:15
a. b. c. d.	Optimization and Upgrade Studies Watershed Permit Reissuance Scenario Planning Delta/Suisun Nutrient Forms and Ratios Workshop EPA Nutrient Questionnaire	 Update on progress of optimization/upgrade studies Discuss Water Board presentation and messaging about watershed permit reissuance at Annual Members Meeting Update from meeting with SFEI and ReNUWIt on scenario planning Discuss outcome of Suisun Delta nutrient workshop Review BACWA's comments on EPA's proposed questionnaire 	
2. Drou	ght/Recycling	Update on Prop 1 proposal State Water Board direction on SNMPs	11:15
3. EPA S	Selenium Criteria	 Are we likely to see a response from EPA? Will Water Board comment on draft selenium freshwater technical support materials? 	11:30
4. Micro	oplastics and CECs	Next steps on State Pilot CECs monitoring	11:40
5. Toxic	ity	 Any updates from SCCWRP, State Water Board, or EPA Update on SCAP lawsuit 	11:45
6. BAAC	QMD Rule 11-18	Overview of the proposed Rule an BACWA's response	11:55

ADJOURNMENT

BACWA Biosolids Survey 2016

BACWA is profiling current biosolids trends throughout our Region. Please take a few minutes to answer the following questions regarding your agency's biosolids recycling activities. BACWA will compile the data and distribute to enable all of its members to gain insight into Regional biosolids recycling activities.

The intent of this survey is to quantify specific biosolids information from BACWA's agencies in order to identify current industry trends for the following issues:

- Biosolids production volumes
- · Dewatering technologies employed
- Biosolids management technologies and destinations
- Biosolids management and transportation rates
- Agency challenges
- Agencies' 5-year and 10-year biosolids management plans
- Biosolids marketing efforts
- · Identify social media outlets for biosolids marketing

Additionally, developing regulations are increasing the likelihood that landfill disposal of biosolids, as well as the use of biosolids as alternative daily cover, will be phased out by 2025. This survey will help our agencies better understand the current and potential future uses for biosolids.

*	1. Name of agency
.1.	
*	2. Name of respondent
*	3. Respondent email address

* 4. How many wet tons of biosolids did your agency produce in 2014?	
Number of wet tons Class A	
Number of wet tons Class A-EQ	
Number of wet tons Class B	
Number of wet tons other quality	
* 5. How many wet tons of biosolids did your agency produce in 2015?	
Number of wet tons Class A	
Number of wet tons Class A-EQ	
Number of wet tons Class B	
Number of wet tons other quality	
(tons), destination/use, and round-trip hauling distance (miles) Destination 1 Destination 2 Destination 3 Destination 4 Destination 5 Destination 6 Destination 7 Destination 8	

* 7. For each destination listed above, please provide the cost (\$/ton). If you h	
down hauling and tipping fees readily available, please provide that data, oth	erwise just provide the total
cost per ton.	1
Destination 1	
Destination 2	
Destination 3	
Destination 4	
Destination 5	
Destination 6	
Destination 7	
Destination 8	
* 8. What percent solids are your agency's biosolids?	
① to 5%	
5 to 10%	
10 to 20%	
20 to 30%	
30 to 40%	
40 to 90%	
90 to 99.99%	
* 9. Please identify your facility's dewatering process from the list below	
Centrifuge	
Belt Filter Press	
Indirect Dryer	
Direct Dryer	
Drying Bed	
Other (please specify)	

IV. If desire	ed, please give more detail about your dewatering process.
I1. Please	ist your dewatering equipment or dryer manufacturer.
	re the main challenges your agency faces with biosolids recycling? Please choose all that apply ncy and prioritize your choices. Please rank, with one being the most important.
	Rising costs
	Public perception/relations
	Hauling distance
	Space for drying operations
	Regulatory Restrictions on using Biosolids for Alternative Daily Cover
	Local restrictions on land application
	Securing long term disposal options
	Wet weather impeding drying operations
	Other
3. If desire	ed, please add further explanations about the challenges your agency faces with biosolids.
_	pes your agency plan to do with their biosolids in 2017? an/strategy as 2016.
Our age	ncy will implement changes as described below.
Describe char	nges.

16. Does your agency have a plan for biosolids reuse in 2025 and beyond? no yes Describe plan for 2025 * 17. Does your agency directly market biosolids products (e.g compost, pelletized fuel)? If yes, what products? List where the products are sold in the comment box. No, we do not directly market biosolids products. Compost
yes Describe plan for 2025 * 17. Does your agency directly market biosolids products (e.g compost, pelletized fuel)? If yes, what products? List where the products are sold in the comment box. No, we do not directly market biosolids products.
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products? List where the products are sold in the comment box. No, we do not directly market biosolids products.
products? List where the products are sold in the comment box. No, we do not directly market biosolids products.
Compost
Composi
Dried biosolids
Dried granules/pellets
Soil blend
Other (explain below)
Other products, and locations products are marketed.
* 18. Does your agency do biosolids outreach/education. If yes, what type?
Facebook
Twitter
Youtube
Website
Newspaper or paper media
Radio
☐ TV
Placards on trucks
No, we do not publicize our biosolids program, but we do publicize our other services.
No, we do not publicize any of our services.

19. Does your ager	ncy have dedicated Bios	solids staff?			
no					
yes					
If yes, how many?					
ii yoo, now many :					
20. If you would like	e to receive notice of the	e survey results an	d be added to the B	ACWA Biosolids	
	e, please include your n				

APA Family Support

Services Project Update

OCTOBER 2016

Mission

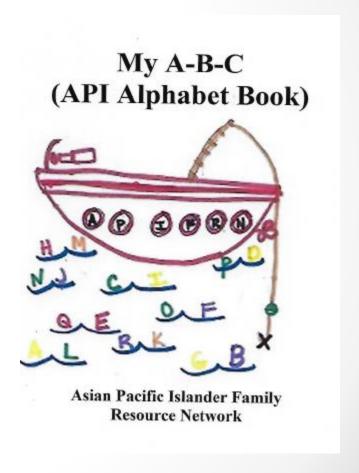
- APA's mission is to promote healthy children and families by providing family support services to prevent child abuse and domestic violence.
- APA also advocates for culturally competent services for Asians and Pacific Islanders through education, community building and leadership development.
- Today, our services are made available to families of all ethnicities and we have expanded the range of family support services we provide.

Our Work

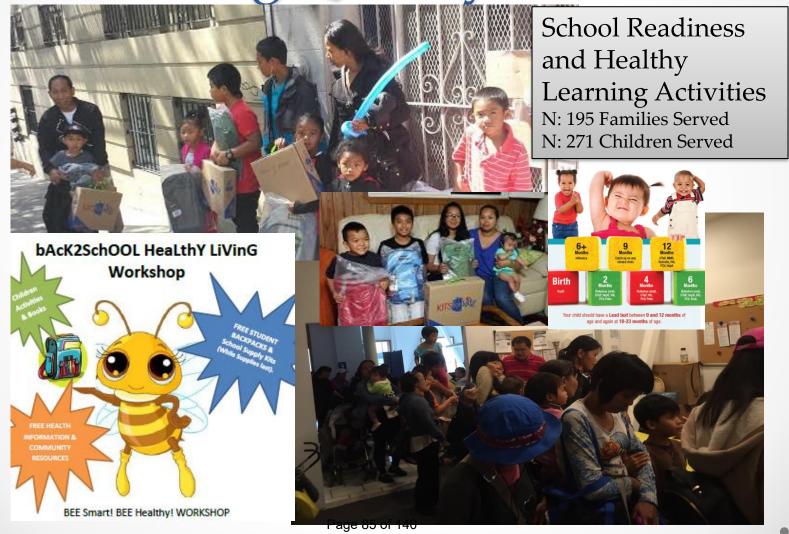
- Chinatown FRC: strengthens families with a spectrum of services to prevent and if necessary, treat problems that may occur as a result of stress, barriers and challenges of language, finances, and lack of resource.
- Visitacion Valley Strong Families: plays an active role in developing community in the Visitacion Valley neighborhood.
- API Family Resource Network: a collaboration of 22 linguistically and culturally competent family resource agencies in San Francisco with the mutual goal of promoting healthy families through education and advocacy citywide.

Working Collaboratively





Providing Quality Services



Advocating Effectively

Outreach and Education Project (i.e. PG&E Project)

Providing

In addition to the

Bened role, new

Starting in 2017

a new charge, to

in 2017, most

Choice.

Existing Rates.

You're mod likely on a

bared rate obnishers

PG&E is here to help you make smart energy choices.

and explore options

comparison tool at

using our race

Take PG&E's free home

are available to help ma

energy and control cost.

energy checkup at

There are three things you can do today:

Go so and sign up for a



Together, Building

a Better California

The way Californians are charged for energy is changing. The changes are intended to make rates more understandable to customers, to ensure the price customers pay for energy is more closely aligned with the actual cost of providing it, and to offer customers choice when it comes to their rate plans. The first step in achieving these goals is to create awareness. PG&E funds APIFRN (due to cultural and linguistic capacities) to help community members make smarter energy choices and manage their energy costs.

Leadership Development



API SF Bay Fish Outreach and Education Project

- Train our community partners and they educate the families on healthy fish consumption and safety fish handling
- Promote awareness and understanding of fish consumption advisories for the API population in San Francisco
- Research Survey to identify individuals who are high consumers. Outreach among our partnering agencies, local "hot spot" fishing area, bait shops, clinics, schools and places frequent by at-risk API population. Education Workshop to promote reduction in human exposure to mercury and PCBs. Provide materials and facilitate discussion and supportive system on alternatives and resources for healthy fish consumption.

Training



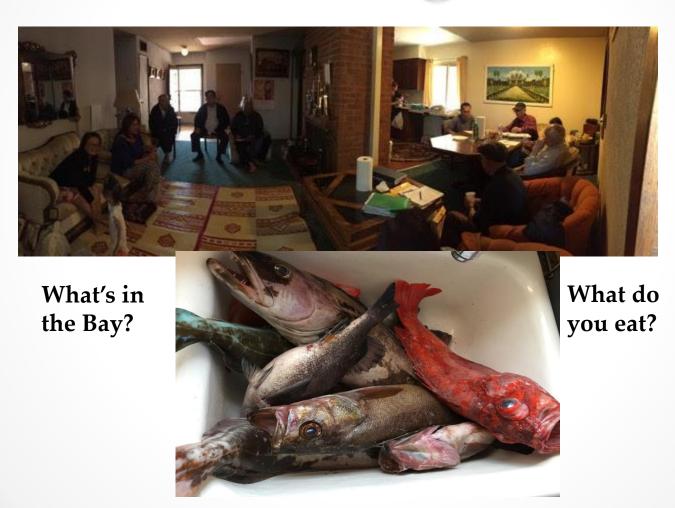
Outreach



Workshop



Case Management

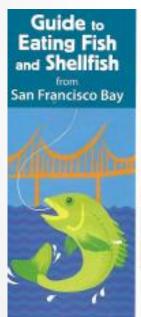


Community Forum



Community Building

"Building community as a means to increase social justice, individual well-being and reduce negative impacts of otherwise disconnected individuals."





Services	Grant Target	Progress Report (7/01/16-9/15/16) Numbers	Total (Year to Date)
Training	50 community providers/staff	0	52 community providers/staff
Outreach	2500 SF Bay families/ fish consumers	380 SF Bay families/ fish consumers	3,210 SF Bay families/ fish consumers
Workshops	500 participants	125 participants	830 participants
Case Management	25 at-risk or high risk API SF Bay fish consumers	24 API SF Bay fish consumers	42 API SF Bay fish consumers
Community Forums	3	0 (planned for Nov 2016)	2 Forum

Promote awareness and understanding of fish consumption advisories, contamination issues, or health risks and benefits associated with eating San Francisco Bay Fish and reduce human exposure to mercury and PCBs from eating San Francisco Bay fish.

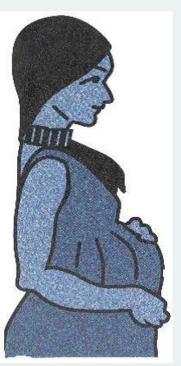
Making Healthy Fish Choices:

Women, Infants & Children



CIEA, CDPH & NAHC 2015

Mercury in the Human Body

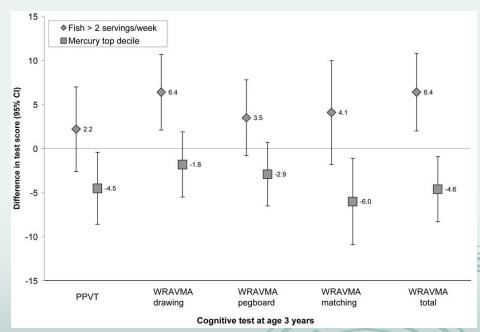


- In pregnant women MeHg easily crosses into the placenta & binds to red blood cells & other fetal tissues (Clarkson 1997, Davis 1994, Peterson 1999)
- Chemical form matters: Metallic Hg, Organic Hg (MeHg) or vapor
- In Utero by birth cord blood is double that of the mothers. Studies show this 1:2 ratio could be much greater (Bjerregaard & Hansen 2000, Hansen 1990, Bahter 2000, Weiss 1994)
- MeHg accumulates in the brain, kidneys, heart & muscle tissue, it is neurotoxic & cytotoxic(NAS 2000)
- Hg takes a year to leave the body In the central nervous system (Because of half-life) (Clarkson 1997, Davis et al. 1994, Peterson 1999)
- > Hg not excreted in utero is excreted in feces, urine & sweat
- Affects likely permanent birth through teen & Shannon 2001, Budtz-Jorgensen 2004, Oken 2008)



New Evidence Oken 2008

- Mothers who ate more than 2 servings a week = increase in child's cognitive development at age 3
- Mother ate no fish = mid cognitive development & lower than those whose mothers had eaten 2 meals per week
- Mother ate more than 2 servings of high mercury fish = even lowest cognitive development



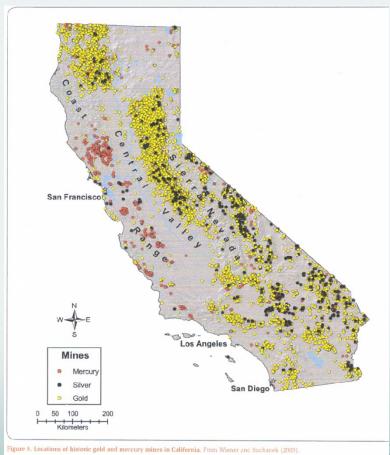
(Oken et al. 2008)

Primary Sources of Mercury

In California:

- #1: Gold Rush Mercury, Gold & Silver Mines
- Energy: coal-power plants
- Industry: petroleum & refineries, cement kilns & chloralkali plants
- Non-point sources: vehicles that combust fossil fuels, dental offices, medical devices, crematoriums, landfills, waste combustion & incineration
- Improper disposal of mercury-laden products: mercury thermometers, florescent bulbs, etc.
- Natural Sources: cinnabar, forest fires & volcanic activities

Mercury: Toxic Legacy of the Gold Rush



(Alpers 2006 / Wiener and Schanek 2009 / BLM 2008)

- In only 20 years of Gold Rush: 26 million lbs. of mercury used California.
- 10-30% lost in standard operations
 = est. lost into environment
 13million lbs.
- 1 gram (2 thermometers) can poison small lake & all fish.
- Cleanup est. \$1 million for one small mine
- Est. \$50 billion to clean AZ, CA, NV

Dietary Guidelines for Americans

Women who are pregnant or breastfeeding:

- Consume 8 to 12 ounces of seafood per week from a variety of seafood types.
- Due to their high methylmercury content, limit white (albacore) tuna to 6 ounces per week and
- do not eat the following four types of fish: tilefish, shark, swordfish, and king mackerel.
- If pregnant, take an iron supplement, as recommended by an obstetrician or other health care provider.

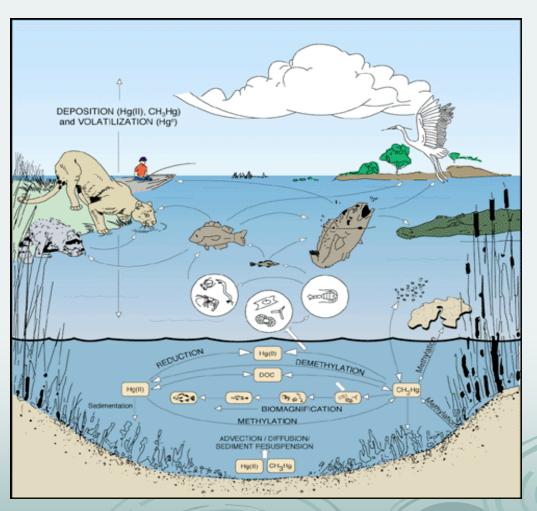
(US Dept. of Agriculture, US Dept. of Health and Human Services, www.usdietaryguidelines.gov)

Iron assists the body to retain Omega3 fatty acids

Mercury in the Food Chain

74% of CA lakes & reservoirs advisories likely

of those 21% of CA lakes may contain at least one fish specie unfit for pregnant women or small children



(Davis et al. 2009, updated 2010 & Scudder et al. 2009)

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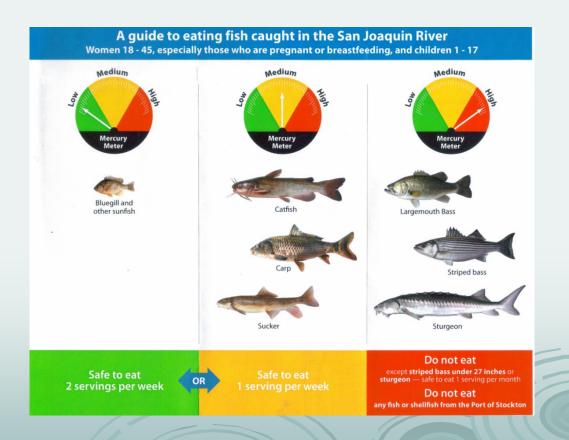
27% of US streams impaired by US EPA standards

Large predatory fish have most mercury

Who is at the top of the food chain?

Safe Eating Guidelines - OEHHA

There are over 50 fish consumption advisories in California due to mercury impairments. http://www.oehha.ca.gov/fish.html





Wild Salmon!

- River Caught Wild Salmon: Low in PCBs & Mercury because of natural lifecycle
- Land-locked Salmon: High in Mercury
- Farmed &/or GMO Salmon: High in Mercury, PCBs & environmentally bad idea



- **High in Omega-3 fatty acids** = Healthy benefits for your heart, muscle tissues & blood (Omega-3/DHA) (OEHHA 2009, updated 2010)
- Many cultures enjoy complete protein sets
 Ex: Salmon, Acorns & Seaweed are a complete protein

"Eating Fish Safely"

- ➤ Avoid large predatory fish
- ➤ Mercury in muscle of the entire fish
- ➤ If pregnant stop eating certain fish follow advice for pregnant women 1 year before pregnancy
- ➤ Balance health benefits (omega3-fatty acids) vs. negative effects (hg) consider Oken study
- ➤ Check local advisories if there are none it doesn't mean the location has been tested & is safe
- Do math based on weekly amounts. EPA RfD is 0.1 μg (microgram) mercury per kg per body weight per day.





Notes/Action Items from Nutrient Workgroup Call

The CASA nutrient workgroup held a call on December 7, 2016 to discuss recent developments and next steps in the now-combined bio-stimulatory substances and bio-integrity policy.

SCCWRP presented an update on their science development efforts to the full CASA regulatory workgroup in October 2016, and the State Water Board will hold a large stakeholder group meeting on December 22 in Sacramento. Several questions and issues have already been identified from the materials that were distributed in advance of the meeting on December 22, which included the WSCCWRP workplans for the biological condition gradient (BCG) work and the algal stream condition index (ASCI) work.

- Notably the science panel feedback on the BCG work from earlier this year was not contained in the workplan (e.g. possibility of TALUs and other suggestions) and potentially should be;
- There are not specifics regarding an opportunity to review both the BCG work and the ASCI work as it is being developed by SCCWRP. Instead it appears structured such that SCCWRP will complete their work product and stakeholders will weigh in on the final product. This is problematic.
- There are no specifics regarding the role of the science panel in providing ongoing, regular feedback on the development of the ASCI work. This should be included.
- There is no mention of or reference to the channels and developed landscapes definitions and changes referenced by Martha back in October. Per Martha's presentation to the RWG in October, it is anticipated that we will be able to attend a webinar on this topic in February 2017, but that should be clarified at the meeting and we should have more opportunities to weigh in on those determinations. This is also a topic that can be raised at our possible meeting with Martha/SCCWRP in January (see below).

As workgroup members review the BCG workplan and the ASCI workplan, and develop more comments/questions/concerns, please email them directly to Adam at alink@casaweb.org. Adam will compile them and redistribute to the group so long as they are received by December 19. This should help us make sure all issues are raised at the meeting on December 22. Many workgroup members will be in attendance and can help identify and raise these issues.

Another request for action by CASA is to set up a meeting with Martha and SCCWRP for January to discuss (1) how to get detailed interaction with SCCWRP as the science detailed in the workplans is being developed, not just after it is completed, and (2) the possibility of pursing watershed, CASA approach supportive research at SCCWRP (implementation and technical support components). The latter may require more preparation on CASA and the workgroup's part in terms of structuring the research, how much it will cost, what we will be willing to contribute, etc. We will broach this subject with Martha at the meeting on December 22 and follow up after that.

Finally, we will pursue some outreach to other group stakeholders (agriculture, industry, sotrmwater, etc.) both in advance of and after the meeting on December 22. Tom G. will reach out to Tess Dunham re: engagement of groups who she represents, and Ashli D. is already scheduled to reach out to some other groups and will report back on status of any potential coalition efforts in the wake of the December 22 meeting.



BAY AREA CLEAN WATER AGENCIES Final Draft ANNUAL MEETING PROGRAM JANUARY 27, 2017

<u>TIME</u>	<u>SUBJECT</u>	<u>DESCRIPTION</u>	<u>SPEAKER</u>
8:30 am - 9:00 am	Coffee and Refreshments		
9:00 am - 9:15 am	Welcome	Introduction and Year in Review	Laura Pagano, Chair
9:15 am - 10:15 am	EPA/SWRCB/RWQCB/ Priorities	<u>Moderator</u>	Jim Ervin
		EPA Region IX, Manager, NPDES Permits Office	David Smith
		SWRCB Board Member	Steve Moore
		RWQCB Executive Officer	Bruce Wolfe
		BAAQMD Executive Officer	Jack Broadbent
10:15 am - 10:25 am	Nutrients - Overview	Progress on 1st WS Permit/Governance Update	Ben Horenstein
10:25 am - 10:35 am	Break		
10:35 am - 11:45 am	Nutrients - Regulatory Update	<u>Moderator</u>	Ben Horenstein
	(cont'd)	Optimization/Upgrade Studies	JB Neethling, HDR
		Annual Reporting	JB Neethling, HDR
		Q & A	JB Neethling, HDR
		Next Steps	JB Neethling, HDR
11:45 am - noon	BACWA Leadership Recognition	Committee Recognition (scrolling screen with Committee Accomplishments)	Laura Pagano, Chair
Noon - 12:35 pm	Lunch		
12:35 pm - 12:45 pm	BACWA Business Meeting	Financial/Organizational Outlook	David Williams
12:45 pm - 1:30 pm	Nutrients - Technical Update	<u>Moderator</u>	Lori Schectel
		SFEI Study Findings & Science Plan	David Senn, SFEI

1:30 pm - 1:45 pm	Nutrient - Regulatory	Preview of the 2nd Watershed Permit	David Williams
1:45 pm - 2:45 pm	BACWA Hot Topics	<u>Moderator</u>	Mike Connor
	(Bold topics stay, delete italics topics)	Enforcement Policy	Lorien Fono
		Biosolids	Alicia Chacrabarti
		CEC Participation	Karin North
		Recycling	Rhodora Biagtan
		Selenium	Eric Dunlavey
		Media Interaction on Spills	San Jose
		TNI Lab Standards	Nirmela Arsem
		Microplastics	Phil Trowbridge
		Reduction in CTR Monitoring	Lorien Fono
		Toxicity	Jim Ervin
		AIR Issues/CWCCG	Sarah Deslauriers
		Enhancing Service to Membership	Laura Pagano
2:45 pm - 2:50 pm	Annual Meeting Wrap-Up		Laura Pagano, Chair

STATE WATER RESOURCES CONTROL BOARD BOARD MEETING SESSION – DIVISION OF WATER QUALITY DECEMBER 6, 2016

ITEM 6

SUBJECT

CONSIDERATION OF A PROPOSED RESOLUTION REAFFIRMING SUPPORT FOR DEVELOPMENT OF SALT AND NUTRIENT MANAGEMENT PLANS AND DIRECTING STAFF TO INITIATE STAKEHOLDER PROCESS FOR UPDATING THE RECYCLED WATER POLICY

DISCUSSION

The Policy for Water Quality Control for Recycled Water (Recycled Water Policy) was adopted by the State Water Board on February 3, 2009. The Recycled Water Policy was amended on January 22, 2013 to require the Regional Water Quality Control Boards (Regional Water Boards) to include monitoring requirements for constituents of emerging concern (CECs) in recycled water used for groundwater recharge. The Recycled Water Policy includes provisions that require staff to reconvene a science advisory panel every five years to provide guidance on future actions related to CECs in recycled water. Since the Recycled Water Policy was last updated in 2013, there have been significant advancements in recycled water research, including new information on the feasibility of the use of recycled water for surface water augmentation and direct potable reuse. The Recycled Water Policy also encourages the development of salt and nutrient management plans for each basin or sub-basin in California. The deadlines set forth in the Recycled Water Policy for salt and nutrient plan development have passed and many groundwater basins do not yet have Regional Water Board-approved salt and nutrient management plans.

State Water Board staff is proposing a resolution for consideration by the State Water Board that would direct staff to initiate stakeholder outreach to solicit input on proposed changes to the Recycled Water Policy, convene a science advisory panel, and present an amendment to the Recycled Water Policy by December 2019 for consideration by the State Water Board. The proposed resolution also reaffirms the State Water Board's interest in and support for salt and nutrient plan development, and encourages collaboration among salt and nutrient management planning groups, the agricultural community, and Groundwater Sustainability Agencies established per the Sustainable Groundwater Management Act.

POLICY ISSUE

Should the State Water Board:

- 1. Support the continued development of regional or subregional salt and nutrient management plans?
- 2. Direct staff to convene a science advisory panel on Constituents of Emerging Concern?
- 3. Direct staff to present, for consideration by the State Water Board, an amendment to the Recycled Water Policy by December 2019 after conducting stakeholder outreach?

FISCAL IMPACT

State and Regional Water Board staff work and contracting associated with this action can be accomplished within budgeted resources.

REGIONAL BOARD IMPACT

Yes. As more salt and nutrient management plans are developed, the Regional Water Boards must review the plans and consider adopting revised implementation plans that are consistent with Water Code section 13242.

HUMAN RIGHT TO WATER

The actions proposed under this item are consistent with the established policy of the State recognizing the human right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (human right to water; Water Code section 106.3). The proposed actions are also consistent with Resolution No. 2016-0010, in which the State Water Board adopted the human right to water as a core value and top priority. As directed by the State Water Board in Resolution No. 2016-0010, staff has determined that the proposed actions support the human right to water by continuing to support the development of new and underutilized water supplies such as recycled water and by protecting groundwater quality from salt and nutrient contamination.

STAFF RECOMMENDATION

Staff recommends that the State Water Board adopt the proposed resolution.

State Water Board action on this item will assist the Water Boards in reaching Goal(s) 2, 3, 4, and 6 of the Strategic Plan Update: 2008-2012. In particular, approval of this item will assist in fulfilling Objective 3.2 to increase the acceptance and promote the use of recycled water and the reuse of stormwater as locally available, sustainable water supplies consistent with the Climate Change Draft Scoping Plan developed pursuant to the California Global Warming Solutions Act of 2006 (AB 32) and other relevant State and regional efforts.

STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2016-

REAFFIRMING SUPPORT FOR THE DEVELOPMENT OF SALT AND NUTRIENT MANAGEMENT PLANS AND DIRECT STAFF TO INITIATE A STAKEHOLDER PROCESS TO UPDATE THE RECYCLED WATER POLICY

WHEREAS:

- 1. The State Water Resources Control Board (State Water Board) encourages the development of new and underutilized water resources to mitigate the effects of long-term drought, climate change, and water supply uncertainty, including improved conservation and water use efficiency, conjunctive water management (i.e., coordinated management of surface and groundwater), stormwater capture, brackish and seawater desalination, groundwater remediation, and production and use of recycled water. The development of these new and underutilized water resources should be done in a manner that is consistent with the State Water Board's mission, "To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations."
- 2. The Strategic Plan Update 2008-2012 for the Water Boards includes a priority to increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015, and ensure adequate water flows for fish and wildlife habitat. The Strategic Plan Update 2008-2012 also includes a goal to improve and protect groundwater quality in high-use basins by 2030.
- The State Water Resources Control Board (State Water Board) adopted the Policy for Water Quality Control for Recycled Water (Recycled Water Policy) in 2009 (<u>Resolution No. 2009-0011</u>) to promote the development of recycled water projects by streamlining the permitting, while still ensuring protection of water quality and beneficial uses.
- 4. The Recycled Water Policy includes goals to increase the use of recycled water over 2002 volumes by at least one million acre-feet per year by 2020 and by at least two million acre-feet per year by 2030. The State Water Board also included a mandate in the Recycled Water Policy to increase the use of recycled water by 200,000 acre-feet per year by 2020 and an additional 300,000 acre-feet per year by 2030.
- 5. Some groundwater basins in the state contain salts and nutrients that exceed or threaten to exceed water quality objectives established in the applicable Water Quality Control Plans (Basin Plans), and not all Basin Plans include adequate implementation procedures for achieving or ensuring compliance with the water quality objectives for salt and nutrients.
- 6. It is the intent of the State Water Board that every groundwater basin or sub-basin in California has a salt and nutrient management plan that is protective of water quality. The Recycled Water Policy states that salt and nutrient management plans shall be completed and proposed to the Regional Water Quality Control Board (Regional Water

- Board) within five years from the date of the Recycled Water Policy (by 2014) and in no case the period for the completion of a plan shall exceed seven years.
- 7. The Recycled Water Policy states that within one year of the receipt of a proposed salt and nutrient management plan, the Regional Water Boards shall consider for adoption revised implementation plans, consistent with Water Code section 13242, for those groundwater basins within their regions where water quality objectives for salts or nutrients are, or threaten to be exceeded.
- 8. The deadlines set forth in the Recycled Water Policy for salt and nutrient management plan development have passed. Many groundwater basins do not yet have Regional Water Quality Control Board-approved salt and nutrient management plans or adequate implementation procedures for achieving or ensuring compliance with the water quality objectives for salt and nutrients in their Basin Plans.
- The 2009 Recycled Water Policy directed State Water Board staff to convene a science advisory panel to provide recommendations on future actions related to constituents of emerging concern (CECs) and to reconvene a science advisory panel to update the report every five years.
- 10. In 2010, the science advisory panel submitted a report titled, "<u>Monitoring Strategies for Chemicals of Emerging Concern in Recycled Water Recommendations of a Science Advisory Panel</u>", which presented recommendations for monitoring CECs in municipal recycled water used for groundwater recharge.
- 11. The Recycled Water Policy was amended in 2013 (Resolution No. 2013-0003) to specify requirements for monitoring CECs in recycled water. Since the Recycled Water Policy was last updated in 2013, there have been significant advancements in recycled water research, including new information on the feasibility of the use of recycled water for surface water augmentation and direct potable reuse.
- 12. On April 25, 2014, the Governor proclaimed a continued State of Emergency due to severe drought conditions and directed the State Water Board to adopt statewide general waste discharge requirements to facilitate the use of treated wastewater.
- 13. On June 3, 2014, the State Water Board adopted General Waste Discharge Requirements for Recycled Water Use (<u>Order WQ 2014-0090-DWQ</u>) to streamline permitting of recycled water use statewide.
- 14. On September 16, 2014 (amended on September 3, 2015), the Governor signed into law the Sustainable Groundwater Management Act. The act establishes local tools and authorities to maintain groundwater levels and storage, prevent land subsidence and significant depletions of surface waters, and protect water quality.
- 15. On November 4, 2014, California voters approved Proposition 1 to enact the Water Quality, Supply, and Infrastructure Improvement Act of 2014. This bond measure included \$725 million for water recycling and advanced water treatment technology projects, a portion of which was allocated to recycled water research and development.

- 16. Water Code section 13562 required the California Department of Public Health (CDPH) to adopt uniform water recycling criteria for indirect potable water reuse for groundwater recharge on or before December 31, 2013, and to develop and adopt uniform water recycling criteria for surface water augmentation by December 31, 2016. Uniform water recycling criteria for indirect potable reuse for groundwater recharge became effective on June 18, 2014. Effective July 1, 2014, CDPH Drinking Water Program was transferred to the State Water Board. The legislative mandates to develop and adopt uniform water recycling criteria for surface water augmentation were also transferred to the State Water Board.
- 17. On February 16, 2016, the State Water Board recognized the human right to water as a core value and that the human right to water is a high priority for the Water Boards under Resolution No. 2016-0010.
- 18. On June 7, 2016, the State Water Board adopted Water Reclamation Requirements for Recycled Water Use (<u>Order WQ 2016-0068-DDW</u>) that established standard conditions for recycled water use and conditionally delegated authority to an Administrator to manage a Water Recycling Program and issue water recycling permits to recycled water users. Order WQ 2016-0068-DDW permits non-potable reuse of treated municipal wastewater as a source of recycled water. Enrollees under Order WQ 2014-0090-DWQ have been transferred for coverage under Order 2016-0068-DDW.
- 19. Water Code sections 13560 to 13569 acknowledge that there are a number of significant unanswered questions regarding direct potable reuse of recycled water and require the State Water Board to convene an expert panel to assess whether additional research is needed to establish uniform regulatory criteria for direct potable reuse. Water Code sections 13560 to 13569 also require the State Water Board to investigate and report to the Legislature on the feasibility of developing uniform water recycling criteria for direct potable reuse by December 31, 2016.
- 20. In August 2016, an expert panel convened pursuant to Water Code section 13565 provided research recommendations related to the feasibility of developing uniform water recycling criteria for direct potable reuse in a report titled "Evaluation of the Feasibility of Developing Direct Potable Reuse Regulatory Criteria for the State of California." The expert panel stated that no additional research was needed to establish uniform water recycling criteria for direct potable reuse, but recommended several areas of research that would enhance the understanding and acceptability of direct potable reuse in California. These research recommendations include monitoring the literature on potential health risks of specific CECs likely to be present in recycled water, improving monitoring of pathogens in raw wastewater, and developing comprehensive analytical methods to identify unknown compounds.
- 21. In September 2016, the State Water Board released a draft report titled "Investigation on the Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse" for public review and comment.
- 22. There is a continued need for research to enhance the understanding and acceptability of all types of water reuse in California. Research topics include, but are not limited to, developing bioanalytical tools, developing methods to analyze a range of unknown constituents (non-targeted analytical tools), monitoring and treatment of pathogens,

monitoring and treatment of CECs, evaluating CECs for their impact on human health and the aquatic environment, and antibiotic-resistant bacteria and genes.

THEREFORE BE IT RESOLVED THAT THE STATE WATER BOARD:

A. Supports and encourages:

- 1. Sustainable use of recycled water to promote conservation of water resources;
- Local water and wastewater entities, together with local salt and nutrient contributing stakeholders, to continue locally driven and controlled, collaborative processes open to all stakeholders that will result in the development of salt and nutrient management plans for groundwater basins in California, including compliance with CEQA and participation by Regional Water Board staff;
- 3. Collaborative work among salt and nutrient management planning groups, the agricultural community, and Groundwater Sustainability Agencies formed under the Sustainable Groundwater Management Act to achieve the goals of groundwater sustainability, recycled water use, and water quality protection;
- 4. Regional Water Boards to work with stakeholders to prioritize development of salt and nutrient management plans in basins where salts and/or nutrients are a threat to water quality, and to consider adopting amendments to the Basin Plans, consistent with Water Code section 13242, to incorporate the elements of salt and nutrient management plans as appropriate;
- Non-potable reuse projects and indirect potable reuse projects, implemented in accordance with existing regulations, to help meet the growing water supply requirements of the state, and projects to sustain aquatic habitats and mitigation areas in times of drought and severe water shortage;
- 6. The use of recycled water by providing funding support for research projects that will fill critical knowledge gaps.

B. And directs staff to:

- Coordinate implementation of the respective regulatory authorities of the Division of Drinking Water, Division of Water Quality, and Regional Water Boards in order to achieve the statewide goal of encouraging the use of recycled water while avoiding potential public health impacts and ensuring the protection of water quality for current and future beneficial uses.
- 2. Initiate stakeholder outreach, including outreach to environmental justice and impacted community stakeholders to solicit input on proposed updates to the Recycled Water Policy;
- Convene a science advisory panel as specified in the Recycled Water Policy to update the 2010 report titled, "Monitoring Strategies for Chemicals of Emerging Concern in Recycled Water – Recommendations of a Science Advisory Panel" and to guide future actions relating to CECs;

- 4. Develop a proposal for an efficient, statewide reporting program and data management system that will allow online reporting of the volume, quality, and use(s) of recycled water on an annual basis, or more frequently, including consideration of adding requirements to recycled water producer, distributor, and/or user monitoring and reporting programs;
- 5. Evaluate the challenges and benefits of salt and nutrient management plan development, and update the Recycled Water Policy consistent with the findings of that evaluation;
- 6. Update the Recycled Water Policy to reflect the increased and varied uses of recycled water, including but not limited to consideration of the following potential elements:
 - a. Revised goals and mandates for statewide volume of recycled water
 - Clarification of monitoring and reporting requirements to protect water quality for different uses of recycled water consistent with California Code of Regulations, title 22, Water Recycling Criteria
 - c. Recommendations for the development of a framework for representative basin-wide monitoring networks to support implementation of salt and nutrient management plans
 - d. An evaluation of the requirements and frequency of monitoring for priority pollutants and CECs, considering recommendations from the Science Advisory Panel
 - e. A recommendation for a time schedule for Regional Water Boards to review orders and permits issued to recycled water projects prior to the adoption of Water Reclamation Requirements for Recycled Water Use (Order WQ 2016-0068-DDW) to ensure compliance with the Recycled Water Policy and to make a determination on whether they should be renewed and if appropriate enroll them under the statewide general order
 - f. The nexus between the provisions of the Recycled Water Policy, Sustainable Groundwater Management Act requirements, groundwater recharge regulations, and surface water augmentation regulations; and
- 7. Present, for consideration by the State Water Board, an updated Recycled Water Policy by December 2019.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on December 6, 2016.

Jeanine Townsend Clerk to the Board

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836 SACRAMENTO, CA 94236-0001 (916) 653-5791



September 29, 2016

RE: Mr. David R. Williams Bay Area Clean Water Agencies PO Box 24055, MS 101 Oakland, CA 94623-1055

Subject: Bay Area Clean Water Agencies, Proposition 50 Implementation Grant, Agreement 4600007654, Grant Closure

Dear Mr. Williams:

This letter acknowledges that the CA Department of Water Resources (DWR) has released the final retention in the amount of \$85,000.00 for the subject grant agreement. Please provide us notice when you receive your final retention payments.

This letter serves as notification that contractual obligations, with the exception of Post-Performance Reporting for the above referenced grant agreement between Bay Area Clean Water Agencies and DWR have been fulfilled. In accordance with the Submission of Reports section of the grant agreement, the date of this letter indicates the beginning of the Post-Performance Reporting requirement for the California WaterStar Initiative Water Efficient Product Testing and Labeling project. Post-performance reporting has already begun for other projects in the grant. Your agency is required to submit these reports every annually for 10 years. Please submit the first report for the California WaterStar Initiative Water Efficient Product Testing and Labeling project no later December 29, 2017. Post-performance reports provide DWR, the legislature, and the public updates of the benefits yielded by State grant funding. Note that failure to submit these reports is a violation of the grant agreement. As of the date of this letter, all Post-Performance Reports should be transmitted to DWR as an email attachment. The report should be in a Microsoft Word compatible format or PDF. The email should be sent to DWR_IRWM@water.ca.gov. The subject line of the email should include the agreement number and "Post-Performance Report".

Please be mindful that the Grantee is obligated to continue records retention as there is a potential for a post completion audit of the Grant. Also, transmitted with this letter is a performance evaluation for you to retain for your records.

Thank you for your interest in the Proposition 50 IRWM Grant Program and your effort to manage water resources in your area. If you have any questions, please contact Melissa Sparks at melissa.sparks@water.ca.gov or 916-651-9221.

Sincerely,

Zaffar Eusuff, Implementation Program Manager

Financial Assistance Branch

Division of Integrated Regional Water Management

GRANTEE PERFORMANCE EVALUATION

STATE OF CALIFORNIA		GRANTE	EE PE	ERFORMAN	CE EVALUATION	
1. AGREEMENT NUMBER:	2. AGREEMENT STA	RT DATE:	3. AG	REEMENT END	DATE:	
460007654	December 17, 2008	December 31, 2015				
DEPARTMENT OF WATER R	RESOURCES	4. GRANTEE'	S NAM	IAME & ADDRESS:		
5. DIVISION/OFFICE:						
Division of Integrated Regional W	ater Management	Bay Area Clean Water Agencies PO Box 24055, MS 101				
. BRANCH:		Oakland, CA 94623-1055				
Financial Assistance Branch						
7. PROJECT TITLE:						
San Francisco Bay Area Propositio	on 50 Implementatio	on Grant	2000 - X 00455-34 U-525-3440			
	9. TOTAL AMOUNT FUNDS:	T OF GRANT		10. TOTAL AMOUNT OF COST SHARE/MATCHING FUNDS:		
\$94,856,653.00	\$12,500,000.00		\$1	\$11,229,500.00		
• Amendment 1 – revised t						
12. DESCRIBE THE WORK/TASKS Fifteen (15) Implementation Projection deliverables met. The types of programs, water efficiency testing projects. 13. WAS THE WORK PERFORMED	ects and one (1) Gra oject work complete g programs, recycled O? NO - Explain	nt Administrated includes reg d water project	tion Programment to the transfer to the transfer to the transfer transfer to the transfer transfer to the transfer trans	oject were com nterties, water passage projec 6 - Explain what v	opleted with all conservation outreach cts, and restoration	
Yes, the work for all 16 projects w budget outlined in the agreement	100		ording	to the scope of	work, schedule, and	
14. DID THE GRANTEE FULFILL A			NT AGE	REEMENT?		
Yes, the Grantee fulfilled all requi						
15. PROJECT MANAGER NAME:(Perso	The second secon	L6. TITLE:	manne	17. DATE:	18. TELEPHONE NUMBER	
Melissa Sparks		Grant Project		9/29/2016	916-651-9221	
19. PROJECT MANAGER'S SIGNATUR		Manager	3/23/20	3/23/2010	310-031-3221	
Udvisa L. Spardy	NL.	Ŭ				
20. REVIEWER'S NAME:		21. TITLE		22. DATE	23. TELEPHONE NUMBER	
Zaffar Eusuff		mplementatio		9/29/2016	916-651-9266	
24. REVIEWER'S SIGNATURE:		Program Manager				
Exfans.						

VERSION 12.2015

Sherry Hull

From: Gilbert-Snyder, Paul <paul.gilbert-snyder@ebmud.com>

Sent: Monday, November 14, 2016 10:03 AM

To: David Williams
Cc: Sherry Hull

Subject: RE: Prop 50 Grant Closure documents

Follow Up Flag: Follow up Flag Status: Flagged

Each Project Sponsor signed an Implementation Agreement with BACWA. Paragraph 29 of those Implementation Agreements states:

29. POST PERFORMANCE REPORTS: Project Sponsor shall submit a Post Performance Report for each Project directly to DWR and in accordance with Paragraph 21 of the State Agreement, as that paragraph relates to "Post Performance Reports". In particular, and as provided in the State Agreement, a Post Performance Report shall be submitted to DWR within ninety (90) calendar days after the first operational year of each Project has elapsed. In subsequent operational years, all Post Performance Reports for each Project shall be submitted concurrently, and no later than the last day of March of each year. This record keeping and reporting process shall be repeated annually for a total of ten (10) years after each Project, as completed, begins operation.

A copy of all Post Performance Reports submitted by Project Sponsor to DWR shall also be provided to BACWA for its review and record-keeping. Such copies shall be submitted to BACWA at the same time Project Sponsor submits its Post Performance Reports to DWR.

I haven't been tracking who has submitted and who hasn't – but from time to time I do receive a copy of a post performance report. Early in the process I asked Brian and DWR who would be responsible for tracking these things for 10 years and the answer was "it will be up to the project proponent to submit to DWR." I left it at that.

I hate to ask DWR, but it could be worth it to get clarification that several of the "non-project" projects won't need follow up reporting. For example, BACWA's grant management shouldn't require follow up reporting and the Conservation Outreach shouldn't either (that was a series of media buys during the previous drought)... what would there be to report on annually?

I'll try to get clarification on that item.

When we receive the final retention payment from DWR Sherry and I will need to work with accounting to zero-out the Prop 50 accounts. This will require sending checks out to the project sponsors who provided funds up front as admin seed money. When we get that all figured out I'll send a note to all the project proponents announcing closure of the grant and reminding them of their annual reporting requirements.

Paul

From: David Williams [mailto:dwilliams@bacwa.org]

Sent: Sunday, November 13, 2016 3:55 PM

To: Gilbert-Snyder, Paul

Cc: Sherry Hull

Subject: RE: Prop 50 Grant Closure documents

Paul, as I am rereading the letter we got from DWR, I wanted to follow-up on this issue.

From your email below, it sounds like, for at least some of the projects (namely Project 3 and 4, are there others??), some sort of post-project completion is required and that your understanding is that the follow-up reporting is the responsibility of the individual agencies not BACWA as the grantee. That is good news since BACWA really doesn't want to be in a position of having to ensure follow-up reporting is being done for the next 10 years. But concern I have is that the letter did come from DWR to BACWA as the grantee and appears to clearly states that "your agency" i.e. BACWA, is responsible for the follow-up reporting. Your email seems to imply that the letter was incorrectly sent to BACWA and should have been sent to the individual agencies. My question is, do you have any documentation in any of the agreements for this grant that would show that the individual agencies and not BACWA is responsible for the follow-up reporting. If there is nothing in written documentation on who is responsible, it would seem that BACWA would need to ensure that on an annual basis the reporting is being done, hopefully by the individual agencies. The alternative is to get clarification from DWR as to what their expectation is. Let me know your thoughts on this. As stated, BACWA is not excited to have this added effort placed on our plate but we also don't want to violate any portion of a grant agreement that we entered into on behalf of all of the individual agencies. thanks

David R. Williams
Executive Director
Bay Area Clean Water Agencies (BACWA)

Cell: 925-765-9616

Email: dwilliams@bacwa.org

From: Gilbert-Snyder, Paul [mailto:paul.gilbert-snyder@ebmud.com]

Sent: Wednesday, October 19, 2016 10:27 AM **To:** Harris, Richard < richard.harris@ebmud.com>

Cc: Sherry Hull <shull@bacwa.org>; David Williams <dwilliams@bacwa.org>; Bohlig, Charles

<<u>charles.bohlig@ebmud.com</u>>; Wallace, Douglas <<u>douglas.wallace@ebmud.com</u>>

Subject: FW: Prop 50 Grant Closure documents

Richard -

This letter from DWR to BACWA was a bit confusing, as it conveys two important pieces of information. First, it informed BACWA that the Prop 50 grant has been successfully completed and closed out (yay!). Second, it reminds BACWA of the requirement for the annual post-performance reporting for Project 3. This requirement should have been directed to the project proponent (EBMUD), not BACWA.

I'm also copying Charles because I don't know if he received a similar letter upon the completion of Project 4, but he should also be aware of the requirement for annual reporting.

Oddly enough, although DWR has informed us that the grant has been successfully closed out and they are releasing the final retention payment, we still haven't received ANY payment for Project 3! I will of course continue to watch for those checks so that we can finally close out this grant and celebrate!

Let me know if you have any questions.

Paul

From: Sherry Hull [mailto:shull@bacwa.org]
Sent: Tuesday, October 18, 2016 11:47 AM

To: Gilbert-Snyder, Paul

Cc: David Williams

Subject: Prop 50 Grant Closure documents

Paul & Dave,

Please find attached documents I received in the mail today. Please let me know if I need to physically file these documents or if they should be kept somewhere else.

It appears that there is a requirement for annual post-performance reporting over the next 10 years. Can you tell me who will be doing this reporting? Do I have any responsibility related to it?

Thanks! Sherry

Sherry Hull
Assistant Executive Director
Bay Area Clean Water Agencies
shull@bacwa.org
415-404-8303

Sherry Hull

From: Gilbert-Snyder, Paul <paul.gilbert-snyder@ebmud.com>

Sent: Wednesday, December 7, 2016 11:27 AM

To: David Williams; Sherry Hull

Subject: FW: Prop 50 - Annual Post Performance Reporting

Follow Up Flag: Follow up Flag Status: Flagged

The note below confirms that DWR will not require annual post performance reporting for projects 2, 13, and 16.

As soon as we get that final Prop 50 check (sometime this month... we were told), I'll work with Sherry and accounting to close out all the Prop 50 accounts and disburse any remaining funds. At that time I'll also send out a letter to all project proponents (except 2, 13, and 16) reminding them of their annual post performance reporting requirements. That note will indicate both the DWR and BACWA email addresses that the reports must be sent to.

Every day gets us one step closer... I hope!!

Paul

From: Goodman, Erik@DWR [mailto:Erik.Goodman@water.ca.gov]

Sent: Wednesday, December 07, 2016 11:21 AM

To: Gilbert-Snyder, Paul

Subject: RE: Prop 50 - Annual Post Performance Reporting

Good Morning Paul,

We went through the chain and have come to the same conclusions that you have regarding post performance reporting. You will not be required to submit post performance reports for Projects 2, 13, and 16. We agree with on all three explanations. Thanks for bringing this to our attention.

Erik

From: Gilbert-Snyder, Paul [mailto:paul.gilbert-snyder@ebmud.com]

Sent: Wednesday, November 30, 2016 3:06 PM

To: Goodman, Erik@DWR

Subject: RE: Prop 50 - Annual Post Performance Reporting

Thanks for the clarifications Erik. BACWA will work with the project sponsors to ensure that the annual post performance reports are submitted timely.

We have seldom received formal notification of project closeouts. I think I have one or two such letters for Prop 84, but I believe the only one I have for Prop 50 was the Grant closeout letter we received on 9/29/16. That letter does indicate when reports are due for Project 3, but it does not address any reporting requirements for the grant admin project (Project 16).

 Project 2 was completed by 2008 and fully invoiced in February 2009. The retention payment was received in February 2011. I have no record of a formal closeout letter for that project. Project 13 was also completed by 2008 and fully invoiced in February 2009. The retention payment was
received in 2011. A single Post Performance Report was submitted to DWR in February 2010 (attached). That
report indicated that no additional reports would be forthcoming.

Thanks again for your assistance with these details.

Paul

From: Goodman, Erik@DWR [mailto:Erik.Goodman@water.ca.gov]

Sent: Monday, November 28, 2016 3:59 PM

To: Gilbert-Snyder, Paul

Subject: RE: Prop 50 - Annual Post Performance Reporting

Good Afternoon Paul,

1. I spoke with Jason and the requirement for post-performance is placed on the Grantee. This is outlined in the agreement. Please see below.

Post Performance Reports: Grantee shall submit a Post Performance Report for each project. Post Performance Reports shall be submitted to State within ninety (90) calendar days after the first operational year of a project has elapsed. In subsequent operational years, all Post Performance Reports for projects completed under this Grant Agreement shall be submitted concurrently, and no later than the last day of March of each year. This record keeping and reporting process shall be repeated, for each project, annually for a total of 10 years after the completed project begins operation.

2. Now onto your second question about what projects should be reporting for the required length of time. We generally send out Project Closeout Emails. Because of the shift in staffing, I don't have any of those if you were sent any by Melissa. By chance, do you have Project Closeout emails for those projects outlined: 2, 13, and 16? I can see that annual reports for those three projects wouldn't be necessary. I am hoping that you were sent something from Melissa that says that as well. If not, then I will talk with Jason again. We wanted to make sure that we asked you before assuming anything.

Thanks,

Erik Goodman, P.E. Water Resources Engineer IRWM – Financial Assistance Branch 916-653-4403

From: Gilbert-Snyder, Paul [mailto:paul.gilbert-snyder@ebmud.com]

Sent: Tuesday, November 22, 2016 11:02 AM **To:** Brabec, Jason@DWR; Goodman, Erik@DWR

Cc: Williams, David@@bacwa.org; Sherry Hull (shull@bacwa.org)

Subject: Prop 50 - Annual Post Performance Reporting

Good morning Jason & Erik -

I'd like to get clarification on two items regarding the Prop 50 annual post performance reports.

First, can you please verify that the individual project proponents, not BACWA, are responsible for electronically submitting their annual reports directly to DWR. The September 29, 2016 grant closure letter was confusing because it was addressed to BACWA and it stated "your agency is required to submit these reports every (sic) annually for 10 years." I believe that instruction was intended to be directed to EBMUD, the project proponent for the project being discussed in the letter, and not BACWA, but in the context of the letter to BACWA it is unclear. It is our understanding that BACWA is not responsible for submitting these reports.

Second, can you please verify that annual post performance reports are not required for projects 2, 13, and 16. This was noted on page 12 of the Grant Completion Report. Project 2 was a regional media campaign in 2009 to raise drought awareness and encourage conservation. It was not an infrastructure project or long-term program and there are no long-term results to report. Project 13 was a groundwater exploration project that resulted in an unsuitable well and the project proponents abandoned the well site noting that the project was complete and there would be no additional activities or continued monitoring of the project. Finally, Project 16 was grant administration, for which we understood there would be no additional reporting after the grant was closed.

Thanks for your clarification of these two items. I will let you know when we receive the final retention payment of \$85,000.

Thanks, Paul

From: Mizani, Mehdi@DWR [mailto:Mehdi.Mizani@water.ca.gov]

Sent: Tuesday, November 15, 2016 9:10 AM

To: Gilbert-Snyder, Paul

Cc: Brabec, Jason@DWR; Goodman, Erik@DWR; Wallace, Keith@DWR

Subject: RE: Prop 50 payments...

Hi Paul,

I wanted to follow up with you on the Prop 50 BACWA agreement. As you are aware, we have had to reassign project managers to the agreements that Melissa was managing. I am the project manager for the BACWA Prop 84 Round 1 agreement. The Prop 50 Program is now being managed by Jason Brabec and the project manager for the BACWA Prop 50 agreement is now Erik Goodman. I have copied both of them on this email as a reference for you. I have informed them of the retention payment that was processed for \$85,000 for projects 3, 4, and 16. Please send Erik an email when BACWA receives the retention check for those projects.

If you have any additional questions please let Erik know.

Thank you, Mehdi

From: Gilbert-Snyder, Paul [mailto:paul.gilbert-snyder@ebmud.com]

Sent: Tuesday, November 08, 2016 9:49 AM

To: Mizani, Mehdi@DWR

Subject: RE: Prop 50 payments...

I believe so, yes. The Grant Closure letter, dated 9/29/16, indicated that \$85,000 retention had been "released". That would be the full retention amount owed (covering projects 3, 4, and 16). I'm assuming that we'll soon receive a check for \$85,000.

Paul

From: Mizani, Mehdi@DWR [mailto:Mehdi.Mizani@water.ca.gov]

Sent: Tuesday, November 08, 2016 8:44 AM

To: Gilbert-Snyder, Paul

Subject: RE: Prop 50 payments...

Great. Did Melissa process the retention payment for Project 3?

Thanks, Mehdi

From: Gilbert-Snyder, Paul [mailto:paul.gilbert-snyder@ebmud.com]

Sent: Tuesday, November 08, 2016 8:34 AM

To: Mizani, Mehdi@DWR **Subject:** Prop 50 payments...

Mehdi -

Also wanted to let you know that we received the payment for Prop 50 Project 3 and now all we're waiting for is the final retention payment... which will hopefully arrive this week.

Thanks, Paul

Paul Gilbert-Snyder, PE
East Bay Municipal Utility District
Water & Natural Resources
375 Eleventh Street, MS 902
Oakland, CA 94607-4240
510-287-0432

AIR Committee – Report to BACWA Board

AIR Committee Meeting on: 11/30/16 Executive Board Meeting Date: 12/16/16

Committee Co-Chairs: Nohemy Revilla and Randy Schmidt

Committee Request for Board Action: None

16 attendees (incl. 2 on phone) representing 10 member agencies

Sarah Deslauriers and Courtney Mizutani provided the <u>regulatory update presentation</u>. Key topics from the meeting and since are below:

BAAQMD Rule Updates

Regulation 2, Rule 5 - We reviewed the proposed amendments to Regulation 2, Rule 5 New Source Review of Toxic Air Contaminants (TACs) - BAAQMD formally adopted the 2015 changes by the Office of Environmental Health Hazard Assessment (OEHHA) to change cancer potency factors and Health Risk Assessment methodology for Toxic Air Contaminants (TAC). The net result will be an increase in the estimated cancer risk of 200% to 500% even though TAC emissions remain the same. The BAAQMD Board adopted the amendments as proposed December 7th.

Regulation 2, Rule 2 - We reviewed the 2012 amendments to Regulation 2, Rule 2 that took effect August 31, 2016. The "new" amendments apply to any permit application that was not complete as of August 31st. It applies to new or modified sources. Rule 2 contains requirements for Best Available Control Technology and emission offsets and implements federal New Source Review and Prevention of Significant Deterioration requirements. The key here is New Source Review (NSR) determination for new or modified sources has changed.

Regulution 11, Rule 18 - Proposed Rule 11-18, Risk Reduction of Air Toxic Emissions at Existing Facilities, was discussed at length. The proposed rule includes a health risk assessment, development of a risk reduction plan, and implementation of risk reduction measures for existing sources of TACs. Phased implementation of the rule would take place based on each facility's cancer prioritization score. The committee is developing a White Paper that will be discussed at the Executive Board meeting.

Facilities who would like to know their Preliminary Cancer Priority Score can request it from Sanjeev Kambo of the BAAQMD at skamboj@baaqmd.gov; however, Sarah has enquired on behalf of BACWA whether BAAQMD would be open to providing all scores at once to the AIR Committee. They have agreed to do so given we provide them a list of all facilities including the BAAQMD Facility ID number. Sarah is coordinating with Lorien on compiling this information.

The BACWA AIR Committee provided written comments on Rule 11-18 and submitted the letter to BAAQMD on December 2. In addition, Randy Schmidt (on behalf of BACWA AIR), Lori Schectel (CCCSD), Laura Pagano (SFPUC and on behalf of BACWA), and Sarah (on behalf of the California Association of Sanitation Agencies) coordinated to provide public comment to the BAAQMD Board during the December 7th Board Meeting.

Issue Updates

Developing BMPs for Digester Gas Venting - Sarah spoke to Brenda Cabral - Brenda recommended the BACWA AIR Committee draft a document with those best management practices and provide it to her for review and feedback. **Injecting Biogas into PG&E Pipelines** - Lorien is coordinating interested member agencies to participate in a conference call to plan a meeting with BAAQMD PG&E on January 5 2017, at 1pm, to discuss the potential for projects involving pipeline injection of biomethane. Please let Lorien know if your agency would like to participate in the call.

Next Meeting: The next meeting is scheduled for March 15, location and facility tour to be determined.

Meeting Date: December 7, 2016

Prepared By: Lorien Fono, BACWA RPM

BAPPG Chair: Robert Wilson

23 attendees representing 15 member agencies.

Committee Notes are available online.

Committee Updates from BAPPG's General Committee Meeting on October 5, 2016:

Regional Water Board Update

Pollution Prevention reports are due in February for most agencies, and can be submitted via CIWQS by an authorized staff person. James Parrish repeated his presentation on reporting from October 2015, and referred the committee to the Water Board's Pollution Prevention Reporting Guide.

Pharmaceutical Take-Back Ordinances

Contra Costa County is developing a <u>Safe Drug Disposal Ordinance</u>. POTWs in the County submitted a <u>comment letter</u> proposing provisions to strengthen the ordinance. The Alameda County Ordinance is in effect. It uses a common carrier model and will be setting up kiosks soon.

Pesticides Update

The DPR's anticipated announcement on human health effects of fipronil has been pushed back to 2017. There is now a <u>link</u> to the study of the passage of flea-control pesticides through POTWs on DPR's home page. BAPPG pesticides leads have been discussing flea control alternatives with veterinary associations, who are generally more in favor of recommending oral medications than mechanical controls such as vacuuming.

Microplastics

Nirmela Arsem of EBMUD gave a presentation on microplastics. She described the background of the issue and potential ecological impacts. She gave a detailed summary of the lab subcommittee's efforts to develop a robust method to characterize and quantify microplastics in effluent. She made the point that getting reliable data is costly and labor-intensive, highlighted that all particles need to by confirmed as plastic by infrared spectroscopy.

Agency Highlights

Staff from <u>WCWD</u> and the <u>City of Petaluma</u> gave presentations on their Pollution Prevention Programs, highlighting FOG inspections and outreach, dental amalgam separator inspections, pharmaceutical take-back programs, and participation in community events.

Committee Budget

The committee has spent 72.5 percent of its annual budget. The Steering committee is recommending shifting \$6K of funds from Toilets Aren't Trashcans to pesticides advocacy. This transfer is within the committee's purview and does not need Board approval.

Date of Next BAPPG Meeting

BAPPG General Meeting
February 1, 2017: 10:00am-12:00pm
1515 Clay Street, Second Floor, Room 12
Oakland, CA

InfoShare Asset Management— Report to BACWA Board

InfoShare Asset Management Committee meeting on: <u>11/30/2016</u>

Executive Board Meeting Date: <u>12/16/2016</u> Committee Chair: <u>Dana Lawson, CCCSD</u>

Committee Request for Board Action: None

Attendees: Dana Lawson, PJ Turnham (CCCSD); Aaron Johnson (DSRSD); Dillon Cowan, Rebecca Overacre (EBMUD); Andy Hall (City of Livermore)

Introductions

See above

Announcements

- PG Environmental, a contractor for USEPA Region 9, assisted in the development of a draft white paper on asset management. Review was requested from specific agencies, who were directed not to share outside of our organizations at this point. The white paper discussed the barriers to implementing an asset management program as well as the benefits from it, and included examples from agencies.
- No further communication has been received regarding the EPA draft permit language via our Regional Board.

Discussion

- In our August meeting, the group agreed to use this meeting as a "working meeting" to being development of asset cost tables that could be shared amongst all agencies.
- DSRSD and CCCSD brought data on flash drives; EBDA and SFPUC previously provided data that will also be used.
- Group determined hierarchy for assets as follows:
 - Asset Class/ Discipline (e.g. Civil Sitework, Electrical, Instrumentation (& Process Control), Mechanical, Structural)
 - Asset Type (e.g. Pump)
 - Asset Subtype: e.g. positive displacement, centrifugal
- Group determined data to track as follows:
 - o Size/ Unit of Measure
 - Asset Cost (\$/UOM)
 - Useful Life (yrs) also min/max
 - o # of Rehabs Possible
 - Rehab Cycle (yrs)
 - Extension of Useful Life per Rehab (Yrs)
 - Rehab Cost (as a % of Asset Cost)
- Group agreed to track asset cost instead of replacement cost (which would include overhead, labor, etc.).
 Agencies can apply their own, agreed-upon multipliers to scale up to the full replacement cost. Group may consider drafting guidelines for this as a future project.
- Dana will complete setting up the initial spreadsheet, then route for review to the participants at today's meeting. Group discussed breaking up the list by Asset Class and assigning to each person to populate the initial data.
- Group discussed how to share the document, suggestions included DropBox and OneDrive. For now, a color-editing system will be used in the Excel spreadsheet until a Dropbox is set-up for the group.
- Group discussed keeping asset cost in current year's dollars, escalating annually for inflation and spotchecking assets to determine if a more comprehensive update is needed (e.g. if a material cost escalates causing the asset type to increase more than inflation).

Next BACWA Asset Management Infoshare Committee Meeting: Tentatively February 22, 2017 at TBD

Please e-mail <u>dlawson@centralsan.org</u> if your agency can host and/or provide a presentation; default is to host at CCCSD or EBMUD if no other agencies are able to volunteer.

Permits Committee – Report to BACWA Board

Permits Committee Meetings on: 12/13/16
Executive Board Meeting Date: 12/16/16

Committee Chair: Eric Dunlavey

Committee Request for Board Action: None

15 attendees, representing 8 member agencies Regional Water Board Staff in attendance

Regional Water Board Report-out

Robert Schlipf has filled Bill Johnson's former position, and Marcia Liao's position will be filled shortly, leaving two vacancies at the Regional Water Board NPDES division. The State Water Board is investigating introducing language into NPDES permits in codify QA/QC procedures.

Selenium

The EPA is extending by sixty days the period during which stakeholders may provide comments on the Agency's draft technical support materials for the selenium aquatic life criterion. The comment period will now close on February 10, 2017. The materials will be finalized by September 2017. The Water Boards will provide comments on these draft materials, since the use of fish tissue criteria as superseding water column criteria, as well as an average for measuring compliance, rather than an instantaneous maximum, form the basis for the Water Boards' and BACWA's recommendations in our comment letters on the SF Bay and Delta criteria.

For moving forward with the proposed Selenium criteria for the SF Bay and Delta, EPA will need to consult with resource agencies, which will be a lengthy process. EPA staff have reported that they are updating their models and doing data analysis based on the data provided to EPA by the LSB dischargers after the release of the proposed criteria. EPA staff said they are working to update the criteria so that they're implementable, but warn that EPA headquarters are often proponents of more stringent criteria than the district offices. See comment letters on the SF Bay and Delta Criteria in EPA's docket.

Toxicity

The next draft of the State Toxicity Policy is slated for March 2017.

The Southern California Coastal Water Research Project (SCCWRP), has conducted research that suggests that there are problems with reproducibility in some of the chronic toxicity methods, particularly with the *Ceriodaphnia dubia* test species. The Summit Partners, composed of CASA, CWEA, BACWA, SCAP, and CVCWA, have contacted SCCWRP and the Stormwater Monitoring Coalition (SMC) with a **proposal** to further evaluate accuracy, and approaches to mitigate and correct inaccuracies, related to the *Ceriodaphnia dubia* reproduction test. SCCWRP has indicated their willingness to participate in this study if the true intent is to improve the test, rather than to undermine the State Toxicity Plan.

BAAQMD Rule 11-18

Draft Rule 11-18 is the Bay Area Air Quality Management District's (BAAQMD's) effort to protect public health from toxic air pollution from existing facilities. BAAQMD expects Rule 11-18 would substantially reduce health risks from various existing facilities by requiring the implementation of all technically and economically feasible risk reduction measures by significant sources of toxic air contaminants (TACs). The Draft Rule will affect publicly owned treatment works POTWs. Concerns POTWs have related to this Draft Rule include its compliance schedule, potential fiscal impact, control technology determinations, public notification, cross media impacts, and renewable energy production. BACWA submitted a comment letter on the Rule, and will host BAAQMD staff at the Executive Board meeting on 12/16. The AIR committee support is developing a white paper on the Rule to help BACWA members understand its implications. BACWA will also request prioritization scores on behalf of any agencies that provide their facility IDs.

Nutrients

- Optimization/Upgrade Studies Three draft facilities reports are set to be distributed this this week
 (Petaluma, San Leandro, and CMSA). Only 6 reports are yet to be initiated nearing the end of the draft
 plant report preparation phase. The 6 include: Millbrae, Richmond, San Mateo, Sausalito-Marin, SASM, and
 West County. The team is responding to comments received on the draft reports thus far. HDR has received
 questionnaires from 25 plants. Additional follow-up is needed to get the remaining 12.
- Suisun Synthesis SFEI staff have recently posted a draft <u>update</u> to the Suisun Synthesis, which was <u>originally published</u> in March 2014. These materials were reviewed at the <u>Delta-Suisun Nutrient Workshop</u> in November 2016, the purpose of which is to highlight research that is relevant to hypotheses of nutrients' role in phytoplankton growth, namely, the "ammonia paradox". The draft update to the Suisun Synthesis provides material in chapters that each either support or refute these hypotheses. Input from the workshop will be used to develop a White Paper on the issue, which is expected in Draft form in Winter 2017.
- NMS Steering Committee meeting #11: A group is doing full scale experiments testing the ammonia paradox. Additionally, there was a discussion about how some phytoplankton species and dinoflagellate labeled as harmful are sometimes high quality fish food.
- EPA Nutrient Survey US EPA <u>letter</u> regarding draft nutrient survey sent. Nutrient study <u>webpage</u> has more information. See <u>BACWA Comment letter</u>. According to NACWA, it is unlikely that the EPA will decide to use its 308 authority to require responses to the questionnaire, and they may not proceed with this effort at all.

Announcements

- BACWA <u>Biosolids survey</u> please respond. Draft report will be available in January.
- Update from CASA Regulatory Workgroup There was a discussion of EPA priorities. EPA staff said they
 would work with colleagues in the office of Air and Radiation to look for solutions where local air regulations
 impede clean energy projects. CASA Regulatory Workgroup is looking to hold joint meetings with the
 Permits Committee twice per year.
- State Water Board postpones update on CECs Pilot Monitoring Plan to January/February so they can get more information from regional monitoring efforts.
- Call for Applications to Serve on the San Francisco Bay Restoration Advisory Committee.
- State Water Board <u>resolution</u> to update State Recycled Water Policy and reaffirm support of Salt/Nutrient Management Plans. CASA requested that the two efforts be decoupled.
- BACWA Annual Meeting January 27 please <u>register</u>

Next BACWA Permits Committee Meeting: Tuesday, January 10, EBMUD.



December 19, 2016

Diana S. Brooks
Chief, Water Use and Efficiency Branch
Division of Statewide Integrated Water Management
Department of Water Resources
901 P Street
Sacramento, CA 95814

Submitted via email to: wue@water.ca.gov

Subject: Comments on "Making Conservation a Way of Life", Draft Report Implementing Executive Order (EO) B-37-16

Dear Ms. Brooks

On behalf of the Bay Area Clean Water Agencies (BACWA), we thank you for the opportunity to comment on the draft report "Making Conservation a Way of Life", implementing Executive Order (EO) B-37-16 (draft report). BACWA's members include 55 publicly owned wastewater treatment facilities ("POTWs") and collection system agencies serving 7.1 million San Francisco Bay Area residents. Many of our member agencies are also recycled water producers. We host an active Recycled Water Committee where both wastewater agencies and water agencies can discuss regulatory and technical issues relating to fostering the increased use of recycled water.

BACWA has a comment specific to "Recycled Water, Section 3.1.3" of the draft report. BACWA is concerned with the requirement that landscape areas irrigated with recycled water are included in the outdoor water use targets. We appreciate that the state wants to ensure that all water, including recycled water, is used efficiently. However, there are already strict prohibitions on recycled water producers and users to prevent the release of recycled water into the environment. Including areas irrigated with recycled water into the targets effectively applies a second set of runoff prohibitions on these areas. This would be a disincentive to expanding the use of recycled water to offset potable water for irrigation. Furthermore, when urban water agencies receive credit for converting irrigated areas to recycled water, it promotes the expansion of recycled water into urban areas. This is essential to making recycled water conversions cost effective.

We urge you to exclude areas irrigated with recycled water from the outdoor water use portion of the 2025 targets. If you have any questions, please contact BACWA's Recycled Water

BACWA Comments on Making Conservation a Way of Life

Committee chairs Leah Walker (lwalker@ci.petaluma.ca.us) or Rhodora Biagtan (biagtan@dsrsd.com).

Respectfully Submitted,

David R. Williams Executive Director Bay Area Clean Water Agencies

Cc: BACWA Board

Leah Walker, BACWA Recycled Water Committee Chair Rhodora Biagtan, BACWA Recycled Water Committee Chair

Executive Director's November 2016 Report

NUTRIENTS:

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

- -Chaired the monthly CMG meeting with the main topic being the review of progress on the studies and the no net loading cost estimate.
- -Coordinated with the OP/Upgrade consulting team on technical and administrative issues.
- -Participated in conference calls for planning the 11th meeting of the NMS Steering Committee and provided BACWA in-kind services by preparing minutes from the #22 meeting of the Planning Subcommittee.

BACWA BOARD MEETING AND CONFERENCES:

- -Worked with staff in preparing for the November BACWA Board meeting including reviewing the agenda with the Board Chair and arranging for speakers and presentations.
- Attended the BACWA monthly Board meeting in November.
- -Continuing to track all action items to completion.
- -Prepared a draft agenda for the Annual Meeting and confirmed attendance of outside speakers.
- -Worked with the AED to finalize routine and special Board meetings dates for calendar year 2017.

PERMIT COMMITTEE:

-Attended the monthly Committee meeting. Engaged in discussions on a variety of topics including the proposed selenium criteria, the new ELAP regulations, nutrients, the Hg/PCB watershed permit and the yet to be released Toxicity Plan.

ASC/SFEI:

-As a member of the Executive Committee, coordinated with SFEI Executive Director on Board activities.

CASA:

-Provided input to the CASA Annual Regulatory Workgroup 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 17 member invoices.

RECYCLED WATER COMMITTEE:

Attended the Committee meeting where guest speakers from the SWRCB and SFEI discussed available funding and nutrient scenario planning respectively.

ADMINISTRATION:

- -Held the monthly BACWA staff meeting to coordinate and prioritize activities.
- -Signed off on invoices, reviewed correspondence, prepared for upcoming Board meeting, responded to inquiries on BACWA efforts, oversaw updating of web page and provided general direction to BACWA staff.
- -Worked with the RPM in the preparation of the monthly BACWA bulletin.
- -Coordinated with the AED to plan activities and review duties, schedules, and priorities.
- -Developed and responded to numerous emails and phone calls as part of the conduct of BACWA business on a day-to-day basis.

MISCELLANEOUS MEETINGS/CALLS:

- -EBMUD's program manager on Prop 50 and Prop 84 and transition of program administration to ABAG
- -BACWA Chair and Committee Chairs on items that arose during the month
- -Water Board staff on coordinating the nutrient activities
- -other misc calls and inquiries regarding BACWA activities
- -participated in coordination calls with the HDR project manager
- -responded to Board member's requests for information



BACWA ACTION ITEMS

Number	Subject	Task	Deadline	Status
	Action Items from November 18, 2016 BACWA Executive Bo	ard Meeting		
	Tara		T	
2016.11-26	RO Proposal	Make sure San Jose is in communication with Santa Clara Valley Water District (RPM)	11/30/2016	
2016.11-25	Rule 11-18	Authorize a White Paper from Carollo on implications for POTWs (Board-ED/RPM/AED)	12/16/2016	6 completed
2016.11-24	Rule 11-18	Consider meeting with BAAQMD in Feb or Mar (ED)	3/31/2017	pending
2016.11-23	Rule 11-18	Consider holding a BACWA Workshop on Air regulations (ED)	3/31/2017	pending
2016.11-22	Annual Meeting Agenda	Add Biosolids to, and remove New Enforcement Policy and Selenium from hot topics. Add Hertzberg Amendment (ED)	12/16/2016	completed
2016.11-21	Nutrient Strategy Team	Add Karin North to group (AED)	11/18/2016	completed
2016.11-20	Nutrient Surcharge	Create estimate of \$/lb for Principal agencies (ED/RPM/AED)	11/30/2016	pending
2016.11-19	EPA Comment Letter on CWA 308	Send Comment Letter (RPM/AED)	11/18/2016	completed
2016.11-18	Scenario Planning Jt Strategy between SFEI & ReNUWIt	Invite SFEI & ReNUWIt to December meeting (ED)	11/30/2016	completed
2016.11-17	Science Plan	Provide access to members (RPM/AED)	11/30/2016	pending

	Action Items Remaining from Previous BACWA Executive Board Meetings					
2016.6-93	NMS Steering Committee	Work With David Senn and Jim Ervin to get studies inside the tent (ED)	8/31/2016 pending			
2016.5-82	Biosolids Literature Review	Committee to consider alternatives and matching funds for further Board deliberation (Karri Ving)	9/30/2016 pending			
2016.5-77	Opt/Upgrade Workshop	Schedule a 2nd Workshop for after Pardee (ED)	9/30/2016 pending			
2016.3-65	Proposition 84	Develop agreement between BACWA & ABAG to transfer Prop 84 admin responsibilities (AED/Paul Gilbert-Snyder)	9/15/2016 pending			
2016.3-61	Membership Policy	Develop policy for out of region agency membership (ED)	8/31/2016 pending			

FY17: 21 of <u>26</u> Action Items completed.
FY 16: <u>92</u> of <u>97</u> Action Items completed.
FY 15: <u>90</u> of <u>90</u> Action Items completed.
FY 14: <u>128</u> of <u>128</u> Action Items completed.
FY 13: <u>67</u> of <u>67</u> Action Items completed.



BACWA BOARD CALENDAR

January 2017 to December 2017

DATE AGENDA

12/22/2016

Joint Meeting Other Business: Discussions

Items due: SNMP

Pagano; Ervin; Connor; Horenstein; Schectel

Williams; Fono

1/27/2017

Annual Members Mtg When to contact media

Pagano; Ervin; Connor; Horenstein; Schectel RMP & NMS Update (Phil Trowbridge/David Senn)

Williams; Fono; Hull

2/?/2017

Nutrient Optimization/Upgrade Workshop #2

Pagano; Ervin; Connor; Horenstein; Schectel Optimization/Upgrade Studies

Williams; Fono Water Board

2/17/2017 Consent

Monthly Board Mtg Previous Board Meeting Minutes (AED)

Items due: 2/10/15 Monthly Financial Report
Pagano; Ervin; Connor; Horenstein; Schectel

Authorizations & Approvals

Williams; Fono; Hull Approval: Solano Comm College Agrmt - Spring 2016

Other Business - POLICY/STRATEGIC

Discussion: WB Joint Meeting Debrief

Other Business - OPERATIONAL

Discussion: FY2017 Budget Planning
Discussion: Annual Meeting Debrief
Discussion: Update on BARR Taskforce

Discussion: Update on regional and statewide biosolids issues

Discussion: Biannual Update on CWCCG (SDeslauriers)

Reports

Committee Reports (Committee Chairs)
Board Reports (Executive Board)

ED Report (ED) RPM Report (RPM)

Other BACWA Representative Reports

3/17/2017 Consent

Monthly Board Mtg Previous Board Meeting Minutes (AED)

Items due: 3/10

Pagano; Ervin; Connor; Horenstein; Schectel

Williams; Fono; Hull

Monthly Financial Report

Authorizations & Approvals

Other Business - POLICY/STRATEGIC

Discussion: HDR Quarterly Update on Optimization/ Upgrade studies

Discussion: Draft Agenda Water Board Jt Mtg Presentation: CPSC Update (Heidi Sanborn)

Other Business - OPERATIONAL

Discussion: Second Draft of FY17 Budget

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED) RPM Report (RPM)

Other BACWA Representative Reports

3/?/2017

Joint Meeting

Other Business: Discussions

Items due:

Pagano; Ervin; Connor; Horenstein; Schectel

Williams; Fono

4/21/2017 Consent

Monthly Board Mtg

Items due: 4/14

Pagano; Ervin; Connor; Horenstein; Schectel

Williams; Fono; Hull

Previous Board Meeting Minutes (AED)

Monthly Financial Report

Authorizations & Approvals

Approval: FY18 Budget

Other Business - POLICY/STRATEGIC

Discussion: WB Joint Meeting Debrief

Other Business - OPERATIONAL

Discussion: Succession Planning FY18

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED) RPM Report (RPM)

Other BACWA Representative Reports

5/19/2017 Consent

Monthly Board Mtg

Previous Board Meeting Minutes (AED)

Items due: 5/12

Monthly Financial Report

Pagano; Ervin; Connor; Horenstein; Schectel Authorizations & Approvals

Williams; Fono; Hull

Approval: FY18 Amendments/Agreements

Approval: Officers: Chair & Vice-Chair

Approval: BACWA Reps to ASC/SFEI Governing Board

Authorization: Legal Support Amendments

Other Business - POLICY/STRATEGIC

Discussion: Draft Agenda Water Board Jt Mtg

Discussion: Pesticides Update (Kelly Moran)

Other Business - OPERATIONAL

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED) RPM Report (RPM)

Other BACWA Representative Reports

5/?/2017

Joint Meeting

Other Business: Discussions

Items due:

Pagano; Ervin; Connor; Horenstein; Schectel

Williams; Fono

6/16/2017 Consent

Monthly Board Mtg Previous Board Meeting Minutes (AED)

Items due: 6/? Monthly Financial Report

Pagano; Ervin; Connor; Horenstein; Schectel <u>Authorizations & Approvals</u>

Williams; Fono; Hull

Approval: FY18 Agreements

Other Business - POLICY/STRATEGIC

Discussion: HDR Quarterly Update on Optimization/ Upgrade studies

Discussion: WB Joint Meeting Debrief

Discussion: Biannual Update on CWCCG (SDeslauriers)

Other Business - OPERATIONAL

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)
RPM Report (RPM)

Other BACWA Representative Reports

6/?/2017 Tentative

BAAQMD Workshop

Pagano; Ervin; Connor; Horenstein; Schectel

Williams; Fono

7/21/2017 Consent

Monthly Board Mtg

Previous Board Meeting Minutes (AED)

Items due: 7/14

Monthly Financial Report

Pagano; Ervin; Connor; Horenstein; Schectel Authorizations & Approvals

Approval: Annual Nutrient WS Payment

Williams; Fono; Hull

Approval: FY18 Agreements

Other Business - POLICY/STRATEGIC

Discussion: Draft Agenda Pre-Pardee Technical Seminar

Discussion: Risk Reduction Update

Discussion: Draft Agenda Water Board Jt Mtg

Other Business - OPERATIONAL

Reports

Committee Reports (Committee Chairs) Board Reports (Executive Board)

ED Report (ED) RPM Report (RPM)

Other BACWA Representative Reports

7/?/2017

Joint Meeting

Other Business: Discussions

Items due:

Pagano; Ervin; Connor; Horenstein; Schectel

Williams; Fono

8/18/2017 Consent

Monthly Board Mtg

Previous Board Meeting Minutes (AED)

Items due: 8/11

Monthly Financial Report

Pagano; Ervin; Connor; Horenstein; Schectel

Authorizations & Approvals

Williams; Fono; Hull

Other Business - POLICY/STRATEGIC

Discussion: Draft Agenda & Schedule Pre & Pardee Technical Seminar

Discussion: WB Joint Meeting Debrief

Discussion: RMP & NMS Update (Phil Trowbridge/David Senn)

Discussion: Risk Reduction Update **Other Business - OPERATIONAL**

Discussion: FY18 Arleen Navarret Award

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED) RPM Report (RPM)

Other BACWA Representative Reports

9/15/2017 Consent

Monthly Board Mtg

Previous Board Meeting Minutes (AED)

Items due: 9/8

Williams; Fono; Hull

Monthly Financial Report

Pagano; Ervin; Connor; Horenstein; Schectel

Authorizations & Approvals Approval: Solano Comm College Agrmt - Fall 2017

Other Business - POLICY/STRATEGIC

Discussion: Draft Agenda Pardee Technical Seminar

Discussion: Annual Meeting Planning

Other Business - OPERATIONAL

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED) RPM Report (RPM)

Other BACWA Representative Reports

9/15/2017 Tentative

Pre-Pardee Mtg

Pagano; Ervin; Connor; Horenstein; Schectel

Williams; Fono; Hull

10/12-13/2017

Pardee Technical Seminar

Pagano; Ervin; Connor; Horenstein; Schectel

Williams; Fono; Hull

11/17/2017 Consent

Monthly Board Mtg

Previous Board Meeting Minutes (AED)

Items due: 11/10

Monthly Financial Report

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Pagano; Ervin; Connor; Horenstein; Schectel <u>Authorizations & Approvals</u>

Williams; Fono; Hull

Approval: Adoption of FY16 Annual Reports

Approval: Finalize next Calendar Year meeting dates

Other Business - POLICY/STRATEGIC

Discussion: Pardee Debrief & Survey

Other Business - OPERATIONAL

Discussion: Annual Meeting Planning

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

12/15/2017 Consent

Monthly Board Mtg

Previous Board Meeting Minutes (AED)

Items due: 12/8

Monthly Financial Report

Pagano; Ervin; Connor; Horenstein; Schectel

Authorizations & Approvals

Williams; Fono; Hull

Other Business - POLICY/STRATEGIC

HOLIDAY LUNCH

Discussion: Draft Agenda Joint Meeting with WB

Other Business - OPERATIONAL

Discussion: Annual Meeting Agenda

Reports

Committee Reports (Committee Chairs)

Board Reports (Executive Board)

ED Report (ED)

RPM Report (RPM)

Other BACWA Representative Reports

CURRENTLY UNSCHEDULED

& 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



Regulatory Program Manager's Report to the Board

November 2016

NUTRIENT SUPPORT: Attended EBMUD meeting on nutrient trading. Drafted BACWA comment letter on EPA Nutrient Questionnaire. Reviewed Suisun Synthesis II. Called in to CMG meeting.

BACWA BULLETIN: Drafted December BACWA Bulletin.

EPA PROPOSED SELENIUM CRITERIA: Reviewed other entities' comment letters on proposed Selenium Criteria.

CECs: Collected data from SFEI-coordinated voluntary CECs study.

PROP 1 PROPOSAL: Participated in kickoff conference call with team members. Communicated with State Water Board to discuss funding opportunities and set up follow-up meeting.

TOXICITY: Reviewed litigation by SCAP and CVCWA against EPA on use of TST.

Hg/PCB WATERSHED PERMIT: Reviewed petition and made recommendation to keep in in abeyance.

COLLABORATION WITH EXTERNAL ASSOCIATIONS: Participated in CASA Regulatory Workgroup call. Participated in conference call with CASQA members to discuss third party lawsuits.

COMMITTEE SUPPORT:

AIR – Reviewed and edited comment letter on Rule 11-18. Attended and provided support for committee meeting. Drafted Board report for September meeting. Contacted agencies to set up call to discuss potential projects involving pipeline injection.

BAPPG – Drafted meeting notes and Board Report. Reviewed and submitted comment letters on pesticide reregistration.

Biosolids: Contacted agencies to get responses to the biosolids survey.

Collection Systems – Drafted agenda, attended meeting, drafted board report.

Permits – Drafted agenda and Board report and attended meeting. Posted signup for holiday luncheon. Developed Google Group for committee.

Recycled Water – Attended meeting and drafted Board report. Reviewed draft State Water Board proposed resolution on updating the Recycled Water Policy.

Executive Board – Prepared packet materials and attended meeting. Edited meeting minutes and action items.

Staff Meeting – Met with BACWA staff to discuss BACWA administration and plan upcoming meetings.

MEETINGS ATTENDED: Recycled Water Committee (11/2), CMG meeting (11/4), Permits Committee (11/8), Staff meeting (11/9), Collection Systems Committee (11/10), CASA Regulatory Workgroup Conference Call (11/10), RO Concentrate Team Call (11/22), Nutrient Trading meeting (11/28), AIR Committee (11/30).