Executive Board Meeting Agenda

Friday, March 20, 2015 9:00 a.m. – 12:30 p.m.
EBMUD Treatment Plant, Lab Library
2020 Wake Ave., Oakland CA.

Agenda Item	Time	Pages
ROLL CALL AND INTRODUCTIONS	9:00 a.m. – 9:03 a.m.	
PUBLIC COMMENT	9:03 a.m. – 9:05a.m.	
CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER	9:05 a.m. – 9:07 a.m.	
CONSENT CALENDAR	9:07 a.m. - 9:10 a.m.	
1. February 20, 2015 BACWA Executive Board Meeting Minutes		3-8
2. January, 2015 Treasurer's Report		9-13
REPORTS		
3. Committee Reports	9:10 a.m. – 9:30 a.m.	
a. Finance Committee Report – Investment Options (Scott Klein)		14-15
b. Other Committee Reports		16-26
Other Committee Reports		
4. Executive Board Reports		
5. Executive Director Report	9:30 a.m. – 9:40 a.m.	27-34
6. Regulatory Program Manager Report	9:40 a.m. – 9:45 a.m.	35-37
7. Other BACWA Representative Reports	9:45 a.m. – 9:50 a.m.	
a. RMP-TRC: Rod Miller	9:50 a.m. – 10:00 a.m.	
b. RMP Steering Committee: Karin North; Jim Ervin		
c. Summit Partners: Dave Williams		38-44
d. ASC/SFEI: Laura Pagano; Dave Williams	See link below	
e. Nutrient Governance Steering Committee: Ben Horenstein; Jim Ervin		
f. SWRCB Nutrient SAG: Dave Williams		
g. SWRCB Focus Group – Bacterial Objectives: Lorien Fono; Amy Chastain		
h. SWRCB Focus Group – Mercury Amendments to the State Plan: Tim Potter		45
i. Nutrient Technical Workgroup: Eric Dunlavey		
j. NACWA Taskforce on Dental Amalgam: Tim Potter		
k. BAIRWMP: Cheryl Munoz; Linda Hu; Dave Williams		

Please note that this is a large file and will take a few moments to download.

http://bacwa.org/LinkClick.aspx?fileticket=P6sHP71cgtc%3d&tabid=73&portalid=0&mid=405

OTHER BUSINESS		
8. Approval: Board Approval of Change of Start Date for CSUS-CCP Contract	10:00 a.m. – 10:03 a.m.	46-51
9. Approval: Board Approval of Amendment to contract with Whitley Burchett for Recycled Water Committee Projects	10:03 a.m. – 10:05 a.m.	52-56
10. Discussion: FY16 Final Draft Budget	10:05 a.m. – 10:10 a.m.	57-59
11. Discussion: BACWA Annual Report FY13 & FY14 – Receipt by Board	10:10 a.m. – 10:15 a.m.	60-68
12. Presentation: Laboratory Committee Chair – Pittcon 2015 (Noel Enoki)	10:15 a.m. – 10:20 a.m.	
13. Discussion: IRWMP/Prop 84 Round 3 (RPM)	10:20 a.m. – 10:35 a.m.	69-81
14. Discussion: Report out from Joint Meeting with Water Board	10:35 a.m. – 10:45 a.m.	
a. Toxicity		82-84
b. Recycled Water Permitting		
c. SSO Enforcement Options		85-87
15. Discussion: Nutrients	10:45 a.m. – 11:45 a.m.	
a. Technical Work		
i. Assessment Framework		
ii. LSB POTW Report Out on Technical Needs		
b. Regulatory		
i. Consultant Team Update		
ii. Permitting Options		
c. Governance Structure		
i. Program Coordinator Update		
16. Discussion: PCB Petition (RPM)	11:45 a.m. – 11:50 a.m.	88-100
17. Discussion: Bay Planning Coalition	11:50 a.m. – 12:00 p.m.	101
18. Discussion: Risk Reduction (RPM)	12:00 p.m. – 12:10 p.m.	102-110
19. Discussion: Update on BACWA Website Development	12:10 p.m. – 12:20 p.m.	
20. Discussion: Water GAP Analysis/Climate Change (RPM)	12:20 p.m. – 12:25p.m.	111-123
21. Discussion: Reminder of Requirements for Training & Filings	12:25 p.m. – 12:29p.m.	124
SUGGESTIONS FOR FUTURE AGENDA ITEMS	12:29 p.m. – 12:30 p.m.	
NEXT REGULAR MEETING The next regular meeting of the Board is scheduled for **April 17, 2015 from 9:00 am – 12:30 pm** at the **SFPUC, Hetch Hetchy Room, 13th Floor, 525 Golden Gate Ave., San Francisco, CA**		
ADJOURNMENT	12:30 p.m.	

Executive Board Meeting Minutes

February 20, 2015

ROLL CALL AND INTRODUCTIONS

Executive Board Representatives: Mike Connor, Chair (East Bay Dischargers Authority); Laura Pagano (San Francisco Public Utilities Commission); Jim Ervin (San Jose); Vince De Lange (East Bay Municipal Utility District); Jean-Marc Petit (Central Contra Costa Sanitary District).

Other Attendees:

Name	Agency/Company
Tim Potter	Central Contra Costa Sanitary District
Karin North	Palo Alto
Amanda Roa	Delta Diablo
Denise Connors	Larry Walker Associates
Tricia McGovern	PME
Vince Falzon	Burlingame
Meg Herston	Fairfield-Suisun Sewer District
Amy Chastain	SFPUC
Heidi Sanborn	CPSC
David Senn	SFEI
Tom Hall	EOA
Melody La Bella	Central Contra Costa Sanitary District
Holly Kennedy	HDR
Mike Falk	HDR
David Williams	BACWA
Sherry Hull	BACWA
Lorien Fono	BACWA

PUBLIC COMMENT

None.

CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER

None.

CONSENT CALENDAR

1. December 19, 2014 BACWA Executive Board Meeting Minutes
2. November & December 2014 Treasurer's Report

Consent Calendar items 1 and 2 *were approved in a motion made by Vince De Lange and seconded by Jean-Marc Petit. The motion carried unanimously.*

REPORTS
Committee Reports were included in the handout packet for agenda **item 3. Pages 21-32**

AIR Committee: Report in Handout. The ED noted that in FY16 the AIR Committee will begin the transition to a full BACWA Committee. In the first year the individual agencies will pay 2/3 of the AIR fees and BACWA will pay 1/3. In FY17 the agencies will pay 1/3 and BACWA will pay 2/3. In FY18 AIR will be a fully funded BACWA Committee. The ED also noted that the Chairs of the Committee welcome the administrative support from BACWA. The next meeting of the AIR Committee will be in March, 2015 at the AIR Board offices.
BAPPG: Report in Handout. The BAPPG Annual Report has been completed and is posted on the BACWA website. It includes information about campaigns and results.
Biosolids Committee*:* No meeting. There will be a Sonoma Valley Clean Water Tour on Thursday, February 26th, 2015.
Collections Committee: Report in Handout. The RPM noted that Paul Causey and Doug Humphreys gave a presentation that will be included in the March BACWA Bulletin. As noted below in the FY16 Draft budget, BACWA will be providing support to the Collection Systems Committee in the future.
InfoShare Group: No report.
Lab Committee: Two meeting reports in Handout. The RPM reported that the Committee is developing a comment letter about migrating ELAP that will be presented to the State Water Board for review.
Permits Committee: Two meeting Reports in Handout. The February meeting was primarily spent strategizing about toxicity. To be discussed later in the Agenda.
Pretreatment Committee: Report in Handout. A comment letter to the EPA regarding Dental Amalgams will be discussed later in the Agenda. NACWA has had a good response to their survey. But there will be implementation issues. Over the course of two conference calls it is clear that the EPA is open to making it workable and that they desire feedback. Regarding pH holding time issues (15 minutes for 136 standards), the time is not feasible in the field. Agencies are encouraged to contact the State regarding standards vs. using a calibrated meter. It was noted that there is a State Water Code Amendment which states that pretreatment can now be called "field monitoring."
Recycled Water Committee: Reports in Handout.

Executive Board Representatives (Board) were given an opportunity to provide updates from each of the Principal agencies under agenda **item 4, Executive Board Reports.** Non-principal members were also given an opportunity to report out on behalf of their agencies. No actions were taken on the report-outs.
EBDA: EPA supporting ReNUWIt's truck mounted pilot study efforts.
EBMUD: By moving sidestream pilot studies to EBMUD work and avoiding duplication of efforts, they expect to free up additional funds for use by HDR for the Optimization/Upgrade Studies.
Central Contra Costa: No report.
San Francisco: The EPA will be visiting next week.
San Jose: No report.

The **Executive Director's Report** was included in the handout packet for agenda **item 5 (Page 33-41)** and the ED highlighted items in the report: he coordinated with the CASA ED on topics on mutual

interest (i.e. State Nutrient Objectives, toxicity plan and a Petition to the SWRCB for review of the LASCD permit and potential litigation, and the LGVSD permit); in cooperation with SFEI he submitted the Science Plan by February 1, 2015 so that BACWA met the Permit requirement; he noted the article included in the handout regarding the lawsuit by CESAR against Sacramento Regional County Sanitation District, noting that BayKeeper sees no value to the lawsuit. The ED informed the Board that he has been asked to help select the EBMUD Food Waste Project contractor.
He noted that 3 action items remain incomplete from fiscal year 2013-14 and 42 of the 45 action items from fiscal year 2014-15 have been completed.

The **Regulatory Program Manager (RPM) Report under agenda item 6 (**Pages 42-44) was included in the handout packet and the RPM highlighted items in the report: Reviewed Regional Water Board's conditional acceptance of the Scoping and Evaluation Plan, and BACWA's response letter; reviewed State Water Board's Bacterial Objectives for REC-1 scoping document. In response to a question about the SFEI contract, noted that the majority of spending in FY15 is carryover from FY14. FY14 contracts should be completed in FY15. FY15 funds are being monitored.

Other BACWA Representative Reports were given an opportunity to provide updates under **agenda Item 7, Other BACWA Representative Reports.** No actions were taken based on the reports.

a. RMP-TRC: Rod Miller – No Report. It was noted that an Agenda is being developed for the next PULSE State of the Estuary Conference.
b. RMP Steering Committee: Karin North; Jim Ervin – No Report.
c. Summit Partners: Dave Williams – Next meeting is in March, 2015.
d. ASC/SFEI: Laura Pagano; Dave Williams – There is a need to fill Board positions which is light on NGO's. The Chair is stepping down. The Board would like to discuss further and the item will be put on the BACWA Executive Board Meeting Agenda in March, 2015.
e. Nutrient Governance Steering Committee: Ben Horenstein; Jim Ervin – Later on Agenda.
f. SWRCB Nutrient SAG: Dave Williams – The ED referred to the letter from CASA on Page 45 of the Handout regarding the SCCWRP Draft Science Plan, noting one particular statement in the letter: "The heart of our concern with the Draft Science Plan is that the approach is geared almost exclusively toward numeric nutrient objectives as opposed to management and implementation."
g. SWRCB Focus Group – Bacterial Objectives: Lorien Fono; Amy Chastain – No Report.
h. SWRCB Focus Group – Mercury Amendments to the State Plan: Tim Potter – The focus of the State is on reservoirs.
i. Nutrient Technical Workgroup – Eric Dunlavey – No Report.
j. NACWA Taskforce on Dental Amalgam – Tim Potter – Later in Agenda.

OTHER BUSINESS

Agenda **Item 8** –Board Approval of funds for BAPPG/O'Rorke for Social Marketing & Integrated Outreach (Page 56-77). The BAPPG Committee developed an RFP. There were two responses. The contract was awarded to O'Rorke due to the fact that their submission was significantly

superior to the other submission. In response to Board questions it was agreed that it is a challenge to measure social media response.
Agenda Item 8 *was approved in a motion made by Laura Pagano and seconded by Jean-Marc Petit. The motion carried unanimously.*

Agenda **Item 9** –Chair Authorization of funds for Solano Agreement for WOT, Spring 2015 Semester (Pages 78-80). The ED noted that this item should not be listed on the Agenda as a Board Approval, but as a Chair Authorization as noted in the CAR included in the Handout. This was the only Chair Authorization taken since the December 19, 2014 Board meeting and was reviewed by the ED.

Agenda **Item 10** –Approval: Board Approval of BACWA Fund Consolidation (Pages 81-82). The ED explained that this is the follow up to the recommendation of the Board to further consolidate BACWA funds.

Agenda Item 10 *was approved in a motion made by Jim Ervin and seconded by Vince De Lange. The motion carried unanimously.*

Agenda **Item 11** –Discussion- Annual Meeting Feedback Survey (Pages 83-94). The ED provided an overview of the Annual Meeting Feedback Survey. Primary responses concerned the location and the day of the week. It was noted that Fridays can be difficult for BACWA Members since some agencies are closed on Fridays. It was requested that the Board be provided with an accounting of the number of Members and Consultants that attended which the AED will provide. The feedback from the Water Board was very good. It was suggested that BACWA invite Tam Doduc from the State Water Board next year. The Chair thanked the ED and AED for a successful Annual Meeting.

Agenda **Item 12** –Discussion- Fiscal Year 2016 Budget Planning (Pages 95-97) – The ED gave an overview of the first draft of the FY16 Budget. He noted that BACWA's high-level goals for the Budget are 1) to continue to fund commitments on regulatory compliance and programs by a combination of drawing down reserves and increasing revenues, 2) to continue the transition to the model for providing committee support at the lowest cost by using low overhead BACWA Staff while providing additional technical personnel on an as-needed basis, 3) to provide nominal funding for Committee meeting expenses and, 4) to phase in the AIR Committee. The Board's comments and requests for action were:

- Determine if there should be a third tier membership
- Determine if there is an alternate investment to increase interest income
- Increase the Miscellaneous Committee Support from $20,000 to $30,000
- Determine if there is someone to take over as Chair of the InfoShare Groups
- Determine if there is an alternate insurance policy at a lower cost.

Agenda **Item 13** – Discussion – Toxicity Meeting with EPA (Pages 98-104). The ED noted that he, along with several members of the Board and Tom Hall from EOA, would be meeting with Dave Smith at the EPA following the Board meeting. The Agenda supports the need to determine how to avoid compliance jeopardy by pursuing the numeric limits on permits. It was noted that an ongoing compilation of data should be explored: an informative annual report with a summary of testing; a quarterly report by BACWA on triggers; outside peer review.

Agenda **Item 14 -** Discussion – Nutrients

a) Technical Work
b) Regulatory
    i) Water Board Approval of Scoping/Evaluation Plans (Pages 105-106) – The ED noted that he attended the Water Board Meeting on February 11th, 2015. He also commented that the HDR work appears to be going well.
c) Governance Structure
    i) BACWA Position on Direction of Science Plan – David Senn of SFEI noted that he presented the science plan to the Water Board and updated the Board on progress. The Board agreed that the Steering Committee, along with David Senn and others, should explore additional studies, particularly in Suisun Bay, to provide complementary scientific information to the Water Board to support them in deciding to delay numerics in the permitting process. David Senn will coordinate with the RPM and report at the March, 2015 BACWA Executive Board meeting. It was agreed that BACWA should invite Lisa Thompson from Sacramento Regional Sanitary District to the March, 2015 meeting. David noted that a key need is to attract funds.

        Detail: There was a discussion on how DO is only one indicator for assessing impairment. There needs to be better indicators of the health of the system. The best design would be to do the easiest and the least expensive first: 1) measure; 2) determine effects, and 3) determine cause. The Board asked David to explore what the cost of next steps might be. He indicated that it would cost approximately $100,000 to $200,000 per question for a study. There needs to be a coordination of actions with other stakeholders. There should be further discussion with the Water Board about regulating prior to having supporting science since this would have a chilling effect on further scientific study. But it was noted that the Water Board will need clear scientific evidence to overrule the current approach. It was suggested that a new study of the South Bay health might be complementary to the currently funded studies.

    ii) Steering Committee/Planning Subcommittee Committee Meetings (Pages 107-126) – The ED noted that the Agendas and meeting summaries of the Steering Committee and Planning Subcommittee are included in the handout. There will be two more meetings before June. The BACWA position needs to be clarified. Wider

distribution and outreach for these two meetings was requested.

Agenda **item 15 –** Discussion: Board Update on Risk Reduction (Page 127) – The RPM Spoke with Jan O'Hara at the Regional Water Board about moving forward with risk reduction requirements. Discussed risk reduction activities with Kevin Buchan of WSPA. She noted that BACWA needs a process for distributing risk reduction funds to community-based organizations. She will draft an RFP but will need a selection criteria committee's help. The committee will consist of Mike Connor and Laura Pagano.

Agenda **item 16** – Presentation: CPSC Update – Heidi Sanborn – Heidi gave a presentation on CPSC including priorities, accomplishments, and areas of concern. The presentation will be available on the BACWA website.

Agenda **item 17** – Discussion: Joint Meeting with Water Board (Page 128) – The ED will propose some dates in early March. Two items were added to the Agenda: Item 1c – Assessment Framework, and Item 1d – Permitting Approach to Nutrients.

Agenda **item 18** – Discussion: Update on BACWA Website Development – AED gave a short online presentation of the new BACWA website. (bacwa.wpengine.com) Developer has been able to download content from the current site to a staging site. They will now clean it up and upload to the new site. They will need our help to organize it on the new site. Depending on how long that takes and any additional page development, the new site could be ready to launch in a month or so. The RPM added that she is working with the Committees to design their pages on the new site.

Agenda **item 19** – Discussion: Confirm Pardee Dates & other meeting dates. The ED noted that the Water Board is available for the dates listed on the Calendar. The AED will confirm the dates with the Pardee facility.

Agenda **item 20** – Discussion: WEF Nutrient Symposium, San Jose, July 26-28 – The ED announced the WEF Nutrient Symposium dates.

SUGGESTIONS FOR FUTURE AGENDA ITEMS:
None

The meeting adjourned at 12:29 p.m.

The next regular meeting of the Board is scheduled for **March 20, 2015** from 9:00 am – 12:30 pm at the **EBMUD Treatment Plant Lab Library, 2020 Wake Avenue, Oakland, CA.**

Fund Balances as of month end 01/31/15

LINE NUMBER	DEPTID	DESCRIPTION	BEGINNING FUND BALANCE 07/1/14	TOTAL RECEIPTS	TOTAL DISBURSEMENTS	ENDING FUND BALANCE 01/31/15	OUTSTANDING ENCUMBRANCES	UNOBLIGATED FUND BALANCE 01/31/15
1	800	BACWA	777,507	628,591	301,309	1,104,789	259,079	845,710
2	802	AIR	19,063	72,186	46,385	44,864	30,679	14,185
3	803	BAPPG	60,537	99	21,935	38,702	9,553	29,148
4	804	LEGAL RSRV	300,000	-	-	300,000	-	300,000
5	805	WQA CBC	675,382	848,977	1,213,012	311,346	897,381	(586,034)
6	806	BACWAOPRES	160,000	-	-	160,000	-	160,000
7	807	RWR	16,780	27	-	16,807	-	16,807
8	810	WOT	58,295	125,136	77,500	105,931	-	105,931
9	811	PRP84	158,082	6,209,730	5,440,518	927,294	20,326	906,968
10	814	CBC OPRSRV	1,198,890	2,709	-	1,201,599	-	1,201,599
11	815	PRP50	109,015	174	5,275	103,914	12,778	91,137
			3,533,551	7,887,630	7,105,934	4,315,247	1,229,795	3,085,452

BACWA Revenue Report for January 2015

DEPARTMENT	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
			DIRECT	INVOICED	JVS	DIRECT	INVOICED	JVS	ACTUAL	
Bay Area Clean Water Agencies	BDO Member Contributions	459,000	-	-	-	-	459,000	-	459,000	-
Bay Area Clean Water Agencies	BDO Other Receipts	41,354	-	-	-	3,900	3,450	-	7,350	34,004
Bay Area Clean Water Agencies	BDO Fund Transfers	6,500	-	-	-	-	-	-	-	6,500
Bay Area Clean Water Agencies	BDO Interest Income	4,000	-	-	548	-	-	1,591	1,591	2,409
Bay Area Clean Water Agencies	BDO Assoc.&Affiliate Contr	168,300	-	-	-	-	160,650	-	160,650	7,650
BACWA TOTAL		**679,154**	**-**	**-**	**548**	**3,900**	**623,100**	**1,591**	**628,591**	**50,563**
AIR-Air Issues&Regulation Grp	BDO Member Contributions	81,120	-	-	-	-	72,120	-	72,120	9,000
AIR-Air Issues&Regulation Grp	BDO Interest Income	-	-	-	27	-	-	66	66	(66)
AIR TOTAL		**81,120**	**-**	**-**	**27**	**-**	**72,120**	**66**	**72,186**	**8,934**
BAPPG-BayAreaPollutnPreventGrp	BDO Interest Income	-	-	-	23	-	-	99	99	(99)
BAPPG TOTAL		**-**	**-**	**-**	**23**	**-**	**-**	**99**	**99**	**(99)**
WQA-WtrQualityAttainmntStratgy	BDO Member Contributions	675,000	-	-	-	-	579,712	-	579,712	95,288
WQA-WtrQualityAttainmntStratgy	BDO Other Receipts	627,369	-	-	-	8,153	260,179	-	268,332	359,037
WQA-WtrQualityAttainmntStratgy	BDO Interest Income	-	-	-	182	-	-	933	933	(933)
WQA CBC TOTAL		**1,302,369**	**-**	**-**	**182**	**8,153**	**839,891**	**933**	**848,977**	**453,392**

BACWA Revenue Report for January 2015

DEPARTMENT	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
			DIRECT	INVOICED	JVS	DIRECT	INVOICED	JVS	ACTUAL	
Regional Water Recycling	BDO Interest Income	-	-	-	8	-	-	27	27	(27)
RWR TOTAL		**-**	**-**	**-**	**8**	**-**	**-**	**27**	**27**	**(27)**
WOT - Wtr/Wwtr Operat Training	BDO Member Contributions	-	-	7,500	-	-	125,000	-	125,000	(125,000)
WOT - Wtr/Wwtr Operat Training	BDO Interest Income	-	-	-	44	-	-	136	136	(136)
WOT TOTAL		**-**	**-**	**7,500**	**44**	**-**	**125,000**	**136**	**125,136**	**(125,136)**
Prop84BayAreaIntegRegnlWtrMgmt	BDO Interest Income	-	-	-	531	-	-	789	789	(789)
Prop84BayAreaIntegRegnlWtrMgmt	Administrative Support	-	-	32,635	-	-	124,541	-	124,541	(124,541)
Prop84BayAreaIntegRegnlWtrMgmt	CCCSD-Concord RW Pipeline	-	-	-	-	-	978,500	-	978,500	(978,500)
Prop84BayAreaIntegRegnlWtrMgmt	Central Dublin RW Project	-	-	-	-	-	56,500	-	56,500	(56,500)
Prop84BayAreaIntegRegnlWtrMgmt	EBMUD East Bayshore I-80 PL	-	-	-	-	-	703,950	-	703,950	(703,950)
Prop84BayAreaIntegRegnlWtrMgmt	Novato So. Area, Hamilton Fiel	-	-	-	-	-	31,250	-	31,250	(31,250)
Prop84BayAreaIntegRegnlWtrMgmt	South Bay Adv RW Treatment R.O	-	-	-	-	-	2,360,750	-	2,360,750	(2,360,750)
Prop84BayAreaIntegRegnlWtrMgmt	South Bay Salt Pond Habitat Re	-	-	-	-	-	63,250	-	63,250	(63,250)
Prop84BayAreaIntegRegnlWtrMgmt	Regional Green Infrastructure	-	-	99,850	-	-	178,069	-	178,069	(178,069)
Prop84BayAreaIntegRegnlWtrMgmt	Water Efficient LRP	-	-	71,922	-	-	178,090	-	178,090	(178,090)
Prop84BayAreaIntegRegnlWtrMgmt	Bay Friendly Landscape TP	-	-	50,730	-	-	129,104	-	129,104	(129,104)
Prop84BayAreaIntegRegnlWtrMgmt	Weather Based Irrigation Cntrl	-	-	7,326	-	-	20,915	-	20,915	(20,915)
Prop84BayAreaIntegRegnlWtrMgmt	High Efficiency Toilet & UR	-	-	129,495	-	-	390,436	-	390,436	(390,436)
Prop84BayAreaIntegRegnlWtrMgmt	High Efficiency Toilet & UI	-	-	55,575	-	-	95,561	-	95,561	(95,561)
Prop84BayAreaIntegRegnlWtrMgmt	High Efficiency Clothes Washrs	-	-	315,780	-	-	542,141	-	542,141	(542,141)
Prop84BayAreaIntegRegnlWtrMgmt	Napa Co. Rainwater HP	-	-	8,782	-	-	19,752	-	19,752	(19,752)
Prop84BayAreaIntegRegnlWtrMgmt	Conservation Program Admin	-	-	13,148	-	-	33,602	-	33,602	(33,602)
Prop84BayAreaIntegRegnlWtrMgmt	Flood Infrastructure Mapping T	-	-	31,765	-	-	61,027	-	61,027	(61,027)
Prop84BayAreaIntegRegnlWtrMgmt	Stormwater Improvements & PBP	-	-	29,012	-	-	62,449	-	62,449	(62,449)
Prop84BayAreaIntegRegnlWtrMgmt	Pescadero Integrated FRAH	-	-	-	-	-	48,653	-	48,653	(48,653)
Prop84BayAreaIntegRegnlWtrMgmt	Restoration Guidance, San FC	-	-	8,764	-	-	46,424	-	46,424	(46,424)
Prop84BayAreaIntegRegnlWtrMgmt	SF Estuary Steelhead MP	-	-	12,101	-	-	68,572	-	68,572	(68,572)
Prop84BayAreaIntegRegnlWtrMgmt	Watershed Program Admnstrtn	-	-	6,066	-	-	15,404	-	15,404	(15,404)
PRP84 TOTAL		-	**-**	**872,951**	**531**	**-**	**6,208,941**	**789**	**6,209,730**	**(6,209,730)**
CBC Operating Resrve Fnd	BDO Interest Income	-	-	-	752	-	-	2,709	2,709	(2,709)
CBC OPRSRV TOTAL		**-**	**-**	**-**	**752**	**-**	**-**	**2,709**	**2,709**	**(2,709)**
Prop50BayAreaIntegRegnlWtrMgmt	BDO Interest Income	-	-	-	47	-	-	174	174	(174)
PRP50 TOTAL		**-**	**-**	**-**	**47**	**-**	**-**	**174**	**174**	**(174)**
GRAND TOTAL		**2,062,643**	**-**	**880,451**	**2,160**	**12,053**	**7,869,052**	**6,526**	**7,887,630**	**(5,824,987)**

BACWA Expense Report for January 2015

DEPARTMENT	EXPENSE TYPE	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
			ENC	PV	DA	JV	ENC	PV	DA	JV		
Bay Area Clean Water Agencies	BC-Collections System	26,000	-	-	-	-	14,236	12,987	-	(850)	26,373	(373)
Bay Area Clean Water Agencies	BC-Permit Committee	1,000	-	-	-	-	-	-	-	-	-	1,000
Bay Area Clean Water Agencies	BC-Water Recycling Committee	8,365	(3,647)	3,647	-	-	3,718	3,647	-	-	7,365	1,000
Bay Area Clean Water Agencies	BC-Biosolids Committee	5,000	-	-	-	-	-	-	-	-	-	5,000
Bay Area Clean Water Agencies	BC-InfoShare Groups	12,000	-	-	-	-	4,985	7,015	-	-	12,000	-
Bay Area Clean Water Agencies	BC-Laboratory Committee	7,000	-	-	-	-	-	-	-	-	-	7,000
Bay Area Clean Water Agencies	BC-Miscellaneous Committee Sup	28,064	-	-	-	-	90,850	11,407	-	-	102,257	(74,193)
Bay Area Clean Water Agencies	LS-Regulatory Support	4,475	-	-	-	-	4,475	-	-	-	4,475	-
Bay Area Clean Water Agencies	LS-Executive Board Support	2,000	-	-	-	-	1,048	952	-	-	2,000	-
Bay Area Clean Water Agencies	CAS-PSSEP	20,000	-	-	-	-	-	-	-	-	-	20,000
Bay Area Clean Water Agencies	CAS-CPSC	5,000	-	-	-	-	-	-	-	-	-	5,000
Bay Area Clean Water Agencies	CAS-PSI	500	-	-	-	-	-	-	500	-	500	-
Bay Area Clean Water Agencies	CAR-BACWA Annual Report	1,000	-	-	-	-	-	-	-	-	-	1,000
Bay Area Clean Water Agencies	CAR-BACWA Website Development/	8,300	-	-	450	-	1,500	-	4,133	-	5,633	2,668
Bay Area Clean Water Agencies	AS-BACWA Admin Expense	5,500	-	-	148	-	-	-	4,119	-	4,119	1,381
Bay Area Clean Water Agencies	CAR-Other Communications	200	-	-	-	-	-	-	-	-	-	200
Bay Area Clean Water Agencies	GBS- Meeting Support	15,600	-	-	1,123	-	714	286	8,115	(300)	8,815	6,785
Bay Area Clean Water Agencies	AS-Executive Director	178,500	-	-	-	-	89,250	89,250	-	-	178,500	-
Bay Area Clean Water Agencies	AS-Assistant Executive Directo	76,500	(6,400)	6,400	-	-	30,675	44,881	7,007	-	82,563	(6,063)
Bay Area Clean Water Agencies	AS-EBMUD Administrative Servic	40,000	(11,783)	11,783	-	-	17,628	22,372	3,522	(3,000)	40,522	(522)
Bay Area Clean Water Agencies	AS-Insurance	4,500	-	-	-	-	-	-	4,308	(6)	4,303	197
Bay Area Clean Water Agencies	BC-Pretreatment Committee	1,000	-	-	-	-	-	-	157	-	157	843
Bay Area Clean Water Agencies	BC-BAPPG	81,000	-	-	-	-	-	-	-	-	-	81,000
Bay Area Clean Water Agencies	CAS-CWCCG	25,000	-	-	-	-	-	-	25,000	-	25,000	-
Bay Area Clean Water Agencies	AS-Regulatory Program Manager	120,000	-	-	-	-	-	45,807	-	-	45,807	74,193
Bay Area Clean Water Agencies	BDO-CAS-Stanford ERC	10,000	-	-	-	-	-	-	10,000	-	10,000	-
Bay Area Clean Water Agencies	CAS-FWQC	5,000	-	-	-	-	-	-	-	-	-	5,000
BACWA TOTAL		**691,504**	**(21,830)**	**21,830**	**1,721**	**-**	**259,079**	**238,604**	**66,860**	**(4,156)**	**560,388**	**131,116**
AIR-Air Issues&Regulation Grp	Administrative Support	4,056	-	-	-	-	-	-	-	-	-	4,056
AIR-Air Issues&Regulation Grp	BDO Contract Expenses	77,064	(17,711)	17,711	-	-	30,679	46,385	-	-	77,064	-
AIR TOTAL		**81,120**	**(17,711)**	**17,711**	**-**	**-**	**30,679**	**46,385**	**-**	**-**	**77,064**	**4,056**
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Pharmaceutical	-	-	-	4,391	-	-	-	4,391	-	4,391	(4,391)
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-General P2	-	-	-	-	-	-	1,500	-	-	1,500	(1,500)
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Emerging Issues	8,044	(3,009)	1,062	-	-	-	4,597	-	-	4,597	3,447
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Other	-	-	-	-	-	5,000	-	-	-	5,000	(5,000)
BAPPG-BayAreaPollutnPreventGrp	BAPPG-CE-Multi-Pollutant	-	(4,124)	4,124	-	-	4,553	11,447	-	-	16,000	(16,000)
BAPPG TOTAL		**8,044**	**(7,132)**	**5,186**	**4,391**	**-**	**9,553**	**17,544**	**4,391**	**-**	**31,488**	**(23,444)**
WQA-WtrQualityAttainmntStratgy	WQA-CE-Technical Support	377,369	-	-	-	-	168,367	248,549	-	(43,200)	373,716	3,653
WQA-WtrQualityAttainmntStratgy	WQA-CE-Collaborations & Sponso	-	-	-	-	-	-	-	20,000	-	20,000	(20,000)
WQA-WtrQualityAttainmntStratgy	WQA-CE-Commun. & Reporting	21,000	-	-	-	-	6,000	-	-	-	6,000	15,000
WQA-WtrQualityAttainmntStratgy	WQA-CE-Other	-	-	-	-	-	-	-	-	-	-	-
WQA-WtrQualityAttainmntStratgy	WQA-CE-Nutrient WS Permit Comm	880,000	(238)	-	-	-	-	14,762	865,000	-	879,762	238
WQA-WtrQualityAttainmntStratgy	WQA-CE-Nutrient Tech Support	450,000	723,014	86,400	-	-	723,014	86,400	21,501	-	830,915	(380,915)
WQA-WtrQualityAttainmntStratgy	WQA-CE Risk Reduction	15,000	-	-	-	-	-	-	-	-	-	15,000
WQA CBC TOTAL		**1,743,369**	**722,776**	**86,400**	**-**	**-**	**897,381**	**349,711**	**906,501**	**(43,200)**	**2,110,393**	**(367,024)**
WOT - Wtr/Wwtr Operat Training	BDO Contract Expenses	-	-	-	-	-	-	-	77,500	-	77,500	(77,500)
WOT TOTAL		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77,500**	**-**	**77,500**	**(77,500)**

Prop84BayAreaIntegRegnlWtrMgmt	Administrative Support	-	(26)	26	-	-	423	51	-	-	474	(474)
Prop84BayAreaIntegRegnlWtrMgmt	BDO Contract Expenses	-	-	-	-	-	19,903	8,826	-	-	28,728	(28,728)
Prop84BayAreaIntegRegnlWtrMgmt	CCCSD-Concord RW Pipeline	-	-	-	-	-	-	-	978,500	-	978,500	(978,500)
Prop84BayAreaIntegRegnlWtrMgmt	Central Dublin RW Project	-	-	-	-	-	-	-	56,500	-	56,500	(56,500)
Prop84BayAreaIntegRegnlWtrMgmt	EBMUD East Bayshore I-80 PL	-	-	-	-	-	-	-	703,950	-	703,950	(703,950)
Prop84BayAreaIntegRegnlWtrMgmt	Sonoma Valley RWP Stage 1	-	-	-	-	-	-	-	31,250	-	31,250	(31,250)
Prop84BayAreaIntegRegnlWtrMgmt	South Bay Adv RW Treatment R.O	-	-	-	-	-	-	-	2,360,750	-	2,360,750	(2,360,750)
Prop84BayAreaIntegRegnlWtrMgmt	Bair Island Restoration	-	-	-	-	-	-	-	63,250	-	63,250	(63,250)
Prop84BayAreaIntegRegnlWtrMgmt	Regional Green Infrastructure	-	-	-	99,850	-	-	-	178,069	-	178,069	(178,069)
Prop84BayAreaIntegRegnlWtrMgmt	Water Efficient LRP	-	-	-	-	-	-	-	106,168	-	106,168	(106,168)
Prop84BayAreaIntegRegnlWtrMgmt	Bay Friendly Landscape TP	-	-	-	-	-	-	-	78,374	-	78,374	(78,374)
Prop84BayAreaIntegRegnlWtrMgmt	Weather Based Irrigation Cntrl	-	-	-	-	-	-	-	13,589	-	13,589	(13,589)
Prop84BayAreaIntegRegnlWtrMgmt	High Efficiency Toilet & UR	-	-	-	-	-	-	-	260,941	-	260,941	(260,941)
Prop84BayAreaIntegRegnlWtrMgmt	High Efficiency Toilet & UI	-	-	-	-	-	-	-	39,986	-	39,986	(39,986)
Prop84BayAreaIntegRegnlWtrMgmt	High Efficiency Clothes Washrs	-	-	-	-	-	-	-	226,361	-	226,361	(226,361)
Prop84BayAreaIntegRegnlWtrMgmt	Napa Co. Rainwater HP	-	-	-	-	-	-	-	10,970	-	10,970	(10,970)
Prop84BayAreaIntegRegnlWtrMgmt	Conservation Program Admin	-	-	-	-	-	-	-	20,454	-	20,454	(20,454)
Prop84BayAreaIntegRegnlWtrMgmt	Watershed Partnership TA	-	-	-	-	-	-	-	-	-	-	-
Prop84BayAreaIntegRegnlWtrMgmt	Flood Infrastructure Mapping T	-	-	-	31,765	-	-	-	61,027	-	61,027	(61,027)
Prop84BayAreaIntegRegnlWtrMgmt	Stormwater Improvements & PBP	-	-	-	29,012	-	-	-	62,449	-	62,449	(62,449)
Prop84BayAreaIntegRegnlWtrMgmt	Pescadero Integrated FRAH	-	-	-	-	-	-	-	48,653	-	48,653	(48,653)
Prop84BayAreaIntegRegnlWtrMgmt	Restoration Guidance, San FC	-	-	-	8,764	-	-	-	46,424	-	46,424	(46,424)
Prop84BayAreaIntegRegnlWtrMgmt	SF Estuary Steelhead MP	-	-	-	12,101	-	-	-	68,572	-	68,572	(68,572)
Prop84BayAreaIntegRegnlWtrMgmt	Watershed Program Admnstrtn	-	-	-	6,066	-	-	-	15,404	-	15,404	(15,404)
PRP84 TOTAL		**-**	**(26)**	**26**	**187,557**	-	**20,326**	**8,877**	**5,431,642**	-	**5,460,844**	**(5,460,844)**
Prop50BayAreaIntegRegnlWtrMgmt	Administrative Support	-	-	-	-	-	475	25	-	-	500	(500)
Prop50BayAreaIntegRegnlWtrMgmt	BDO Contract Expenses	-	-	-	-	-	12,303	5,250	-	-	17,553	(17,553)
PRP50 TOTAL		**-**	**-**	**-**	**-**	**-**	**12,778**	**5,275**	**-**	**-**	**18,053**	**(18,053)**
		2,524,037	**676,077**	**131,153**	**193,670**	**-**	**1,229,795**	**666,396**	**6,486,894**	**(47,356)**	**8,335,730**	**(5,811,693)**

Sherry Hull

From: Skoda, Sophia <sskoda@ebmud.com>
Sent: Friday, March 6, 2015 9:07 AM
To: Sherry Hull
Cc: Law, Peter
Subject: FW: WFS Securities Offering
Attachments: Securities Bid List.xlsx

Sherry-

See the below from Peter.

Just an FYI that we will need a simple agreement signed between BACWA and the District in order to execute such a transaction.

Thanks,

Sophia

From: Law, Peter
Sent: Friday, March 06, 2015 9:01 AM
To: Skoda, Sophia; Klein, Scott
Subject: FW: WFS Securities Offering

Sophia: this is what I put together for BACWA. Please take a look.

I updated a list of securities that are possibilities for BACWA. Investment rates are higher today because of the favorable employment report. This means that people think that the Fed will be more inclined to raise rates sooner in the next few months. This also means that chances are good that investments made today will lose a little bit of value over the next few years that is if you bought a bond today and the Fed raises rates in July, the bond you bought today might be worth less in July than what you paid today. You will, however, have some interest earnings in the meantime to make up for some or all of that loss). This is true in particularly with longer maturities. Shorter term maturities, which we are focused on, are not affected as much.

That said, my favorite is still a callable agency with a 3 year maturity that pays about 1.40%. If they are called, we can use the proceeds to reinvest in another 3 year bond at about the same rate.

Our investment policy requires CDs from a bank with a AA rating. There are very few banks with that rating left. They also only pay about the same as callable agencies.

We can also shop for CDs issued by local banks, which may get us higher rates. Our investment policy requires a signed agreement with the bank. If the amount is more than $100,000, the policy requires collateral posting.

That said, LAIF is paying about 0.25% today. We can keep half the portfolio in LAIF and invest in a 24 to 36 month callable agency (let's say a 36 month callable agency at 1.40%) and have a blended return of about 0.80%. We would be exposed to more interest rate risk. I can also shop for some local CDs, rates will be about the same.

Offer Side Yield on Securities			
Months to Maturity	**Agency Bullet**	**Agency Callable** 3mo berm call	**Certificate of Deposit** FDIC
6	0.13	na	0.25
12	0.33	0.41	0.4
18	.61	0.65	0.6
24	.81	1	0.85
30	1.02	1.15	1.1
36	1.20	1.4	1.25
42	1.43	1.55	1.3

Date: Thursday, February 26, 2015
Time: 10:30 am to 1:00 pm
Location: Silicon Valley Clean Water / 1400 Radio Road, Redwood City, CA
Project: BACWA Biosolids Committee Meeting
Subject: Summary & Action Items

Attendees:

Robert Gillette, BAB2E	Zach Kay, City of Santa Rosa
Alicia Chakrabarti, EBMUD	Karla Guevarra, SFPUC
Rebecca Overacre, EBMUD	Manon Fisher, SFPUC
Ryan Mayfield, San Jose-Santa Clara	Peter Kistenmacher, SVCW
Ryan Smith, City of San Mateo	Tim Grillo, USD
Pete Dalla-Betta, City of San Mateo	Armando Lopez, USD

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1. BioForce Presentation and Tour

a. Dario Presezzi from BioForceTech (BFT) presented an overview of their technology and a description of their facility at Silicon Valley Clean Water (SVCW).
    i. The BFT technology involves two stages: 1) biologically enhanced drying and 2) pyrolysis. The end product, called biochar, is an amorphous solid that slowly releases nutrients. Organic Rankine cycle technology is proposed to be applied for waste heat recovery.
    ii. BFT operated a pilot-scale and a single “full-scale” sized dryer for testing at SVCW (first “full-scale” testing facility).
    iii. BFT estimated the cost for a full-scale (7,000 tons per year) facility at SVCW to be approximately $65 per wet ton, based on a capital cost of $4.5M. This would process about ½ of SVCW’s biosolids.
    iv. Currently, BFT owns the testing equipment and SVCW is providing land for the testing.
    v. SVCW will be considering whether to proceed with a full-scale facility in order to reduce hauling of biosolids and hedge against future cost increases.
    vi. The group discussed air permitting issues, and Tim Grillo noted that California Air Resource Board (CARB) greenhouse gas reporting is required for any facility producing 10,000 metric tons of carbon dioxide per year, regardless of whether the source is biogenic.

b. The group toured the existing BFT reactor.
    i. Clarifications made in field were that there is no auger inside the reactor, and an inoculum is not needed. The process works with microbes present in the biosolids feedstock.

ii. Odors were reported to be stronger with the pyrolysis product than the first stage product, but the group did not observe odors with either. Although the facility was not operating, samples of both products were made available.

c. The group also toured the SVCW dewatering and cogeneration facilities, which were recently upgraded.

i. SVCW received a $2.5M grant from PG&E to install the new cogeneration engines. They expect to no longer operate the boilers. The engines are rated at 630kW each and currently produce 1MW total. SVCW is looking to increase feedstock, but this may cause them to exceed the current gas conditioning system capacity.

ii. The rotary press dewatering unit is a low speed, low polymer system manufactured by Fournier. It provides SVWA flexibility to dewater to 11 to 25 percent TS, which is necessary given their varying downstream processes, e.g. drying beds, BFT, hauling.

2. Project Updates

a. Digester upgrade projects – Karla Guevarra provided updates on the digester upgrade projects at SFPUC. The Oceanside plant is converting to a TPAD process. They hope to be operating in flow-through mode by Dec. 31, 2015 and in batch mode by the end of next year. At the Southeast Plant, a conversion to the Cambi process is in the planning phase and will be constructed by 2022.

b. Bay Area Biosolids to Energy (BAB2E) – Bob Gillette provided updates on the BAB2E project.

i. The steering committee voted to accept terms from Synagro/SCFI using the AquaCritox technology. This technology uses high temperature and pressure to convert biosolids to energy.

ii. Chemergy was another technology that proposed and was selected to implement a pilot scale project using CEC grant funds obtained by the Coalition. Unfortunately, they could not obtain the required financial backing for their share of the project. Chemergy is a process developed in conjunction with Lawrence Livermore National Laboratory.

iii. Regarding costs for the Synagro/SCFI technology, minimal operations and maintenance cost data is available. A staffing analysis is being conducted by Synagro based at a similar facility in Spain which plans to go into operation this summer. Synagro proposed to privately finance the project, but their financing has an interest rate of approximately 18 percent, compared to 2-3 percent if publically financed.

iv. Zach Kay noted that the City of Santa Rosa aims to send 5-10 percent of their biosolids to BAB2E and another portion to the Lystek facility opening at the Fairfield-Suisun Sewer District.

v. The Coalition wants to subsidize the high cost of the innovative technology through other member contributions. So, for example, Dublin San Ramon Services District-- who does not currently have dewatering facilities-- may provide support by way of a technology fee, as opposed to direct payment for biosolids contribution or participation in the demonstration project.

3. CASA/Legislative Updates

a. Karla Guevarra provided an update on CASA's challenge to the Kern County Biosolids Ordinance. The Tulare County Superior Court Judge Lloyd Hicks stated he is "very close" to granting CASA's motion that the Kern ordinance is pre-empted by the California Integrated Waste Management Act.

b. CalRecycle will hold an informal workshop regarding proposed anaerobic digestion and compost regulations on March 3, 2015. Zach Kay noted that the City of Santa Rosa objects to the draft limit of 0.1 percent contamination, as they cannot achieve this due to contamination in the yard waste feedstock they receive for composting with biosolids. Santa Rosa sees an increase in contamination following Christmas, when people max out their trash and put wrapping paper in the green waste bins.

4. Biogas to Compressed Natural Gas (CNG) Project at City of San Mateo

a. Ryan Smith provided an overview of this project, which was funded in part by a grant from the California Energy Commission (CEC). The project is jointly owned with Foster City. The facility is expected to be operational in 2016.

b. San Mateo will be required to provide 100 cubic feet per minute (cfm) biogas to this facility. This export eliminates their ability to be energy independent at the treatment plant.

c. The project has a four year payback period with the CEC grant funding.

d. The suggestion was made that if San Mateo has excess biogas, it could be used to fuel a biosolids dryer.

5. Action Items

Action Item	Point Person	Deadline	Status
1. Schedule next meeting	Alicia Chakrabarti	April 2015	In Progress

Updated by: Rebecca Overacre

BAPPG Committee Report to BACWA Board

Meeting Date: March 4, 2015
Prepared By: Robert C. Wilson, Petaluma
BAPPG Vice-Chair

Committee Request for Board Action

None

Committee Updates

The following updates are from BAPPG's Steering Committee conference call on March 4, 2015:

- Discussed changes in committee leadership and the approaching end of the fiscal year. Group agreed to discuss leadership at the next in-person steering committee meeting and general meeting on April 1, 2015
- Vice-Chair Jennifer Seguin, City of San Jose, to send out current budget to team leads with the focus on project completeness by the end of FY 14-15.
- The next BAPPG Meeting on April 1st will feature a presentation by Dr. Kelly Moran with updates on pesticides, including pyrethroids and fipronil, with a focus on the fate and transport of CECs.

Current Project Summary

- The BAPPG is in discussion with CWEA's Community Engagement and Outreach Committee regarding conducting a joint outreach workshop.
- Staff at the SFPUC will lead BAPPG's social marketing contract with O'Rorke through the end of the fiscal year with support from the staff at the City of Petaluma.

Date of Next BAPPG Meeting

BAPPG Steering Committee Meeting
April 1, 2015: 9:00am-10:00am
1515 Clay Street, Second Floor, Room 12
Oakland, CA

BAPPG General Meeting
April 1, 2015: 10:00am-12:00pm
1515 Clay Street, Second Floor, Room 12
Oakland, CA

Laboratory Committee – Report to BACWA Board

Laboratory committee meeting on: 11 March 15
Executive Board Meeting Date: March 2015
Committee Chair: Noel Enoki
Vice Chair: Nirmela Arsem

Committee Request for Board Action: None

20 attendees representing 13 BACWA member agencies, Vacaville, Pacific EcoRisk, LWA and RWQCB attended the meeting. (minutes prepared and submitted by Nirmela Arsem on behalf of Noel Enoki)

Focus topic – Interpreting Whole Effluent Aquatic Toxicity Tests: Avoidance of 'False Positives'

- This presentation was given by Dr. Stephen L. Clark of Pacific EcoRisk. His talk covered an overview of Whole Effluent Toxicity (WET) as required by EPA and confounding factors leading to false positives.
- His recommendations for avoiding unnecessary accelerated monitoring are: critical evaluation of data, comprehensive review of the tests, elimination of interferences and Toxicity Reduction Evaluation.
- The second part of his talk was "**Key Points of the State Board Toxicity Policy and the TST Statistic Related to the Laboratory"**.
- His recommendation was to select a laboratory with stringent quality control program to assure reliable test results.

ELAP:

- There was no report of laboratories being audited by ELAP.
- The State Water Resources Control Board review of ELAP after its withdrawal from NELACE is gaining momentum. There is an Expert Review Panel (ERP) convened to lead the discussion and Southern California Costal Water Research Program, SCCWRP has been tasked to coordinate the ERP and public comments on behalf of State Board. The first meeting is scheduled for March 17-19 at SCCWRP offices. The first day and last day of the meeting are open to the public. The link below provides details for the participating on-line: http://conference.sccwrp.org/help.php
- Registration is required for in-person attendance. Municipal laboratories are represented by Richard Kimbrough of City of Pasadena.

Open forum:

- Upon preapproval from CWEA, contact hours can be obtained for utility safety or other local meetings.
- CWEA is updating lab analyst certification exams. A survey will be sent out to current certificate holders to determine types of tests performed by each grade level. One contact hour will be given for those completing the survey.
- Since ELAP was dropped from NELAC reciprocity, ELAP requires agencies that have out of state NELAC certification to obtain separate ELAP certification for additional fee, which is increasing the cost for those laboratories.

Recruitment Opportunities:

- City of Millbrae - Lab Analyst
- CCCSD – Environmental and Regulatory Compliance Division Manager
- EBMUD – Research Microbiologist

Next BACWA Laboratory Committee Meeting: Wednesday, April 8, 2015, at EBMUD Laboratory Library.

Permits Committee – Report to BACWA Board

Permits Committee Meeting on: 3/10/15
Executive Board Meeting Date: 3/20/15
Committee Chair: Meg Herston

Committee Request for Board Action: None

19 attendees representing 12 BACWA member agencies
Lila Tang and Bill Johnson from the Regional Water Board in attendance

Regional Water Board Report-out

Lila Tang reported that Chevron requested that CCCSD be named as a responsible party for a groundwater cleanup site. CCCSD was not added because they were able to document a well-performing maintenance program on their collection system.

Adoption of Permits/Permit Amendments:

March – Fairfield Suisun Sewer District – FSSD is generally pleased with their tentative order. BACWA submitted a comment letter asking for the removal of SSO language from the Fact Sheet of their TO, since their sewer system is covered by the State SSS WDR. The Regional Water Board responded by updating the SSO table to provide more context.

May – Las Gallinas Valley Sanitation District (LGVSD) – At the behest of EPA, LGVSD was given numeric chronic toxicity limits, in addition to triggers in their tentative order. The EPA is reviewing toxicity data from each discharger whose permit is due for renewal and letting the Regional Water Board know if the EPA is likely to object. In calculating their limits, the Regional Water Board granted LGVSD the same dilution they get for cyanide (3.25:1) resulting in limits of 2.7 TUc avg monthly and 5.3 TUc max day. Reasonable potential was determined qualitatively based on 30 data points. The one high toxicity value (8 TUc) was used to confirm reasonable potential, although the agency says that it was likely a spurious hit. Several BACWA representatives met with Dave Smith, EPA, to discuss their position. While the EPA is firm on requiring numeric chronic toxicity limits, they are open to implementation alternatives. BACWA submitted a comment letter which suggested changes in implementation, including how limits are calculated, how reasonable potential is determined, mixing zones, removal of triggers, and removal of acute toxicity limits where no reasonable potential is found. BACWA also suggested that a watershed permit for toxicity may make sense in the San Francisco Bay area. Another issue that was not raised in time to make it into the letter is that single sample maximum limits are not appropriate for toxicity. Bill Johnson had briefly reviewed the BACWA letter and reported that he would be open to at least some of BACWA's proposed changes.

EBMUD – Tentative order is expected later in the week.

Dry Season Discharge Prohibitions

Nine out of 15 shallow water dischargers in the North Bay are prohibited from discharging during the dry season. However, there is inconsistency in how this prohibition is implemented in terms of the dates of the dry season, criteria exceptions, and methods to obtain approval to discharge. Lila Tang passed around a sheet with proposed language for making the prohibition uniform. Denise Connors brought up that insufficient dilution in the receiving water could limit discharge exceptions, and Lila responded that there are workarounds, such as using SIP-calculated dilution rather than an arbitrary dilution. Mary Cousins stated that there needs to be clarity in setting discharge conditions so that agencies can design appropriate storage to supply recycled water users and prevent dry season discharge. Lila Tang will set up a meeting with agencies who have a discharge prohibition, and will alert the permits committee.

Water Sector Greenhouse Gas Gap Analysis

BAAQMD is looking for ways to reduce greenhouse gas (GHG) emissions across industry sectors. They have released a Water Sector Gap Analysis document on that they are asking for feedback on. Committee members that reviewed it felt that their assumptions are too broad. Agencies who have already completed GHG estimates are requested to provide their reports to Elyse Engel. The document will be discussed at the next AIR committee meeting (unscheduled), which will be held at BAAQMD offices in San Francisco. Robert Schlipf of the Regional Water Board called the BAAQMD to alert them to potential future nutrient treatment requirements that will impact wastewater sector GHG emissions.

Nutrients

- Optimization/Upgrade studies - Site Visits for optimization/upgrade studies will begin in April.
- BACWA Nutrient Submittal for Prop 84 funds - The Department of Water Resources has updated the schedule for the Proposition 84 2015 Integrated Regional Water Management (IRWM) Implementation Grant Program solicitation. The DWR Updated schedule can be found at http://www.water.ca.gov/irwm/grants/index.cfm. Approximately $40M is available for the SF Bay Area across all functional areas. It is now confirmed that this will not be a drought-specific round of funding. The BAIRWM Project Screening committee (PSC) has updated the request for project concept submittals, which are due by April 20. There will not be separate calls for regional vs. subregional projects this round. Materials relating the request for submittals can be found at http://bairwmp.org/funding/2015-round/2015-round-announcement. BACWA will update its nutrient concept submittal for this round.
- The Nutrient Technical Workgroup is aiming to schedule a meeting at the end of March.

Report-out from 2/20 Executive Board Meeting

- HDR has reported that they have all the survey responses from the agencies
- There was a discussion of the future of the nutrient watershed permit, and whether there would be load caps in the next reissuance
- Risk reduction for compliance with the Hg/PCB watershed permit – BACWA is developing an RFP to fund community-based organizations
- Heidi Sanborn gave a presentation on the work of the California Product Stewardship Council. She will be asked to speak at next year's BACWA members' meeting.
- The BACWA website update is in its final stages and will go live next month.
- Mike Connor will speak at the WEF Nutrient Symposium in San Jose

Informational Items/Announcements

- Federal Dental Amalgam Rule BACWA comment letter
- Sacramento Regional is sued by NGO per ESA. The NGO is backed by state water contractor funding.
- Regional Water Board North Bay Selenium TMDL CEQA Scoping Workshop April 3
- April meeting moved to 4/7 to accommodate Executive Board meeting.

Next BACWA Permits Committee Meeting: Tuesday, April 7, 2015, at EBMUD Plant Library, Regional Water Board Staff to attend

Recycled Water Committee – Report to BACWA Board

Recycled Water Committee Meeting on: 3/4/15
Executive Board Meeting Date: 3/20/15
Committee Chair: Cheryl Muñoz

Committee Request for Board Action: None

Detailed notes from meetings are posted online.
18 attendees (including 9 on phone) representing 9 member agencies

2015 Proposition 84 Funding

The Department of Water Resources (DWR) has updated the schedule for the Proposition 84 2015 Integrated Regional Water Management (IRWM) Implementation Grant Program solicitation. The updated schedule can be found at http://www.water.ca.gov/irwm/grants/index.cfm. Approximately $40M is available for the SF Bay Area across all functional areas. It is now confirmed that this will not be a drought-specific round of funding, although there may be drought-related criteria included. The BAIRWM Project Screening Committee (PSC) has updated the request for project concept submittals, which are due by April 20. There will not be separate calls for regional vs. subregional projects this round. Materials related to the request for submittals can be found at http://bairwmp.org/funding/2015-round/2015-round-announcement. There will be an online form for adding new projects to the BAIRWMP, or updating projects that are already included.

The PSC prefers BACWA to package together and prioritize recycled water and wastewater projects. The Recycled Water Committee chair and the BACWA nutrient project proponents will discuss collaboration on a functional area submittal before the Executive Board Meeting on March 20. Prior to the Recycled Water Committee Meeting on April 1, interested recycled water project proponents should forward their project submittal information to Cheryl and Linda that include the benefits, timing, and readiness to proceed. The committee will sort recycled water projects at the April 1 meeting.

Advanced Treatment Operator Certification

WateReuse has proposed an advanced operator certification for advanced treatment. There is more knowledge required for advanced treatment than for conventional treatment, and a higher level of public safety burden, particularly for potable reuse. Irvine Ranch Water District is concerned that it could be problematic hiring staff if this certification was required. There are also questions about who would pay for it. The Recycled Water Committee proposed that Summit Partners would be a good venue to discuss the issue. (Link to drinking water vs. wastewater operator certification requirements: https://bacwa.box.com/s/y26bxhq4gsc3p9fw3u62mucw7el31z2m)

Bay Area Recycled Water Survey Update

The Recycled Water Survey needs to be updated to reflect changes in recycled water projects, both planned and built, since 2011. There is an opportunity to use existing information, and information from the nutrient watershed permit optimization and upgrade studies (led by the HDR team), as a data basis. Since the HDR team is doing site visits at the POTWs that discharge to the Bay beginning in April, there is an opportunity to use these visits to generate data for the Survey. The committee will develop the information that will be included in the Survey and a strategy for getting this information. Additional work will need to be done to obtain information for those agencies that do not discharge to the Bay. They will also propose a budget for consultant assistance.

Next BACWA Recycled Water Committee Meeting: April 1, 2015 from 10:00 am to 12:00 pm, 4th Floor Conference Room at EBMUD Headquarters.

Maintenance Subgroup BAMI
Meeting Minutes
January 28, 2015 at EBMUD

ATTENDEES

Ike Bell, EBMUD
Dave Port, USD
Matthew Mahoney, CCCSD
Mike Barnes, Kennedy Jenks

DISCUSSION ITEMS

Laney College Technical Education

Laney College has an Industrial Mechanical Maintenance Technician, which is a good training program for maintenance staff. There is a Machinist track and an Industrial track. The Industrial Maintenance track is a 9 month certificate program.

Dave Port will start teaching at Laney within a year.

Mark Martin is the Director of Advanced Manufacturing Workforce Development at Laney

Peter Crabtree is the Dean at Laney.

Los Medanos College Technical Education

Los Medanos College also has good training programs to prep for wastewater work. The Process Operator and Instrument Technicians are two modules in the college that are applicable.

Internships and Training

EBMUD gave Laney College a grant for internships, and provides intern training for the college students. EBMUD has selected interns from a pool of students, and the interns have worked out well. For hiring, EBMUD uses technical skills and behavioral characteristics in their selection process. Once a candidate meets the technical skill needs, then the interpersonal skills are reviewed to determine how well the applicant will work with others.

USD has a 10 week intern program.

CCCSD. For the mechanical shop, they bring in apprentices who get trained. They use the TPC Lessons by Technical Publishing for their training. For their machinist,

electrical, and instrumentation groups, they hire at the journey level rather than the apprentice level.

USD Cogeneration System

Installed a new GE Jenbacher engine. It has controls to blend the gas feed on the fly, with a feed range of 0-100% of natural gas and 0-100% for digester gas.

It runs in a lean burn mode to comply with AQMD requirements. However, Dave noted that it runs better with a richer burn.

Parts are generally expensive; spark plugs cost $500. The life of the spark plugs has been shorter than expected.

GE has not fully developed its Jenbacher service network in the US yet; it's more established in Europe. Penn Power is the vendor in the US. Western Energy has service offices in Brea and Hayward, but there is no service tech in Hayward.

To get training, you need to go to Austria. There is a facility in Houston that remotely monitors engine performance.

The engine has been running primarily on digester gas, with about 5% supplemental natural gas. They would like to have more digester gas.

Turbine Maintenance

EBMUD contracts with Solar (from San Diego) for maintenance of their turbine. The cost is about $50,000/month. CCCSD also contracts with Solar for their turbine maintenance.

It was noted that there is not much engine maintenance capability in the Bay Area anymore.

Hot Topics

EBMUD plans to install a second turbine by 2020.

CCCSD is in the process of performing a "plant of the future" analysis.

USD is interested in high strength waste addition to increase digester gas production.

EBMUD High Strength Waste Addition Facilities

The group toured the EBMUD facilities to add food waste and the newly constructed facilities for FOG addition.

ACTION ITEMS

1. Christine will send the SFPUC lessons learned document on their CMMS selection process.
2. Mike will get the BACWA member list to better publicize the meetings to BACWA members that have not traditionally participated in the meetings.

BACKLOG

- EBMUD Turbine tour

NEXT MEETING

To be scheduled after July 1, 2015 once the budget for the 2015/2016 BACWA Info Sharing Group meetings is available.

Executive Director's Report to the Board
March, 2015

NUTRIENTS:

Completed a variety of tasks and activities associated with BACWA's interests on nutrients and collaborating with the Water Board including:
- Attended and participated in the 7th meeting of the Steering Committee's Planning Subcommittee meeting and served as scribe. Following the meeting prepared detailed meeting minutes and summary of action items. Materials delivered to the Steering Committee Facilitator.
-Participated in the March monthly conference calls of the of the CMG and consulting teams
-Continued coordination on the in-kind support committed by BACWA for the EBMUD EPA grant for nutrient research

BACWA BOARD MEETING:

-Worked with the AED in preparing the March BACWA Board agenda including reviewing the agenda with the chair.
-Attended the BACWA February Board meeting and worked with the AED and RPM in preparing the minutes and Action Items.
-Organized and participated in the bi-monthly Joint Meeting with Water Board staff
-Continuing to track all action items to completion.
-Organized the Special Board meeting to discuss BACWA's nutrient strategy

ASC/SFEI:

-As the Chair of the Governance Committee, coordinated with the Executive Director to schedule and set the agenda for Governance Committee meetings in April.
-Discussed future leadership role in ASC/SFEI with the Executive Director.

FINANCE:

-Reviewed the BACWA financial reports with the AED and planned for revisions of the reports to make them more effective in conveying financial information to the Board.
-Prepared the Final Draft of the BACWA FY 16 budget.

AIR COMMITTEE:

-Coordinated with AIR Committee members on transitioning the Committee to a regular BACWA Committee.

COLLECTION COMMITTEE

-Coordinated with the Committee on the review of the Guidelines for Developing and Update Sewer System Management Plans.

RECYCLED WATER COMMITTEE:

-Worked with the Committee chair in developing funding request for assistance in responding to IRWM Prop 84 Round 3 request for proposals.

PERMIT COMMITTEE:

-Attended the March monthly Permit Committee meeting.
-Participated in a meeting with EPA to discuss concerns about EPA's position on including numeric limits for toxicity in permits.
-Coordinated the preparation of the BACWA comment letter on the Las Gallinas Valley Sanitary District Tentative Order.

COLLABORATION:

-Coordinated with the CASA ED on topics on mutual interest (i.e. State Nutrient Objectives, toxicity plan and potential litigation, and the LGVSD permit).
-Attended the CASA DC meeting (not a BACWA expense)
-Participated in NACWA conference call on ISO Standard on Flushable Wipes
-Attended the March meeting of the Clean Water Summit Partners
-Participated in pre-proposal meeting on EBMUD's food waste RFP

ADMINISTRATION:

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

MISCELLANEOUS MEETINGS/CALLS:

-Paul Gilbert Snyder on Prop 50 and Prop 84
-BACWA Chair and Committee Chairs on items that arose during the month
-Water Board staff on coordinating the nutrient activities
-other misc. calls and inquiries regarding BACWA activities

BACWA ACTION ITEMS

Number	Subject	Task	Deadline	Status
Action Items from February 20, 2015 BACWA Executive Board Meeting				
2015.2-59	Reviving ELAP	Comment Letter LAB Comm prep		pending
2015.2-58	ASC Representation	Add to next meeting Agenda		complete
2015.2-57	Toxicity Testing	Develop Ann Summ Rpt		pending
2015.2-56	Lower So Bay Nutrient Investigations	Members discuss key questions w/ Dsenn		pending
2015.2-55	CMG	Reallocate Funds for EBMUD Nutrient Grant		pending
2015.2-54	April EB Meeting	Invite Lisa Thompson Sac Reg'l (ED)		pending
2015.2-53	Dental Amalgam	Send revised Comment Letter (AED)		complete
2015.2-52	Insurance Policy	Research (AED)		complete
2015.2-51	InfoShare Groups	Need Chair (ED)		pending
2015.2-50	BACWA Budget	Update with Board changes (AED)		complete
2015.2-49	BACWA Member Tiers	Create 3rd Tier (ED)		pending
2015.2-48	BACWA Budget	Alternatives to Interest Income (ED/AED)		complete
2015.2-47	Annual Meeting Feedback	Provide details of Member attendance to Board (AED)		complete
2015.2-46	AIR Committee Meeting	At AIR Board Offices (RPM)		pending
Action Items Remaining from Previous BACWA Executive Board Meetings				
2014.11-42	SSO Enforcement Options	set up meeting with WB to discuss (ED)	12/19/2014	pending
2014.11-33	New Dental Amalgam Rule	Prepare Fact Sheet for Dental Offices (TP)	3/31/2015	pending
2014.10-30	Review of CBC fees (ED)	Prepare options for changing the CBC fees (ED)	12/19/2014	pending
2014.06-113	Joint meeting with Air District (ED, Air Comm. Chair)	Set up meeting with senior staff at BAAQMD (ED, AIR Comm. Chair)	12/31/2014	pending
2014.05-105	Annual Report (ED)	Produce scaled-down version.		pending
2014.05-102	NACWA Inquiry Regarding Collaboration with Agriculture (ED)	Forward request to Napa and Sonoma agencies and respond to NACWA. (ED)		pending

FY 15: *48 of 59 Action Items completed.*
FY 14: *125 of 128 Action Items completed.*
FY 13: *67 of 67 Action Items completed.*

Board Calendar 2015

DATE	ASSIGNMENT	STATUS NOTES
4/17/2015 Monthly Board Mtg Items due: 4/10 **Connor; Pagano; Horenstein; Ervin; Bailey** **Williams; Fono; Hull**	**Consent** **Previous Board Meeting Minutes (AED)** **Monthly Treasurer's Report (EBMUD Accounting)** **Reports** **Committee Reports (Committee Chairs)** **Board Reports (Executive Board)** **ED Report (ED)** **RPM Report (RPM)** **Chair/ED Authorizations (AED** **Other Business: Authorizations** **Other Business: Discussions** Discussion: Additional studies in Suisun Bay (invite Lisa Thompson, Sac Regional) Discussion: Draft Agenda for Joint WB Meeting in May	
5/15/2015 Monthly Board Mtg Items due: 5/8 **Connor; Pagano; Horenstein; Ervin; Bailey** **Williams; Fono; Hull**	**Consent** **Previous Board Meeting Minutes (AED)** **Monthly Treasurer's Report (EBMUD Accounting)** **Reports** **Committee Reports (Committee Chairs)** **Board Reports (Executive Board)** **ED Report (ED)** **RPM Report (RPM)** **Chair/ED Authorizations (AED** **Other Business: Authorizations** Chair: Downey Brand/Computer Courage IT ED: Day, Carter, Murphy **Other Business: Discussions** Approval: Amendments to FY15 Contracts & NewFY16 Contracts Discussion: Confirmation of BACWA Reps to ASC/SFEI Governing Board?	

5/?/2015 Joint Meeting Items due: ? **Connor; Pagano; Horenstein; Ervin; Bailey** **Water Board Staff** **Williams; Fono**	**Other Business: Discussions**	

6/19/2015 Monthly Board Mtg Items due: 6/12 **Connor; Pagano; Horenstein; Ervin; Bailey** **Williams; Fono; Hull**	**Consent** **Previous Board Meeting Minutes (AED)** **Monthly Treasurer's Report (EBMUD Accounting)** **Reports** **Committee Reports (Committee Chairs)** **Board Reports (Executive Board)** **ED Report (ED)** **RPM Report (RPM)** **Chair/ED Authorizations (AED** **Other Business: Authorizations** **Other Business: Discussions**	

7/17/2015 Monthly Board Mtg Items due: 7/10 **Connor; Pagano; Horenstein; Ervin; Bailey** **Williams; Fono; Hull**	**Consent** **Previous Board Meeting Minutes (AED)** **Monthly Treasurer's Report (EBMUD Accounting)** **Reports** **Committee Reports (Committee Chairs)** **Board Reports (Executive Board)** **ED Report (ED)** **RPM Report (RPM)** **Chair/ED Authorizations (AED** **Other Business: Authorizations** **Other Business: Discussions** RMP Update (Phil Trowbridge 30 min)	

7/?/2015 Joint Meeting Items due: ? **Connor; Pagano; Horenstein; Ervin; Bailey** **Water Board Staff** **Williams; Fono**	**Other Business: Discussions**	

8/14/2015 Monthly Board Mtg Items due: 8/7 **Connor; Pagano; Horenstein; Ervin; Bailey** **Williams; Fono; Hull**	**Consent** **Previous Board Meeting Minutes (AED)** **Monthly Treasurer's Report (EBMUD Accounting)** **Reports** **Committee Reports (Committee Chairs)** **Board Reports (Executive Board)** **ED Report (ED)** **RPM Report (RPM)** **Chair/ED Authorizations (AED** **Other Business: Authorizations** **Other Business: Discussions** Annual RMP Update (RPM)	

9/18/2015 Monthly Board Mtg Items due: 9/11 **Connor; Pagano; Horenstein; Ervin; Bailey** **Williams; Fono; Hull**	**Consent** **Previous Board Meeting Minutes (AED)** **Monthly Treasurer's Report (EBMUD Accounting)** **Reports** **Committee Reports (Committee Chairs)** **Board Reports (Executive Board)** **ED Report (ED)** **RPM Report (RPM)** **Chair/ED Authorizations (AED** **Other Business: Authorizations** **Other Business: Discussions**	

9/?/2015 Joint Meeting Items due: ? **Connor; Pagano; Horenstein; Ervin; Bailey** **Water Board Staff** **Williams; Fono**	**Other Business: Discussions**	

10/21 – 10/23 Pardee Technical Seminar Items due: 10/15 **Connor; Pagano; Horenstein; Ervin; Bailey** **Williams; Fono; Hull**	**Other Business: Discussions** **AIR Committee Restructuring**	**No Board Actions Permitted**

11/20/2015 Monthly Board Mtg Items due: 11/13 **Connor; Pagano; Horenstein; Ervin; Bailey** **Williams; Fono; Hull**	**Consent** **Previous Board Meeting Minutes (AED)** **Monthly Treasurer's Report (EBMUD Accounting)** **Reports** **Committee Reports (Committee Chairs)** **Board Reports (Executive Board)** **ED Report (ED)** **RPM Report (RPM)** **Chair/ED Authorizations (AED** **Other Business: Authorizations** **Other Business: Discussions**	

11/?/2015 Joint Meeting Items due: ? **Connor; Pagano; Horenstein; Ervin; Bailey** **Water Board Staff** **Williams; Fono**	**Other Business: Discussions**	

12/18/2015 Monthly Board Mtg Items due: 12/11 **Connor; Pagano; Horenstein; Ervin; Bailey** **Williams; Fono; Hull**	**Consent** **Previous Board Meeting Minutes (AED)** **Monthly Treasurer's Report (EBMUD Accounting)** **Reports** **Committee Reports (Committee Chairs)** **Board Reports (Executive Board)** **ED Report (ED)** **RPM Report (RPM)** **Chair/ED Authorizations (AED** **Other Business: Authorizations** **Other Business: Discussions**	

CURRENTLY UNSCHEDULED AND SIGNIFICANT

- Receipt of Annual Report FY12 & FY13
- Defining BACWA Priorities/Revisit Strategic Plan
- BACWA Membership Engagement Opportunities
- Tech Seminar/Workshop: CCCSD Cogen explosion, SFPUC force main leak and repair, and BACWA member pilot plants.
- Chlorine Residual Analyzer Investigation
- Suggestions for Monthly Meeting Guest Speakers/Presenters: i.e. Jim McGrath, State Water Board; ?
- CEC's (Kelly Moran)
- Strategy Development for Triennial Review (Permits Committee/Board)
- Optimization/Upgrade Studies Quarterly Report to Board(CMG) Mar, Jun, Sept, Dec 2015-2017
- Optimization/Upgrade Studies Biannual Report to Members (CMG/Consultant) Oct, April
- BAAQMD Biannual Joint Meetings (Feb, Aug 2015)

BOARD COMMITTEES WITH NO MEETINGS CURRENTLY SCHEDULED

-

Regulatory Program Manager's Report to the Board

February 23 – March 17, 2015
Prepared for the March 20, 2015 Executive Board Meeting

NUTRIENT WATERSHED PERMIT SUPPORT: Participated in CMG conference call. Posted project documents to the BACWA website.

SFEI CONTRACT OVERSIGHT: Reviewed SFEI invoices for February 2015. Approximately $563K of $675K has been spent for Fiscal Year 2014 (see attached matrix). A draft of the Lower South Bay Synthesis is expected in March 2015, and Suisun Synthesis II is expected in April 2015. A first iteration of the draft science plan was completed in February 2015. It will be reviewed by the Nutrient Technical Workgroup and the Nutrient Steering Committee and further revised.

TOXICITY: Reviewed Las Gallinas tentative order toxicity language. Drafted BACWA comment letter on tentative order and incorporated comments from Permits Committee members. Reviewed CASA comment letters on Las Gallinas tentative order, and the EPA's withdrawal of approval for the 2-concentration TST analysis.

RISK REDUCTION: Drafted a BACWA risk reduction RFP based on the 2011 San Francisco Bay Fish Project RFP, and circulated it to the risk reduction selection committee for comment.

BACWA BULLETIN: Drafted and distributed March BACWA Bulletin.

IRWMP SUPPORT: Reviewed request for project concept submittals from the Bay Area Project Screening Committee for the Proposition 84 2015 funding round. Reviewed the draft Project Selection Guidelines from the Department of Water Resources. Reviewed the 2014 BACWA nutrient submittal. Arranged conference call with project organizers to update BACWA submittal for 2015.

PCB PETITION: Reviewed BACWA's 2013 petition to the State Water Board regarding the Hg/PCB permit, and recommended keeping it in abeyance.

JOINT MEETING WITH REGIONAL WATER BOARD: Prepared draft agenda for meeting.

COMMITTEE SUPPORT: Drafted agenda and Board Reports for Permits Committee meeting. Reviewed and distributed BAAQMD Water Sector Gap Analysis for AIR committee. Drafted meeting notes and Board Report for March Recycled Water Committee meeting. Reviewed 2011 Recycled Water Survey, and proposed budget for WBA scope of work. Sent Draft SSMP Guide Document to Collection System Committee Chairs.

CASA REGULATORY WORKGROUP: Attended meeting in San Leandro. Key pointes were discussion on toxicity and stormwater diversions in Southern California. LACSD will be required to take 1/10" of first flush flow. There was also a discussion of brine management for recycled water projects. The workgroup is considering setting up regular join meeting with EPA staff.

IT UPGRADES: Met with Computer Courage to discuss website upgrades on 3/5. Worked on developing committee webpages.

MEETINGS ATTENDED: Conference Call with State Water Board on CEC pilot studies (2/26), Recycled Water Committee (3/4), BACWA Staff meeting (3/10), Permits Committee (3/10), Meeting with Computer Courage (3/5), CASA Regulatory Committee (3/12), Joint Meeting with Regional Water Board (3/13), CMG Conference Call (3/13).

SF Bay Nutrient Strategy FY2014 Status (Contract with SFEI)

Updated 3/16/2015

Total Spent of $675,000 **$562,963.70**

Task	**Description**	Upcoming Deliverable	Original Date	Updates
11	Lower South Bay Synthesis	Draft Report	December 2013	Draft expected March 2015
4 (FY13)	Suisun Synthesis I	Final Report	December 2013	Delivered April 2014
12	Suisun Synthesis II	Draft Report	April 2014	Expected in April 2015
13	Nutrient Science Plan	Draft Plan	February 2014	Interim draft completed February 2015
22	Moored Sensor Program	Progress Update	April 2014	Circulated for comment September 2014
23	Characterizing Phytoplankton Community Composition	Draft Report	April 2014	Ongoing, results presented at BACWA annual meeting
24	Nutrient Monitoring Program Development	Draft Plan	March 2014	Circulated for comment September 2014
3 (FY13)	Conceptual Model of Nutrient Exchange through Golden Gate	Final Report	July 2013	Delivered February 2014

Clean Water Summit Partners
1225 8th Street Suite 595
Sacramento, CA 95814
p: 916.446.0388
f: 916.231.2141

Summit Partners:
- Bay Area Clean Water Agencies (BACWA)
- California Association of Sanitation Agencies (CASA)
- Central Valley Clean Water Association (CVCWA)
- California Water Environment Association (CWEA)
- Southern California Alliance of Publicly Owned Treatment Works (SCAP)

March 2, 2015
9:30 AM – 1:30 PM
Sutter Club
1220 9th Street, Sacramento, CA 95814

AGENDA

9.30 AM **Call to Order, Dave Williams, President, CASA**
- Welcome and Introductions
- Approval of Minutes of November 10, 2014 Meeting
- Review and Adjust Agenda

9:45 AM **Strategic Planning (Williams/All)**
- Brainstorm: Focus Questions
- Triple bottom line analysis/cost drivers

11:00 AM **Break**

11:15 AM Identify Goals/Key Actions

12:15
- **Working Luncheon**

Key Issue Updates
- SB 119 (Hill) relating to sewer lines (Dillon)
- Toxicity Plan (Larson)
- Energy/WET CAT Initiatives (Kester)
- Flushable Wipes (Pastore)

1.30 PM **Adjourn**
- Next Meeting: June 2015
- Hosted by CWEA

Blue font= attachment

FOCUS QUESTIONS FOR STRATEGIC PLAN

- What is the biggest challenge facing the CA wastewater/clean water community?
- What is the most promising opportunity facing the CA wastewater/clean water community?
- Which of these challenges/opportunities are best suited to action by the summit partners in particular (as opposed to another entity or one of the individual partners)?
- What does success look like? What obstacles do we have to overcome?

Clean Water Summit Partners Meeting Minutes
Monday March 2, 2015
Sacramento Sutter Club, Sacramento Room

Call to Order

A meeting of the leaders from the state and regional clean water associations was called to order on March 2 at 9:44 a.m. by Dave Williams, President of CASA: Present were:

First	Last	E-mail	Assn
Dave	Williams	dwilliams@bacwa.org	BACWA, CASA
Kevin	Hardy	Khardy@encinajpa.com	CASA
Jackie	Kepke	jkepke@ebmud.com	CASA
Bobbi	Larson	blarson@casaweb.org	CASA
Greg	Kester	gkester@casaweb.org	CASA
Adam	Link	alink@casaweb.org	CASA
Mike	Dillon	mfdillon@mfdillon.com	CASA
Debbie	Webster	eofficer@cvcwa.org	CVCWA
Simon	Watson	swatson@brwncald.com	CWEA
Elizabeth	Allan	eallan@cwea.org	CWEA
Bob	Ghirelli	rghirelli@ocsd.com	SCAP
John	Pastore	jpastore@dudek.com	SCAP

Approval of Minutes and Agenda

The minutes of the November 10, 2014 meeting were approved unanimously on motion by Bob Ghirelli and second by Simon Watson.

Strategic Planning

The group engaged in a strategic planning discussion, focusing on the key issues, opportunities and actions for the Summit Partners. The flipchart notes are attached. There were two specific action items:

1. The Executive Directors will develop and outline of how to move the utility of the future re-brand/concept forward.

2. In person meetings of full Summit will be held semi-annually—focus on relationships with key decision-makers and other stakeholders (e.g. agriculture). EDs/Key Staff and Regulatory Workgroup Chair will meet bi-monthly by conference call.

Key Issue Updates

Guide for Developing and Updating SSMPs: Paul Causey distributed the draft guide and is seeking feedback and endorsement from the Summit Partners. The group asked Bobbi Larson to contact Paul and request until April 20th to provide comments.

Legislative Update: Mike Dillon, CASA state lobbyist, provided an overview of key legislation including two CASA-sponsored measures, AB 888 (Bloom) relating to microbeads and AB 1144 (Rendon) relating to credits for onsite energy generation. He also discussed SB 119 (Hill), which would require marking of unpressurized sewer lines.

Toxicity Plan: Bobbi Larson reported that while there have been some positive developments in the SCAP litigation challenging the approval of the alternative test procedure, there is still no clarity regarding where the State Water Board is headed. She will continue her efforts to get information on the proposed plan,

Energy WET CAT Initiatives: Greg Kester reported that he participated in the WET CAT meeting on February 9 and that he is working on a workplan to:

- Quantify anaerobic digestion use, methane production, and utilization, and the potential across wastewater plants.
- Understand the issues with interconnection, grid stability and demand response.
- Evaluate and review technologies to comply with new emissions limits.

Flushable Wipes: John Pastore gave an update on the status of current efforts to address flushable wipes.

ESA Lawsuit: Bobbi Larson reported that Sacramento Regional County Sanitation District has been sued by a group claiming that the District needs to apply for a take permit. The group agreed that this has the potential to set a dangerous precedent and that we should continue to track.

Next Meeting: CVCWA will host the next meeting, which will be held in September. CASA will send out a doodle poll to schedule the meeting.

The Executive Directors will convene by telephone in May.

The meeting adjourned at 1:30 pm.

Clean Water Summit
Strategic Planning Session
March 2, 2015
Notes

General Comments:

- CWS should focus on utility of the future (UTOF)/resource recovery; "what does the future look like?" Coordination on specific technical issues can be handled by the individual associations.

- Executive Director coordination is important; maybe the EDs should meet quarterly or monthly by conference call and the full CWS, including presidents/chairs, meet semi-annually.

- Can the Regulatory Workgroup be more effective in coordinating?

    - Should EDs participate in workgroup?
    - Designate a portion of the agenda or focus individual meeting agendas on regional updates/issues?

- There is value in bringing key leaders to the CWS for information discussion and idea exchange.

- Are comment letters on the CWS letterhead effective?

- CWS is important for getting the small agency and regional perspectives.

What are the Big Issues?

Group Discussion:

- Rebranding as UTOF; Resource management

- Recycled water is resource not waste

- Regulations are not keeping step with technology (e.g. nutrients, full scale research on biosolids)

- Succession planning workforce—are we keeping up with technology?

- What to Flush Campaign (pesticides, pharma, wipes, microbeads, etc.)

- New regulations with high cost and low environmental benefit—flexibility should not be a negative

- Develop our own science; engage with SCCWRP, SFEI, etc.

- Break down silos/address cross media issues.

Participant Comments:

- BACWA: Not having the next round of permits getting ahead of the science on the nutrient issue.

- OCSD: Public viewing the district as critical infrastructure and willing to invest; also, as a valued voice in the community.

- SCAP: (1) toxicity issues and (2) limit or change regulations that are an impediment to water recycling

- Regulatory Workgroup: Not spending money on low environmental benefit to meet mandates—this takes resources away from resource recovery

- CWEA: (1) Better understanding of what agencies need from the workforce; (2) understanding regulations and ensuring that training is in sync with them

- Encina: (1) How can we make use of the water currently going to the ocean; (2) Standardize interconnection for renewable power

- CASA: (1) successfully rebrand as resources recovery agencies—be seen as a partner in problem solving; (2) biosolids are undervalued and every county in the state should embrace them; (3) Need to break down silos; increase understanding of all the things wastewater agencies can do to help with the state's goals; (4) Ability to connect members with the various programs (funding etc) so that they can participate and benefit from them.

What Does Success Look Like?

- Associations are coordinated; not all doing the same thing on parallel tracks

- Regulators identify associations & wastewater agencies as resources

- Regulations provide greater benefits for lower cost

Opportunities

- Outreach to agency GMs—create a CWS summary to share

- Diversion of organics from landfills

- Distributed on-site waste recovery

- More effective use of our collective association resources (e.g. rates survey/database, collection system practices database, etc.)

- Drought response

- Climate change

- Retirement wave—bring in the next generation

Action Items

1. Executive Directors will develop and outline of how to move the utility of the future re-brand/concept forward.

2. In person meetings of full CWS will be held semi-annually—focus on relationships with key decision-makers and other stakeholders (e.g. agriculture). EDs/Key Staff and Regulatory Workgroup Chair will meet bi-monthly by conference call.

Sherry Hull

From: Sherry Hull
Sent: Wednesday, March 18, 2015 4:07 PM
To: Sherry Hull
Subject: CASA RWG: Water Committee

Importance: High

From: Debbie Welch [mailto:dwelch@casaweb.org]
Sent: Monday, March 16, 2015 12:21 PM
Subject: CASA RWG: Water Committee
Importance: High

CASA Water Committee,

Amanda Polumbo from the State Water Board called this morning to set up a meeting for POTW stakeholders as part of their statewide mercury program. She is attempting to organize a meeting to discuss the State Water Board's developing statewide mercury objectives and the new requirements that may be included for POTWs. If you are interested in attending this meeting, let me (her) know your availability via the doodle poll below and they will try to accommodate everyone's schedule.

http://doodle.com/phq4xidryyv2s3iy

This will be a follow up from the July 14 meeting last year, which covered the whole statewide mercury program. This meeting will be a more detailed discussion on possible requirements for POTWs. This will be a face-to-face meeting (no web conferencing) at the CalEPA building in downtown Sacramento. Please let me know if you have any questions, and if you are interested in attending please fill out the doodle poll and I will make sure everyone gets the invite once the meeting is set. Thank you.

- Adam
Alink@casaweb.org

Adam D. Link
Director of Government Affairs
California Association of Sanitation Agencies
1225 8th Street, Suite 595
Sacramento, CA 95814
916.446.0388, ext 2 (office)
916.947.2900 (mobile)
www.casaweb.org
Ensuring Clean Water for California

BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 9

FILE NO.: 13,505

MEETING DATE: March 20, 2015

TITLE: Approval of Change of Start Date for California State University Sacramento (CSUS) – Center for Collaborative Policy (CCP) Contract for Nutrient Steering Committee Facilitation Assistance

☐**MOTION** ☐**DISCUSSION** ☐**RESOLUTION** ☒**APPROVAL**

RECOMMENDED ACTION

Approve the change of the start date for the CSUS-CCP Agreement from January 1, 2015 to November 1, 2014.

SUMMARY

BACWA originally contracted with CSUS-CCP at a not to exceed amount of $15,000 for Nutrient Steering Committee Facilitation Assistance from June 24, 2014 through December 31, 2014. BACWA was notified by CSUS-CCP in November 2014 that Funds remaining in that agreement were about to run out. The Board approved a new agreement with CSUS-CCP for an additional not to exceed amount of $10,000 for Nutrient Steering Committee Facilitation Assistance from January 1, 2015 through June 30, 2015. In March 2015 BACWA received invoices from CSUS-CCP for work done in November and December of 2014 that exceeded the original $15,000 contract amount. Since it was the intention of the Board to continue to provide interim assistance and facilitation services to support the development of an appropriate stakeholder-driven implementation of the San Francisco Bay, Nutrient Management Strategy (NMS) after the first agreement funds ran out, the start date of the second agreement should be revised from January 1, 2015 to November 1, 2014.

FISCAL IMPACT

This action has no fiscal impact.

ALTERNATIVES

This action does not require consideration of alternatives.

Attachments:

1. Amendment to CSUS-CCP Contract January 1, 2015 through June 30, 2015
2. CSUS-CCP Contract June 24, 2014 through December 31, 2015
3. CSUS-CCP Contract January 1, 2015 through June 30, 2015

Date: _____ **Approval:** _____

Amendment

BAY AREA CLEAN WATER AGENCIES
And
David M. Ceppos (Consultant)
California State University, Sacramento
Center for Collaborative Policy (CSUS/CCP)
AGREEMENT

Facilitation Assistance for the
San Francisco Bay Nutrient Management Strategy (NMS)

START DATE MODIFICATION

March 20, 2015

The purpose of the modification to the CSUS-CCP existing agreement is to revise the start date. BACWA originally contracted with CSUS-CCP at a not to exceed amount of $15,000 for Nutrient Steering Committee Facilitation Assistance from June 24, 2014 through December 31, 2014. BACWA was notified by CSUS-CCP in November 2014 that Funds remaining in that agreement were about to run out. The Board approved a new agreement with CSUS-CCP for an additional not to exceed amount of $10,000 for Nutrient Steering Committee Facilitation Assistance from January 1, 2015 through June 30, 2015. In March 2015 BACWA received invoices from CSUS-CCP for work done in November and December, 2014 that exceeded the original $15,000 contract amount. Since it was the intention of the Board to continue to provide interim assistance and facilitation services to support the development of an appropriate stakeholder-driven implementation of the San Francisco Bay, Nutrient Management Strategy (NMS) after the first agreement funds ran out, the start date of the second agreement is revised from January 1, 2015 to November 1, 2014.

CSUS# CP140105

File 13,352

DATE June 24, 2014

BAY AREA CLEAN WATER AGENCIES

PURCHASE ORDER

TO:	David M. Ceppos (Consultant) California State University, Sacramento Center for Collaborative Policy (CSUS/CCP) 815 S Street, First Floor Sacramento, CA 95811	E-mail: dceppos@ccp.csus.edu Phone: (916) 341-3336 FAX: (916) 445-2087
FROM:	Dave Williams, Executive Director BACWA PO Box 24055, MS702 Oakland, CA 94623	Email: dwilliams@bacwa.org Phone: (925) 765-9616 FAX:

RE: California State University, Sacramento
Center for Collaborative Policy

Purchase Order for 2014-2015 Facilitation Assistance

This Purchase Order (PO) covers professional Facilitation services to be performed by CONSULTANT in order to implement the Facilitation Assistance for the San Francisco Bay Nutrient Management Strategy (NMS) process beginning June 24, 2014 through December 31, 2014. FY 2014-2015. This work is described in the attached Scope of Work and under the direction of Dave Williams (PROJECT MANAGER). The total cost of professional services to be performed by CONSULTANT is not to exceed $15,000.00. This contract will be funded by the BACWA account, Watershed Permit line item.

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

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

Sherry Hull, Assistant Executive Director
BACWA
PO Box 24055, MS702
Oakland, CA 94623
shull@bacwa.org
(415) 404-8303

If this purchase order for professional services is acceptable to you, please sign and mail this document to me for BACWA records and distribution. Please call me if you have any questions or concerns relating to this matter.

Approved:

By _____
Mike Connor
Chair, BACWA Executive Board

Date 8/05/14

By _____
Michelle Johnson
Contract Specialist, CSUS/CCP

Date 7.15.14

BACWA EIN: 94-3389334

File 13,352
Bay Area Clean Water Agencies

Date June 24, 2014

SCOPE OF WORK

The Center for Collaborative Policy (Center) will provide the following facilitation and related services for the San Francisco Bay Nutrient Management Strategy (NMS) process

Conduct Stakeholder Meetings. The facilitator will work with NMS stakeholders to plan, prepare, and conduct up to six (6) NMS meetings. These meetings may include support to the NMS Steering Committee, NMS project leadership, and/or the Nutrient Technical Workgroup (NTW).

Deliverables: *Draft and Final meeting agendas*
Draft and final meeting summaries (see assumptions below)
Meeting materials (to be determined)

RATE SHEET

Hourly Labor Rate: Hourly rates do not include software licensing fees or costs for outside services including but not limited to application service providers or website hosting.

Consulting Services
Mediation/Facilitation Consulting Services - $188 per hour

Scope Assumptions and Cost Estimate

Labor hours and direct expenses will total no more than $15,000.00.

Period of Performance

Activities for the project will start upon approval of the purchase order by BACWAA and the Center. The completion date is subject to revision based on external conditions and discussions between the CCP facilitator / project manager, BACWA and the Water Board.

Deliverables

CCP will be responsible for meeting the following standards and providing the following items:

- All work produced will be provided in electronic format.
- All written text will be produced in a format compatible with MS Office and or Adobe Acrobat.
- All deliverables will be free of grammatical and spelling errors and as accurate as possible.

CSUS #CP1403166

File 13,463 DATE December 19, 2014

BAY AREA CLEAN WATER AGENCIES

PURCHASE ORDER

TO:	David M. Ceppos (Consultant) California State University, Sacramento Center for Collaborative Policy (CSUS/CCP) 815 S Street, First Floor Sacramento, CA 95811	E-mail: dceppos@ccp.csus.edu Phone: (916) 341-3336 FAX: (916) 445-2087
FROM:	Dave Williams, Executive Director BACWA PO Box 24055, MS702 Oakland, CA 94623	Email: dwilliams@bacwa.org Phone: (925) 765-9616 FAX:

RE: California State University, Sacramento Purchase Order for 2014-2015 Facilitation Assistance
Center for Collaborative Policy

This Purchase Order (PO) covers professional Facilitation services to be performed by CONSULTANT in order to implement the Facilitation Assistance for the San Francisco Bay Nutrient Management Strategy (NMS) process beginning January 1, 2015 through June 30, 2015, FY 2014-2015. This work is described in the attached Scope of Work and under the direction of Dave Williams (PROJECT MANAGER). The total cost of professional services to be performed by CONSULTANT is not to exceed $10,000.00. This contract will be funded by the BACWA account, Watershed Permit line item.

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

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

Sherry Hull, Assistant Executive Director
BACWA
shull@bacwa.org
(415) 404-8303

If this purchase order for professional services is acceptable to you, please sign and mail this document to me for BACWA records and distribution. Please call me if you have any questions or concerns relating to this matter.

Approved:

By Michael S. Connor
Michael S. Connor
Chair, BACWA Executive Board

Date 2/11/14

By M. Johnson
Michelle Johnson
Contract Specialist, CSUS/CCP

Date 1.20.15

BACWA EIN: 94-3389334

File 13,463
Bay Area Clean Water Agencies

Date: December 19, 2014

SCOPE OF WORK

The Center for Collaborative Policy (Center) will provide the following facilitation and related services for the San Francisco Bay Nutrient Management Strategy (NMS) process

Conduct Stakeholder Meetings. The facilitator will work with NMS stakeholders to plan, prepare, and conduct up to six (6) NMS meetings on an as-needed basis when services are specifically requested. These meetings may include support to the NMS Steering Committee, NMS Planning Subcommittee, and/or the Nutrient Technical Workgroup (NTW).

Deliverables (as requested): *Draft and Final meeting agendas*
Draft and final meeting summaries (see assumptions below)
Meeting materials (to be determined)

Scope Assumptions and Cost Estimate

Labor hours and direct expenses will total no more than $10,000.00.

Period of Performance

Activities for the project will start upon approval of the purchase order by BACWAA and the Center. The completion date is subject to revision based on external conditions and discussions between the CCP facilitator / project manager, BACWA and the Water Board.

Deliverables

CCP will be responsible for meeting the following standards and providing the following items:

- All work produced will be provided in electronic format.
- All written text will be produced in a format compatible with MS Office and or Adobe Acrobat.
- All deliverables will be free of grammatical and spelling errors and as accurate as possible.

BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 9
FILE NO.: 13,507
MEETING DATE: March 20, 2015

TITLE: Whitley Burchett Support for Recycled Water Committee Projects

☐**RECEIPT** ☐**DISCUSSION** ☐**RESOLUTION** ☒**APPROVAL**

ACTION UNDER CONSIDERATION

Authorize Amendment to agreement with Whitley Burchett & Associates for Recycled Water Committee Project Support in an amount not to exceed $14,000.00 to be completed by June 30, 2015

SUMMARY

The purpose of the scope modification to Whitley Burchett & Associates (WBA) existing agreement is to add two new tasks to the scope of work in their existing contract. The first new task is to support the BACWA Recycled Water Committee with initiating pre-survey work for the 2016 update to the 2011 Recycled Water Use Survey; the second new task is to provide consultant committee support for the anticipated 2015 IRWM Prop 84 Grant Solicitation process which will begin in March 2015.

FISCAL IMPACT

Funding for this contract is available in the approved BACWA Budget FY 2015. After completion of all existing work under existing agreements, $3,718 of available funds remain in the Recycled Water FY 15 budget. These funds will be applied to this new scope. In addition $11,992 is remaining under the Miscellaneous Committee Support line item which will be used to fund the new scope of work.

ALTERNATIVES

No other alternatives were considered as the terms of this agreement are consistent with BACWA contracting policies.

ATTACHMENT

1. Amendment

Date: _____ **Approval:** _____

Amendment No. 4

BAY AREA CLEAN WATER AGENCIES
and
WHITLEY BURCHETT & ASSOCIATES
AGREEMENT

Recycled Water Committee Support

SCOPE MODIFICATION

March 10, 2015

The purpose of the scope modification to Whitley Burchett & Associates (WBA) existing agreement is to add two new tasks to the scope of work in their existing contract. The first new task is to support the BACWA Recycled Water Committee with initiating the 2016 update to the 2011 Recycled Water Use Survey; the second new task is to provide consultant committee support for the anticipated 2015 IRWM Prop 84 Grant Solicitation process which will begin in March 2015.

EXISTING WBA AUTHORIZATION

In 2012, BACWA retained the services of WBA to provide support to the BACWA Recycled Water Committee for the development and review of the 2013 Bay Area IRWM Plan Update (BAIRWMP). WBA's role was to coordinate and review proposed project submittals, assist the chair with project prioritization, and review and comment on the BAIRWMP draft update. The original budget authorized for this effort was $49,906. The 2013 BAIRWMP has been completed and approved by the BAIRWM Coordinating Committee.

The original contract has been amended to allow for scope modification and extension of contract completion date to provide consulting assistance to the Recycled Water Committee on efforts that emerged since the initial scope of work was prepared. The table below summarizes the changes.

Amendment No.	Change to Completion Date	New Scope	Budget
No. 1 6/27/2013	June 30, 2014	• Term extension only; no scope change	No Change
No. 2 5/16/14	June 30, 2015	• Prop 84 Round 3 Sub-regional Concept Submittal • 2014 Drought Solicitation Pre-Application effort	No Change
No. 3 8/15/14	No Change	• Recycled Water Truck Fill Facilities Survey and Guidebook • Recycled water regulatory and drought-related assistance	No Change

As of February 1, 2015, WBA has a remaining budget of $15,712 under the existing authorization. The Recycled Water Truck Fill Guidebook has been finalized and posted on the BACWA website. There may be a minimal amount of additional work if BACWA wants to make any revision to the Guidebook in this fiscal year. WBA estimates there is about $14,000 of budget available to provide the Recycled Water Committee with consultant support on new tasks through the end of the fiscal year.

BACKGROUND

There are two new tasks which BACWA's Recycled Water Committee anticipates to occur between February and the end of the 2015 fiscal year that would benefit from consultant support. These are described below.

Initiate the Update to the 2011 BACWA Recycled Water Use Survey.
BACWA's intent is to update their Recycled Water Use Survey every five years, following the Department of Water Resources' Urban Water Management Plan update schedule. The current survey was published in 2011 and the Committee's objective is to begin the survey in 2015 to allow issuing an update in early 2016. The Recycled Water Committee has requested FY 2016 budget to prepare the survey.

The Recycled Water Committee's proposed approach is to leverage the current data collection efforts of two other ongoing surveys: 1) HDR is collecting recycled water information as part of its wastewater plant optimization/upgrade (nutrient) studies and 2) DWR is requiring agencies to include recycled water information in their Urban Water Management Plan 2015 updates. The Recycled Water Committee would like to begin timely coordination efforts with HDR and DWR prior to FY 2016. This would allow BACWA to gain dual benefits from the HDR site visits and begin the conversation with DWR on their survey approach. This will lead to a well-designed and efficient 2015

BACWA survey. Consultant support to collect, review and organize information from the other surveys will assist the Recycled Water Committee leadership.

IRWM Prop 84 Round 3 Grant 2015.
DWR IRWM Prop 84 Round 3 grant solicitation schedule shows applications will be due August 2015. To meet this schedule the Bay Area IRWM Coordinating Committee (CC) has issued a Request for Project Concept Submittals that is due to the CC on April 20, 2015. The CC has asked that the BACWA Recycled Water Committee review all of the recycled water and possibly the wastewater project submissions. The CC intends to have a final list of projects by the end of May 2015. This will require a significant short-term effort by the Recycled Water Committee to review project proposals and coordinate with project proponents. For the 2014 IRWM effort, the Recycled Water Committee leadership utilized consultant assistance to facilitate the process. The Committee leadership sees benefit in having similar consultant assistance for the 2015 IRWM effort.

PROPOSED NEW SCOPE OF WORK

This contract amendment would add the following new tasks to the existing WBA agreement.

Task 9: Initiate BACWA Recycled Water Use Survey 2016 Update

WBA will support the BACWA Recycled Water Committee in initiating the Recycled Water Use Survey 2016 Update. As budget allows, anticipated activities could include:

- Review 2011 BACWA Recycled Water Use Survey.
- Work with the BACWA Recycled Water Committee to identify information that BACWA would like to collect in its Recycled Water Use Survey Update.
- Identify recycled water information being collected by DWR and would be useful for the BACWA survey.
- Identify recycled water information being collected by HDR.
- Draft survey questions that can be included in HDR's interview of wastewater agencies (work currently planned for wastewater plant optimization/upgrade studies) in coordination with the BACWA Recycled Water Committee.
- Identify information BACWA will need to collect, as it is not being collected by other survey.

Task 10: IRWM Prop 84 Round 3 Grant 2015

WBA will support the BACWA Recycled Water Committee with the IRWM Prop 84 Round 3 effort. WBA's support would be as-needed and at the direction of the Committee Chair. All activity will be performed through June 30, 2015. As budget allows, anticipated assignments could include:

- Review projects for conformance with regional priorities and criteria.
- Follow-up with project sponsors for additional information.

- Prepare list of projects.
- Enhance the background information in the proposal for future use in the DWR application.

BUDGET

The budget remaining in WBA's 2012-2015 budget authorization to perform Tasks 9 and 10 is estimated at $14,000. This will provide about 75 hours of consultant assistance. WBA will work under the direction of the Recycled Water Committee Chair up to the WBA 2012-2015 contract budget authorization.

SCHEDULE

The proposed work would begin upon receipt of a Notice to Proceed from BACWA and continue through June 30, 2015, the current term of WBA's existing BACWA authorization, unless BACWA determines the necessity to extend the term of the agreement.

FY 2016
BACWA BUDGET
DRAFT

REVENUES & FUNDING	***Line Item Description***	**FY 2014 Actuals**	**FY 2015 Budget Amended**	**FY 2015 Actuals to Date (Jan 2015)**	**FY 2016 Draft Budget**	**FY 2016 NOTES**
Principals' Contributions		$494,061	$459,000	$459,000	$468,180	2% increase ($91,800 to $93,636)
Associate & Affiliate Contributions		$160,500	$168,300	$160,650	$171,639	2% increase ($7,650 to $7,803 & $1,530 to $1,560), (see attached billing draft)
Fees	Clean Bay Collaborative	$765,500	$675,000	$579,712	$675,000	
	Nutrient Surcharge	$0	$300,000	$268,332	$600,000	
Other Receipts						
	AIR Committee Phase-in	$0	$0	$0	$50,000	
	BAPPG Non-Members	$0	$3,450	$3,450	$3,600	
	AIR Non-Member	$0	$0	$0	$6,200	
Fund Transfer	Special Program Admin Fees	$12,924	$6,500	$0	$2,500	WOT
Interest Income		$2,873	$4,000	$1,591	$1,500	
	Total Revenue	**$1,435,858**	**$1,616,250**	**$1,472,735**	**$1,978,619**	
EXPENSES						
	Line Item	**FY 2014 Actuals**	**FY 2015 Budget Amended**	**FY 2015 Actuals to Date (Jan 2015)**	**FY 2016 Draft Budget**	
Labor						
	Executive Director	$175,000	$178,500	$89,250	$183,498	Annual CPI change for San Francisco-Oakland-San Jose
	Assistant Executive Director	$84,070	$76,500	$44,881	$78,642	Annual CPI change for San Francisco-Oakland-San Jose
	Regulatory Program Manager	$0	$120,000	$45,807	$123,360	Annual CPI change for San Francisco-Oakland-San Jose
	Total	**$259,070**	**$375,000**	**$179,938**	**$385,500**	
Administration						
	EBMUD Financial Service & Audit	$24,662	$40,000	$22,372	$40,000	
	Administrative Expenses	$3,867	$5,500	$11,125	$7,500	Conference Attendance, Supplies, Parking, Mileage, Tolls, Misc.
	Insurance	$4,321	$4,500	$4,308	$4,500	
	Total	**$32,850**	**$50,000**	**$37,805**	**$52,000**	
Meetings						
	Meetings			$8,402		
	EB Meetings		$2,500		$2,500	
	Annual Meeting		$7,000		$8,000	
	Pardee		$5,000		$5,000	
	Misc. (Summit Partners)		$1,100		$1,100	
	Total	**$11,896**	**$15,600**	**$8,402**	**$16,600**	

FY 2016
BACWA BUDGET
DRAFT

	Line Item	FY 2014 Actuals	FY 2015 Budget Amended	FY 2015 Actuals to Date (Jan 2015)	FY 2016 Draft Budget	
Communication						
	Annual Report	$0	$1,000	$0	$0	
	Website Development/Maintenance	$6,639	$0	$4,133	$0	
	Website Hosting (Power DNN)		$600		$600	Change to Computer Courage with new website
	File Storage (Box.net)		$720		$720	
	Website Development/Maintenance		$5,000		$1,200	
	IT Support (Managed Services)				$1,800	3 computers @ $50/computer - Computer Courage
	IT Support (As Needed)		$1,500		$2,000	IT Support-Computer Courage
	Email (Office 365/MS Exchange)		$480		$480	
	Other Communication (Survey Monkey)	$73	$0		$288	
	Other Communication (iContact)		$200		$0	
	Total	**$6,712**	**$9,500**	**$4,133**	**$7,088**	
Legal						
	Regulatory Support	$2,977	$4,475	$0	$2,500	
	Executive Board Support	$1,972	$2,000	$952	$2,000	
	Total	**$4,949**	**$6,475**	**$952**	**$4,500**	
Committees						
	AIR	$78,340	$81,120	$46,385	$50,000	Consultant Support, Admin provided by BACWA Staff
	BAPPG	$70,920	$81,000	$21,935	$86,000	
	Biosolids Committee	$0	$5,000	$0	$3,100	
	Collections System	$23,997	$26,000	$12,987	$10,000	Includes Venue Costs & Consultant Services
	InfoShare Groups	$10,849	$12,000	$7,015	$1,000	Assumes BACWA Support
	Laboratory Committee	$2,106	$7,000	$0	$6,000	
	Permit Committee	$0	$1,000	$0	$1,000	
	Pretreatment	$0	$1,000	$157	$1,000	
	Recycled Water Committee	$2,545	$8,365	$3,647	$1,000	Requests for outside assistance considered on a case by case basis
	Misc Committee Support	$104,894	$28,064	$11,407	$30,000	
	Total	**$293,650**	**$250,549**	**$103,533**	**$189,100**	

FY 2016
BACWA BUDGET
DRAFT

	Line Item	FY 2014 Actuals	FY 2015 Budget Amended	FY 2015 Actuals to Date (Jan 2015)	FY 2016 Draft Budget	
Collaboratives						
	State of the Estuary (biennial)	$0	$20,000	$20,000	$0	Bienniel. Last in 2013.
	Arleen Navarret Award	$0	$0	$0	$1,000	
	FWQC (Fred Andes)	$5,000	$5,000	$0	$5,000	Requested $7,500 for FY16
	CPSC (Ca Product Stewardship Council)	$5,000	$5,000	$0	$0	Included in BAPPG Budget at $9,000
	PSI (Product Stewardship Institute)	$500	$500	$500	$0	Included in BAPPG Budget at $1,000
	Stanford ERC (ReNUWIt)	$10,000	$10,000	$10,000	$10,000	
	CWCCG	$0	$25,000	$25,000	$35,000	
	Total	**$20,500**	**$65,500**	**$55,500**	**$51,000**	
Technical Support						
	Nutrients					
	Watershed		$880,000	$879,762	$880,000	
	Additional work under permit		$100,000		$100,000	
	Annual Reporting		$100,000		$0	
	Opt/Upgrade/Annual Reporting Studies		$250,000	$107,901	$559,000	
	Nutrient Program Coordination		$0		$50,000	
	General Tech Support		$50,000	$248,549	$50,000	
	Chemicals of Concern (K. Moran/CASA support)		$15,000		$15,000	
	Risk Reduction		$15,000		$17,500	Remaining 3 years is approx. $50k
	Rate database		$6,000		$0	Create form for Agencies to share their own surveys
		$474,545	**$1,416,000**	**$1,236,212**	**$1,671,500**	
	TOTAL EXPENSES	**$1,104,172**	**$2,188,624**	**$1,626,475**	**$2,377,288**	
	NET INCOME BEFORE TRANSFERS	**$331,686**	**-$572,374**	**-$153,740**	**-$398,669**	
	TRANSFERS FROM RESERVES				**$398,669**	
	NET INCOME AFTER TRANSFERS				**$0**	

BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 11

FILE NO.: 13,503

MEETING DATE: March 20, 2015

TITLE: Receive the BACWA Annual Reports for Fiscal Years 2013 and 2014

☒**RECEIPT** ☐**DISCUSSION** ☐**RESOLUTION** ☐**APPROVAL**

RECOMMENDED ACTION

Receive the BACWA Annual Reports for Fiscal Years 2013 and 2014.

SUMMARY

The BACWA JPA states: *Each year the Association will report to the governing bodies of each of the member agencies. This report will describe the technical and financial activities of the Association during the preceding year.* The BACWA Annual Reports for Fiscal Years 2013 and 2014 fulfills this requirement.

FISCAL IMPACT

This action has no fiscal impact.

ALTERNATIVES

This action does not require consideration of alternatives.

Attachments:

1. BACWA Annual Reports, Fiscal Years 2013 & 2014

Date: _____ **Approval:** _____

BACWA Annual Report

Fiscal Years 2013 and 2014

As water quality regulation becomes increasingly complex and stringent, BACWA provides technical expertise and financial support to its membership and a public utility perspective to negotiations and collaborations 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 shifting rapidly from toxic pollutant reduction to renewable resource generation; and understanding the potential impacts of micro-constituents, compounds detected at often miniscule levels that may present human health or environmental concerns. Member contributions will continue to support BACWA's goal of ensuring that any nutrient regulations are well-supported by science and that any necessary reductions in nutrient loading will be equitable and 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 have garnered the agency much respect and success.

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

List of Accomplishments, Fiscal Year 2013

- Prepared reports, on behalf of our members, demonstrating compliance with risk reduction and special studies requirements
- Met with state board staff and submitted a comment letter on the Draft Whole Effluent Toxicity Policy. Provided members with a letter template to allow them to more easily comment on the Draft Whole Effluent Toxicity Policy
- Provided comments on Sacramento Regional Permit requirements
- Provided comments on the San Francisco Bay Basin Plan Triennial Review
- Provided comments on the dilution credits and anti-backsliding requirements in West County Agency's tentative order;
- Proposed revisions to the SSS WDR MRP
- Participated in collaborative projects such as the California Wastewater Climate Change Group,
- Funded development of a recycled water landscape guide
- Completed a Biosolids Fact Sheet
- Performed regional water quality education and outreach
- Completed a selenium effluent characterization study
- Managed of a regional sewer rate survey database.
- Finalized the dental metrics report to meet Mercury/PCB Watershed Permit requirements
- Completed risk reduction requirements to meet Mercury/PCB Watershed Permit requirements
- Negotiated renewal of the Mercury/PCBs Watershed Permit
- Reviewed of the Method 1668C PCB data that has been gathered to date to inform permit negotiations

- Developed the Regulatory and AIR issues summary matrices
- Worked with the RWQCB to develop a group nutrients sampling and reporting plan to comply with 13267 requirements for influent and effluent nutrient data collection over two years.
- Participated in statewide Green Chemistry/Pesticide regulation efforts
- Participated in the update of the Bay Area Integrated Regional Water Management Plan
- Conducted routine communication with our membership through the Annual Meeting, Monthly Board meetings.

List of Accomplishments, Fiscal Year 2014

- Prepared reports, on behalf of our members, demonstrating compliance with risk reduction and special studies requirements;
- Developed updated PCB sampling, analysis and reporting protocols to reduce variability between laboratory results;
- Worked with regulators and other discharger to reestablish a regional risk reduction program in compliance with the Mercury/PCB Watershed Permit;
- Conducted meetings with State Water Board and submitted comment letter on proposed changes to the State Whole Effluent Toxicity Plan; followed up on regional impact of Statewide Toxicity Plan with Regional Water Board Staff;
- Reviewed the State Water Resources Control Board's proposed revisions to the SSS WDR MRP and provided summary of the new requirements of the WDR MRP once it was adopted;
- Supported our member agencies responding to 13267 letter Nutrient reporting requirements;
- Provided comments on the water rights language in Palo Alto's tentative order which may have limited its ability to deliver recycled water;
- Provided comments on the Statewide vector control general order;
- Provided comments on the Statewide recycled water general order;
- Co-funded a Layperson's Guide to Wastewater, copies of which were made available to our member agencies;
- Conducted regional outreach campaigns related to flushable wipes, copper, pharmaceutical disposal, household hazardous waste, building demolition, and FOG; Submitted comment letters to regulators on emerging pesticides;
- Developed partnerships with state and federal organizations on emerging issues such as climate change, pesticide regulation, product stewardship, electronic reporting, and wastewater as a resource;
- Led efforts to develop a regional nutrient focused grant application for Proposition 84, Round 3 funding;
- Supported effort to develop a regional drought relief application for Proposition 84 funding;
- Established a new Pretreatment Committee;
- Commented on SFPUC's Southeast Plant's Tentative Order requesting a test species be added to its chronic toxicity testing requirements;
- Reviewed Regional Water Board efforts to develop selenium objectives for North and South San Francisco Bay selenium TMDLs;
- Led efforts to work collaboratively with the Water Board in pursuit of science based regulations dealing with nutrient loadings to San Francisco Bay including negotiation of a watershed permit, funding $675,000 in scientific studies and development of a governance structure for overseeing the development and implementation of a Science Plan to help inform future regulatory policy;
- Updated the Regulatory and AIR issues summary matrices;
- Held a Nutrient Regulatory Workshop and a Nutrient Technical Symposia for our members;
- Conducted routine communication with our membership through the Annual Meeting, Monthly Board meetings and monthly BACWA Bulletin;

- Presented 2014 Arlene Navarret Award to Amanda Roa of Delta Diablo;
- Participated in the update of the Bay Area Integrated Regional Water Management Plan

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/Engineering Infoshare
- Pretreatment (new in FY 2013/14)
- Bay Area Pollution Prevention Group (partial support in FY 2012/13, full support in FY 2013/14)
- Air Issues and Regulations (partial support)

List of BACWA Members as of June 30, 2014

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
South Bayside System Authority
San Mateo Wastewater Treatment Plant
South San Francisco
Vallejo Sanitation and Flood Control District
West County Agency

Affiliates

City American Canyon
City of Albany
City of Belmont
City of Benicia
City of Berkeley
City of Brisbane
City of Burlingame
City of Calistoga
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
City of Windsor
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
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
Santa Clara County Sanitation District No. 2-3
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
West Bay Sanitary District
West Valley Sanitation District
Yountville

Financials:

BAY AREA CLEAN WATER AGENCIES
Fiscal Year 2013
BUDGET VS ACTUAL

BACWA	**FY 2013 Budget**	**FY 2013 AMENDED Budget**	**Actuals**	**Percentage of Budget**	**Amended Budget Notes**
REVENUES					
Principals' Contributions	420,000	420,000	420,000	100.00%	
Associate & Affiliate Contributions	162,000	159,000	159,000	100.00%	loss of 2 affiliates (St Helena & Windsor)
Other Receipts	0	0	9,987		support
Fund Transfer	10,000	10,277	13,563	131.97%	AIR, BAPPG & WOT=$10,277. Prop 50=$3,286
Interest Income	5,000	5,000	3,195	63.90%	
Administrative & General	0	0	7,341		Dues overpayment by Sewerage Agency of So. Marin
TOTAL BACWA REVENUES	**597,000**	**594,277**	**613,086**	**103.17%**	
EXPENSES					
BACWA Committees					
Collections System	25,000	25,000	25,007	100.03%	
Permit Committee	0	0	0		
Water Recycling Committee	10,000	13,359	733	5.49%	includes EPC carryforward of $3,359
Biosolids Committee	5,000	6,515	2,832	43.47%	includes Cpoint carryforward of $1,515
InfoShare Groups	25,000	25,000	11,825	47.30%	
Laboratory Committee	7,000	7,000	0	0.00%	
Misc Committee Support	140,000	140,000	92,081	65.77%	
Legal Support					
Regulatory Support	2,000	2,000	5,451	272.55%	
Executive Board Support	2,000	2,000	530	26.50%	
Collaboratives and Sponsorships					
CWAA	1,000	1,000	1,000	100.00%	
State of the Estuary	20,000	20,000	20,000	100.00%	
CPSC	5,000	5,000	5,000	100.00%	
PSI	500	500	500	100.00%	
Stanford ERC	10,000	10,000	10,000	100.00%	
Communications and Reporting					
Annual Report	15,000	15,000	0	0.00%	
Website Development/Maintenance	10,720	10,720	7,403	69.06%	
Other Communications	5,000	5,000	657	13.14%	
Special Programs					
Contribution to BAPPG Enterprise	50,000	50,000	50,000	100.00%	
General BACWA Support					
Contingency	30,000	30,000	36,686	122.29%	
Meeting Support	13,000	13,000	9,970	76.69%	
Administrative Support					
Executive Director	160,000	160,000	164,432	102.77%	Overlap of two ED's
Assistant Executive Director	70,000	70,000	67,610	96.59%	
EBMUD Financial Service & Audit	40,000	40,000	20,163	50.41%	
Administrative Expenses	3,000	3,000	5,388	179.60%	
Insurance	4,000	4,000	3,860	96.50%	
TOTAL BACWA EXPENSES	**653,220**	**658,094**	**541,128**	**82.23%**	

BAY AREA CLEAN WATER AGENCIES
Fiscal Year 2013
BUDGET VS ACTUAL

CLEAN BAY COLLABORATIVE (CBC)	FY 2013 Budget	FY 2013 AMENDED Budget	Actuals	Percentage of Budget	Amended Budget Notes
REVENUES					
CBC Contributions	450,000	450,000	449,000	99.78%	
CBC Interest/ Misc	1,600	1,600	1,269	79.31%	
TOTAL CBC REVENUES	**451,600**	**451,600**	**450,269**	**99.71%**	
EXPENSES					
Technical Support	385,000	525,838	248,650	47.29%	Carryforwards: LWA (9990-3402), HDR (19256), SFEI (62974+45000), Somach (7110)
Collaborations & Sponsorships	65,000	65,000	15,000	23.08%	
Commun. & Reporting	26,000	26,000	3,140	12.08%	
Other	45,000	45,000	28,404	63.12%	
TOTAL CBC EXPENSES	**474,000**	**661,838**	**295,194**	**44.60%**	

AIR	FY 2013 Budget	FY 2013 AMENDED Budget	Actuals	Percentage of Budget	Amended Budget Notes
REVENUES					
AIR Contributions	85,000	78,354	78,354	100.00%	loss of South San Fran ($6,646)
AIR Interest/Misc	0	0	135		
TOTAL AIR REVENUE	**85,000**	**78354**	**78,489**	**100.17%**	
EXPENSES					
AIR Contract Expenses	81,000	79,556	64,990	81.69%	CH2MHill contract actual value
AIR Administrative Expenses	4,000	3,977	3,977	100.00%	5% of Amended Contributions
TOTAL AIR EXPENSES	**85,000**	**83,533**	**68,967**	**82.56%**	

BAPPG	FY 2013 Budget	FY 2013 AMENDED Budget	Actuals	Percentage of Budget	Amended Budget Notes
REVENUES					
BAPPG Contributions	80,000	79,505	79,505	100.00%	loss of St Helena
BAPPG Interest/ Misc	3,079	3,079	152	4.94%	
TOTAL BAPPG Contributions	**83,079**	**82,584**	**79,657**	**96.46%**	
EXPENSES					
FOG	14,000	14,000	8,000	57.14%	
Pesticides	10,000	10,000	10,000	100.00%	
Copper	5,000	5,000	4,833	96.66%	
Pharmaceuticals	7,499	7,499	8,845	117.95%	
Multi-Pollutant	19,000	19,000	15,952	83.96%	
Emerging Issues	8,000	8,000	7,517	93.96%	
Other	12,500	16,539	10,459	63.24%	JJackson Carryforward of $4,039
Administrative Expenses	3,800	3,800	3,800	100.00%	5% of Amended Contributions
TOTAL BAPPG EXPENSES	**79,799**	**83,838**	**69,406**	**82.79%**	

WOT	FY 2013 Budget	FY 2013 AMENDED Budget	Actuals	Percentage of Budget	Amended Budget Notes
REVENUES					
WOT Contributions	160,500	150,000	164,500	109.67%	reflects actual billing total
WOT Interest/Misc	0	0	400		
TOTAL WOT Contributions	**160,500**	**150000**	**164,900**	**109.93%**	
EXPENSES					
WOT Contract Expenses	158,000	158,000	182,000	115.19%	
WOT Administrative Expenses	2,500	2,500	2,500	100.00%	2% of Contributions
TOTAL WOT EXPENSES	**160,500**	**160,500**	**184,500**	**114.95%**	

BAY AREA CLEAN WATER AGENCIES
Fiscal Year 2014
BUDGET VS ACTUAL

BACWA	**FY 2014 Budget**	**FY 2014 AMENDED Budget**	**Actual**	**%**	**Notes**
REVENUES					
Principals' Contributions	450,000	450,000	494,061	109.79%	$44,061 received 11/18/2013 for outstanding FY12, FY13 dues
Associate & Affiliate Contributions	159,000	163,500	160,500	98.17%	$3,000 not paid
Other Receipts	0	0			
Fund Transfer	10,000	10,675	12,924	121.07%	Budget reflects actual admin fees from AIR, BAPPG and WOT
Interest Income	3,000	3,000	2,873	95.77%	
TOTAL BACWA REVENUES	**622,000**	**627,175**	**670,358**	**106.89%**	
EXPENSES					
BACWA Committees					
Collections System	26,000	26,000	23,997	92.30%	
Permit Committee	0	0	0	0.00%	
Water Recycling Committee	10,000	41,552	2,545	6.12%	$31,552: WBA carryforward
Biosolids Committee	5,000	5,000	0	0.00%	
InfoShare Groups	25,000	25,000	10,849	43.39%	
Laboratory Committee	5,000	5,000	2,106	42.11%	
Miscellaneous Committee Support	90,000	106,368	104,894	98.61%	$16,368: PME Carryforward
Legal Support					
Regulatory Support	2,000	2,000	2,977	148.85%	
Executive Board Support	2,000	2,000	1,972	98.60%	
Collaboratives and Sponsorships					
State of the Estuary	0	0	0		Every other year
CPSC	5,000	5,000	5,000	100.00%	
PSI	500	500	500	100.00%	
Stanford ERC	10,000	10,000	10,000	100.00%	
Arleen Navarret Award	1,000	1,000	0	0.00%	
FWQC	5,000	5,000	5,000	100.00%	
Communications and Reporting					
Annual Report	5,000	5,000	0	0.00%	
Website Development /Maintenance	7,820	7,820	6,639	84.90%	
Other Communications	200	5,199	73	1.39%	$4,999: Linde Carryforward
Special Programs					
Contribution to BAPPG Enterprise	50,000	50,000	50,000	100.00%	
General BACWA Support					
Contingency	31,100	31,100	7,534	24.23%	
Meeting Support	13,000	13,000	11,896	91.51%	
Administrative Support					
Executive Director	175,000	175,000	175,000	100.00%	
Assistant Executive Director	75,000	75,000	84,070	112.09%	Overlap of 2 AED contracts
EBMUD Financial Service & Audit	40,000	40,000	24,662	61.66%	
Administrative Expenses	3,000	3,000	3,867	128.89%	
Insurance	4,000	4,000	4,321	108.03%	
TOTAL BACWA EXPENSES	**590,620**	**643,539**	**537,901**	**83.58%**	

BAY AREA CLEAN WATER AGENCIES
Fiscal Year 2014
BUDGET VS ACTUAL

CLEAN BAY COLLABORATIVE (CBC)	FY 2014 Budget	FY 2014 AMENDED Budget	Actual	%	Notes
REVENUES					
Principals	450,000	450,000	540,000	120.00%	90k paid by EBMUD in FY14 for FY15
Associates & Affiliates	225,000	227,250	224,500	98.79%	$2,750 not paid
TOTAL CBC Contributions	675,000	675,000	765,500	113.41%	
CBC Other Receipts			54,719		40k paid by EBMUD in FY 14 for FY15
CBC Interest/ Misc	1,000	1,000	1,927	192.71%	
TOTAL CBC REVENUE	**676,000**	**676,000**	**822,146**	**121.62%**	
EXPENSES					
Technical Support	795,000	896,902	470,972	52.51%	$101,902 - Carryforward: SFEI 99,703; Jkelly 2,199
Collaborations & Sponsorships	30,000	30,000	30,000	100.00%	
Commun. & Reporting	6,000	6,000	1,806	30.10%	
Other	33,800	33,800	14,967	44.28%	
TOTAL CBC EXPENSES	**817,800**	**919,702**	**517,745**	**56.29%**	

AIR COMMITTEE	FY 2014 Budget	FY 2014 AMENDED Budget	Actual	%	Notes
REVENUES					
AIR Contributions	78,340	78,340	84,384	107.72%	
AIR Other Receipts	0	0	0		
AIR Interest/Misc	0	0	124		
TOTAL AIR REVENUE	**78,340**	**78,340**	**84,508**	**107.87%**	
EXPENSES					
AIR Contract Expenses	74,440	74,440	74,440	100.00%	
AIR Administrative Expenses	3,900	3,900	3,900	100.00%	
TOTAL AIR EXPENSES	**78,340**	**78,340**	**78,340**	**100.00%**	

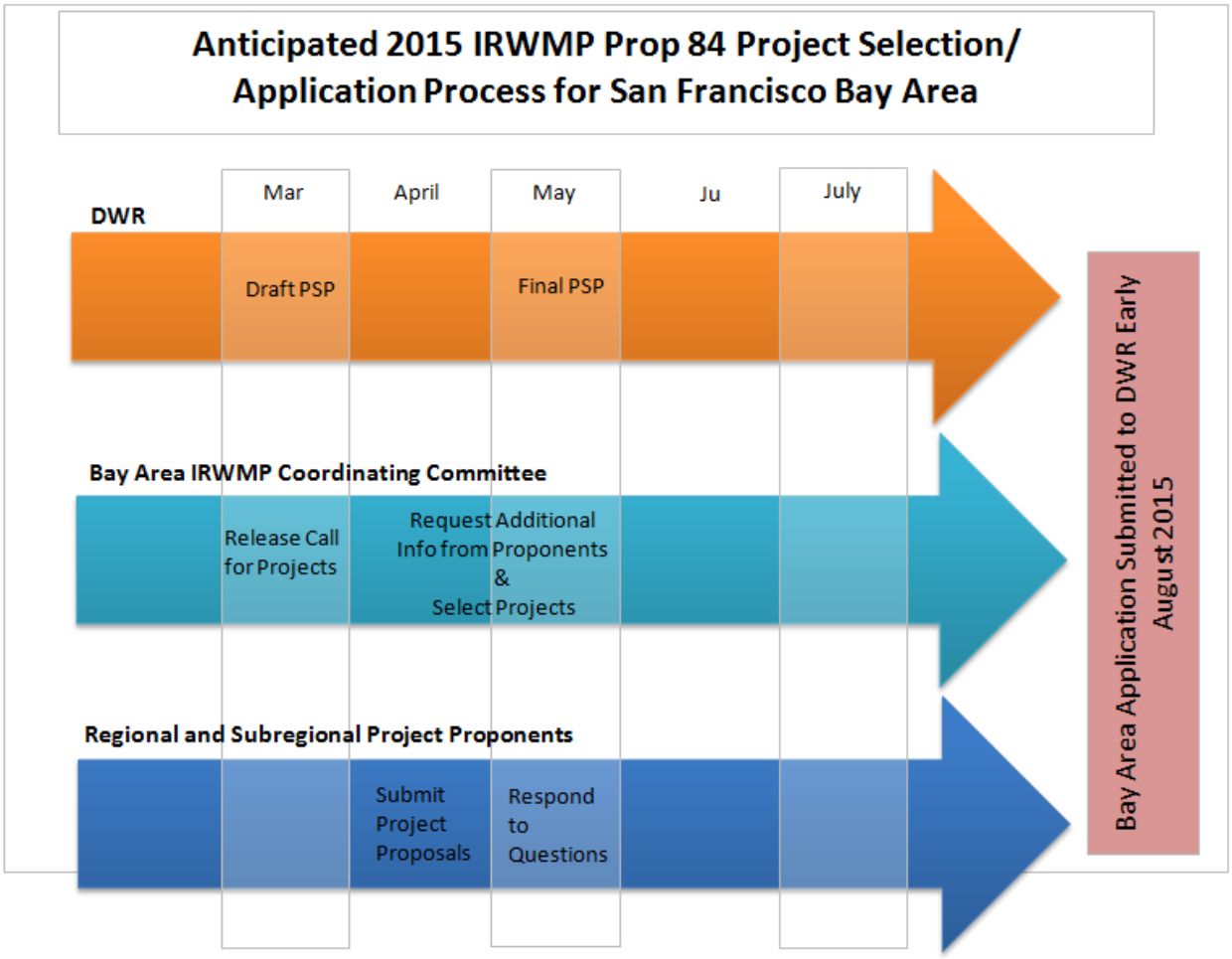
BAPPG	FY 2014 Budget	FY 2014 AMENDED Budget	Actual	%	Notes
REVENUES					
BAPPG Contributions	**80,000**	**80,000**	**79,505**	**99.38%**	
EXPENSES					
BAPPG Contract Expenses					
FOG	17,000	17,000	8,000	47.06%	
Mercury	2,500	2,500	0	0.00%	
Pesticides	10,000	10,000	10,000	100.00%	
Pharmaceuticals	9,998	9,998	0	0.00%	
General P2	1,500	1,500	0	0.00%	
Multi-Pollutant	19,000	19,000	15,999	84.21%	
Emerging Issues	14,000	21,437	26,667	124.40%	$7,437: Carryforward: Tandem 3K; O'Rorke 4,437
Other	11,500	11,500	5,979	51.99%	
BAPPG Administrative Expenses	4,275	4,275	4,275	100.00%	
TOTAL BAPPG EXPENSES	**89,773**	**89,773**	**70,920**	**79.00%**	

WOT	FY 2014 Budget	FY 2014 AMENDED Budget	Actual	%	Notes
REVENUES					
WOT Contributions	**160,500**	**160,500**	**163,500**	**101.87%**	
EXPENSES					
WOT Contract Expenses	158,000	158,000	151,000	95.57%	
WOT Administrative Expenses	2,500	2,500	2,500	100.00%	
TOTAL WOT EXPENSES	**160,500**	**160,500**	**153,500**	**95.64%**	

Coordinating Committee Members and Interested Parties:

The Bay Area Integrated Regional Water Management Plan (IRWMP) Coordinating Committee (CC) is soliciting projects for the region's response to a forthcoming Proposal Solicitation Package (PSP) from the California Department of Water Resources (DWR) for Proposition 84 Implementation Grant funding. Please find the Request for Project Concept Submittals (RPCS) attached and linked here.

The CC is soliciting all project types, and at this point is encouraging the submittal of integrated projects that provide watershed, habitat, flood and/or stormwater benefits. The timeline in the RPCS and below shows the anticipated timeline for DWR, the regional decision-making process for project selection, and important dates for project proponents.



Please note that the dates listed in the timeline are estimates by DWR and could change. Such changes would be posted by DWR at this website, which will also have links to the draft and final Proposal Solicitation Package.

The link to submit a project to CC and find more information about the application process, criteria for project submittal and evaluation is here. As of this writing, the project submittal form and guidance for Bay Area agencies interested in submitting (or updating) a project, is being updated. These documents will be posted / made live shortly.

All project submissions (new or updated) must be received electronically by **5:00 p.m. PDT on Monday, April 20, 2015**

If you are already on the Bay Area IRWMP Coordinating Committee mailing list, you will receive timely updates on the submittal and project selection process. Click here to add your name to the list. If you have any questions on the process, please contact **projects@bairwmp.org**. We look forward to hearing your ideas for the next round of IRWMP funding.

Bay Area Integrated Regional Water Management Plan

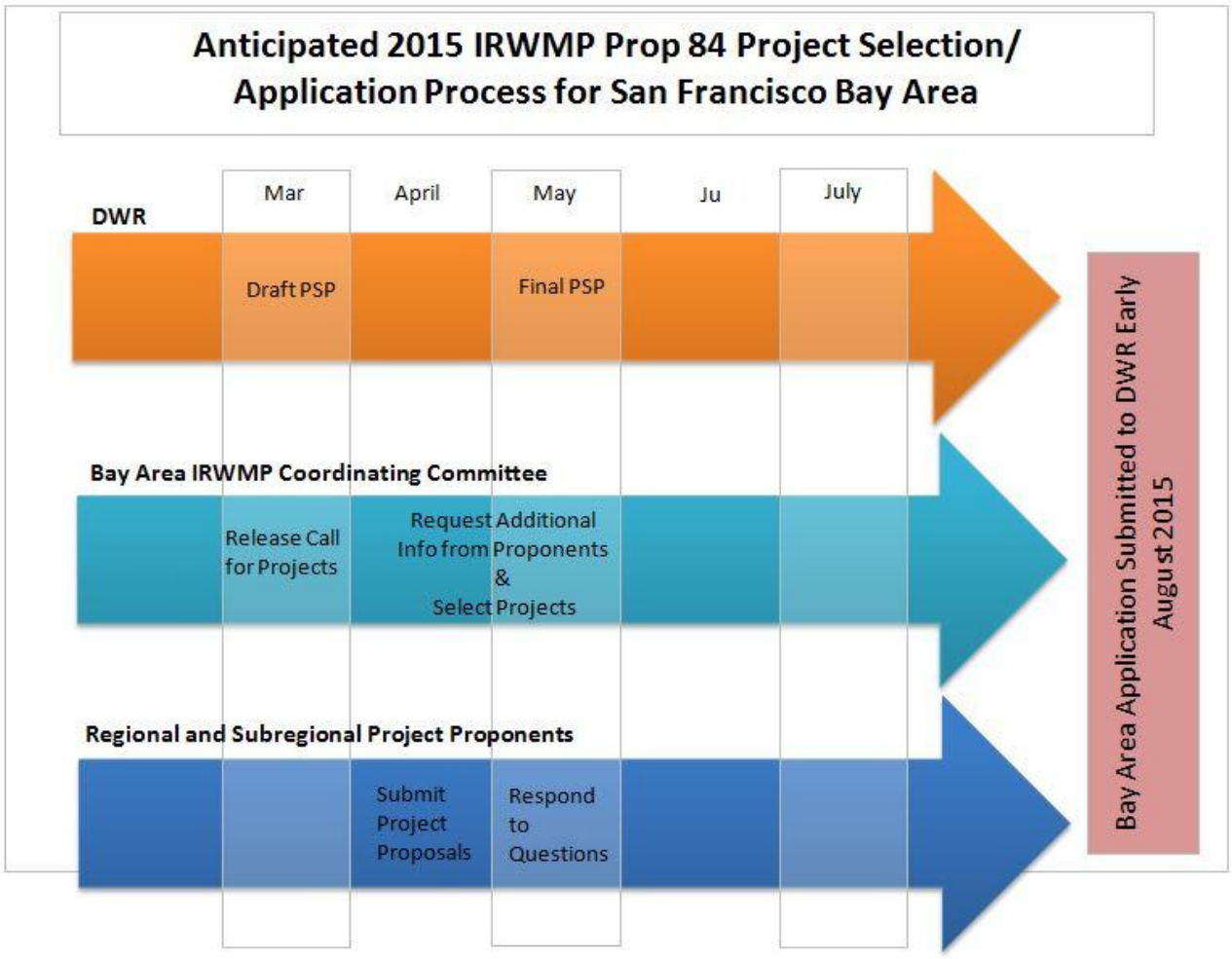
Integrated Regional Water Management Implementation Grant Program

2015 Request for Project Concept Submittals

The Bay Area Integrated Regional Water Management Plan Coordinating Committee (CC) is soliciting project concepts for inclusion in the Bay Area's 2015 Round Integrated Regional Water Management (IRWM) implementation grant application to the Department of Water Resources (DWR). The CC anticipates release of the DWR's 2015 Round Proposal Solicitation Package (PSP) in mid-March 2015, with full applications due in August 2015 (See http://www.water.ca.gov/irwm/grants/index.cfm for the latest DWR schedule). In order to effectively put together a grant proposal in that window, the CC is soliciting and vetting project concept proposals at this time.

This request for project concepts includes both regional and sub-regional project submittals. Regional project priorities and criteria are described in Attachment A. These priorities and criteria should be useful for both regional and sub-regional submittals. For those who submitted proposals in 2014 who wish to be considered during this 2015 Round, updated proposals are required. All project proposals are expected to be reviewed in late April/early May 2015 in order to follow-up with a final pool of project applicants (both regional and sub-regional) in mid-May. The evaluation process will be informed by DWRs project solicitation package and their priorities and regional allocations for the State.

The graphic below shows the anticipated timeline for DWR, the regional decision-making process for project selection, and important dates for project proponents.



Background

In November 2006, voters passed Proposition 84, the Safe Drinking Water, Water Quality, and Supply, Flood Control, River and Coastal Protection Bond Act, which provided $1,000,000,000 for IRWM planning and implementation. The Bay Area was allocated $138 million, of which about $85 million was awarded in previous grant funding rounds, leaving approximately $40 million available to the Bay Area in the 2015 Round.

IRWM grants are managed within DWR's Division of IRWM by the Financial Assistance Branch. The program's goal is managing water resources in a collaborative effort and DWR seeks to have regions work across jurisdictional, watershed, and political boundaries. Prop 84 gives preference to IRWM grant proposals that:

- Effectively integrate water management programs and projects within a hydrologic region,
- Effectively resolve significant water-related conflicts within or between regions,
- Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program,

- Address critical water supply or water quality needs of disadvantaged communities within the region,
- Effectively integrate water management with land use planning,
- Address statewide priorities.

DWR is anticipated to release draft guidance and a draft Project Solicitation Package (PSP) specific to the 2015 Round in mid-March. The Draft guidance and PSP will explain the application process and allocation of funds and DWR anticipates that they will adopt final guidance and PSP in May. Prospective applicants for IRWM Implementation grants should read the 2015 PSP and the entire 2015 Guidelines when they are released. These, as well as information on DWR's approach and process may be found at: http://www.water.ca.gov/irwm/grants/.

The DWR PSP will likely be based on some combination of the 2012 IRWM Guidelines and 2014 Drought Solicitation IRWM Guidelines with modifications as necessary for the specific funding round. The 2014 Guidelines are posted on the DWR website at: http://www.water.ca.gov/irwm/grants/guidelines.cfm. Project proponents may also want to review the Prop 84 Round 2 PSP and Guidelines (both available at http://www.water.ca.gov/irwm/grants/archive.cfm) and 2014 Drought Round PSP (available at http://www.water.ca.gov/irwm/grants/implementation.cfm) because they provide information on typical DWR grant application and agreement requirements.

Eligibility

Proponents must be able to satisfy all criteria for inclusion in a regional application per the DWR Guidelines and eventual 2015 Round PSP. See Section III of the 2012 Guidelines for more detail. Local public agencies and non-profit organizations, as defined in the Guidelines, may serve as the regional applicant, and other IRWM stakeholder or partner entities, as defined in CWC§10541(g), may be part of the proposal as a project proponent and access grant funding through their relationship with the applicant, at DWR's discretion.

Projects proposed for inclusion in the 2015 Round application must be within the Bay Area IRWM region (Bay Area region) and/or bring plan-specified benefits to the region (see 2012 Guidelines Section III C.2). The Bay Area region boundary is the same as the boundary of the San Francisco Bay Regional Water Quality Control Board (Region 2) and includes all or portions of the nine counties that flow to the San Francisco Bay area. The Bay Area region is further divided into four sub-regions: North, South, East, and West to represent the diversity of needs around the Bay and to allow for more locally targeted outreach through the IRWM's sub-regional process. There are also the following functional areas that have common water management concerns: water supply-water quality, wastewater–recycled water, flood protection–stormwater management, and watershed management-habitat protection and restoration. A map showing the region and sub-regions can be found at:

http://bairwmp.org/content/Bay%20Area%20IRWMP%20Sub-Regions.jpg.

In addition, project proponent's concept proposals will have to adequately address each of the eligibility factors listed below to be further considered for inclusion in a Bay Area IRWM grant application to DWR. See Attachment B for proposed screening criteria for these factors.

1. ***Inclusion in the 2013 Bay Area IRWM Plan:*** Projects must either be included in the current BAIRWM plan (www.bairwmp.org) or must be submitted for inclusion in the Plan. Proponents must indicate the status of their submittal (currently in plan, in plan with new modifications, new submittal), and should specify how their project addresses the Goals and Objectives of the plan (See Chapter 3 of the BAIRWM Plan). Proponents should indicate whether their projects are being modified or are new to the plan. Proponents with projects new to the plan will be further notified about the process for plan updates/submissions.

2. ***Readiness to proceed:*** Projects must be able to proceed to implementation within the timeframe of the 2015 Round grant. Reimbursements are not expected any sooner than late 2016 and generally funds must be expended within five years with clear project deliverables to be submitted at the end of the grant period. Proposals must indicate status and proposed timing of any preliminary designs, environmental documentation, engineering and final design, and permitting that may apply.

3. ***25% upfront Match:*** Projects must be able to demonstrate that a minimum of 25% in non-state match is committed to the project and can be spent in advance of receiving grant reimbursement from DWR.[1] Projects whose primary benefit is to a disadvantaged community (DAC) may qualify for a match waiver. However, the project proponent must specify the geography (city, census tract, zip code, etc.) and corresponding income by census data or income survey to qualify as a DAC project and for a match waiver.

4. ***Defines Physical Benefits:*** Proponents must be able to clearly define the physical benefits of a project, as defined in the DWR PSP. Proposals must provide clear and appropriate metrics of the physical benefits that the project will provide. Prop 84 implementation grant funds are intended for implementation projects rather than planning studies; operations and maintenance of facilities is ineligible.

5. ***Benefit/Cost Analysis:*** Proposals should estimate how good a benefit-cost ratio could be provided by the project and the basis for the estimated ratio (either relate to similar projects or provide evidence). Proposals that move forward most likely will have to be able to provide a rigorous Benefits and Cost Analysis (See Exhibit D in the 2012 DWR PSP and "Additional Resources" below).

6. ***Cash for Consultant:*** Project proponents will be required to contribute to application preparation costs, which have previously ranged from $10,000 to $25,000 per project,

[1] Match is typically eligible for a period of time prior to grant award, often as early as the date of funding appropriation to DWR.

depending on the scale. Proponents must indicate their ability to pay an equitable share of the regional application cost.

7. ***Collaboration***: Proposals must demonstrate the support of relevant participants and their consistency with the priorities of regional and/or sub-regional plans and frameworks.

8. ***Multi-objective – Achieves Multiple Benefits:*** Cross functional projects are preferred and the degree to which up-front integration of different IRWM functional categories (See Chapter 1.2.4 in the BAIRWM Plan) has occurred should be discussed.

9. ***Amount of Grant Request:*** No maximum request is currently set but projects may be required to scale downward should the funding made available to the region be reduced. Please describe the scalability of your proposal. No firm minimum has been set, however the Coordinating Committee is targeting projects of $1 million and above.

10. ***Impact/Effect:*** For projects that claim a regional benefit, describe how the project is regional in scope and how it serves a greater than local need. How geographically extensive are the benefits of the project? Describe how the project may address regional priorities (refer to Attachment A) and include a description of project monitoring and evaluation of project goals.

Submittal Procedure

Proposals must be submitted via the IRWM online form that will be posted at www.bairwmp.org. Please update records for any existing projects and/or transfer any 2014 submittals to this new format. All submissions must be posted online by **5:00 p.m. PDT on Monday, April 20th.** Please report any submission problems or any questions by contacting **projects@bairwmp.org.**

The IRWM Project Screening Committee will review submittals in anticipation of selection of top proposals in early-May 2015.

Contents

Proponents should address all the eligibility factors listed above via the following application sections:

Applicant Info: Specify lead applicant organization and address, including a primary proposal contact name, email and phone. List names of any partnering organizations. Provide project location. Indicate whether project is adopted in BAIRWM plan. Indicate the project proponent's ability to help pay for the regional grant application.

Project Narrative: Provide a description of the project including the general project concept, what will be constructed and/or implemented, and how the project will function.

Detail how the project achieves multiple benefits. Discuss regional and/or sub-regional coordination. Also, discuss where the project provides benefits to a DAC.

Status and Timeline: Be clear on when the overall project is scheduled to start and complete. Indicate status and start and completion timing for milestones such as design, CEQA and permitting, etc.

Project Need/Regional Priorities: Describe the regional need(s) or problem(s) that the project will address. Address relevant regional priorities as applicable.

Project Benefits: Describe the physical benefits of the project, where and how extensively the project's benefits will accrue, and provide a preliminary estimate of benefit/cost.

Project Costs: Provide preliminary budget broken down by key project elements and include proposed and secured matching funding sources.

Plan Goals/Objectives: Describe how the project helps achieve the Bay Area IRWMP goals and objectives.

Background documents: Up to three additional documents may be uploaded to the website. You may include map(s) or photos that illustrate the site and areas of influence for the project.

Questions

For all inquiries, contact projects@bairwmp.org.

Additional Resources

Example Bay Area Applications:

http://bairwmp.org/prop84-imp-rnd1/submitted-to-dwr
http://bairwmp.org/prop84imprnd2

NBWA Benefit/Cost Manual:

http://nbwatershed.org/library/NBWA_Handbook_2012-1221.pdf

ATTACHMENT A

Priority Regional Needs and Criteria

The CC has determined to prioritize regional submittals that best address a suite of ***regional priority needs*** identified in the plan and further refined with input from each IRWM functional area. These need categories are not exclusive and projects that integrate solutions to multiple needs are welcomed. The priority needs are as follows:

- **Climate Change**, as relates to ***all*** topics below, but also including:
  - Enhanced Weather Management Projects
  - Shoreline Sustainability Projects
- **Reinforce/Enhance Water Supply Capacity** (Desal, Infiltration, Interties)
- **Regional Water Reliability/Long-term sustainability**
- **Health of the Bay and Creeks** (Water quality and biota)
- **Sediment Management**
- **Invasives Management**
- **Riparian and Fisheries Restoration**
- **Protection of Water Source Areas**

Regional project submittals will be considered that best address the priority regional needs at the regional scale. See more detailed screening criteria for each category of need below under "Criteria for Priority Needs."

Criteria for Priority Needs

Proposals must specify which priority need or needs they meet, and the degree to which they address the criteria below (or can provide the metric referenced) for each priority they cite. These screening criteria are not intended as individual scoring factors; they are intended to illustrate the breadth and intended focus of each category. Projects will not be evaluated exclusively by how many criteria they meet, but by how well they address the intent and substance of each priority regional need. The CC will be determining and releasing specific scoring criteria prior to selecting regional and subregional projects for a second call in summer 2014.

Climate Change

These projects should address the effects of climate change on the region's water resources.

Proposals should specify degree to which:

- Project is based on vulnerability or risk assessment,
- Program enhances region's ability to address climate change impacts,
- Proposal demonstrates innovation based on an evaluation of adaptive options (not business as usual),
- Projects or programs are adaptive to climate changes (Project or program responds to climate change through adaptive management),
- Ecosystem enhancement is included (where appropriate),

- Greenhouse gas (GHG) reduction is achieved (where appropriate), especially regarding projects that achieve energy reduction and/or carbon sequestration.

Additional desirable characteristics for Enhanced Weather Management Projects include:

- Project provides more precise information on the timing, location, amount and duration of extreme rain events,
- Project designed to be useful for flood, reservoir, and wastewater management.

Additional desirable characteristics for Shoreline Sustainability Projects include:

- Project demonstrates an ability to reduce shoreline vulnerability to climate change, addressing potential future sea level rise and documenting metrics of benefit such as economic, habitat or wildlife damages or losses avoided, length of shoreline protected, and/or reduction in frequency of levee topping,
- Project contributes necessary data, analysis or proof of concept for development of climate adaptation strategies relevant at the regional scale,
- Project re-uses wastewater or sediment as a resource or for wetlands enhancement.

Reinforce/Enhance Water Supply Capacity (Desalination, Infiltration, Interties)

These projects should support creating additional water supply for the Region.

Proposals should specify quantity, if any, of:

- Acre-feet (AF) additional water supply to Region (e.g., desalination, imports via wheeling & interties, recycled water offset of potable supplies),
- AF additional infiltration in Region (e.g., recycled water for recharge, stormwater infiltration),
- New interties (and/or miles of connecting supply lines) with potential to provide X AF additional potable water to Region,
- AF additional storage within or connected to Region.

Regional Water Reliability/ Long-term Sustainability

These projects should support increasing water supply reliability within the Region by adding distribution options or otherwise adding flexibility for use or conveyance of existing (and/or new) supplies.

Proposals should specify quantity, if any, of:

- Acre-feet (AF) additional water supply NOT from Delta sources (e.g., desalination, imports via wheeling & interties, recycled water offset of potable supplies),
- AF additional infiltration in Region (e.g., recycled water for recharge, stormwater infiltration),
- AF additional storage within or connected to Region,
- New interties (and miles of connecting supply lines) with potential to provide X AF capacity to redistribute existing supplies within Region,
- New interties (and/or miles of connecting supply lines) with potential to provide X AF additional potable water to Region and/or additional flexibility amongst water agencies within Region,

- Reduction in energy required for production and/or distribution of AF potable or recycled water,
- Energy produced or saved from waste,
- AF of conservation savings.

Health of the Bay and Creeks

These projects should:

- Protect, restore and rehabilitate watershed and bay processes,
- Maintain health of watershed vegetation, land cover, natural stream buffers and floodplains to improve filtration of point and nonpoint source pollutants,
- Minimize point-source or non-point source pollution; in particular improving conditions that have led to a 303D listing/TMDL for a watershed,
- Control erosion and sedimentation,
- Improve floodplain connectivity, and/or
- Improve infiltration capacity.

Proposals should (where applicable) specify quantity of:

- Amount of Nitrogen/nutrient removal – lbs removed,
- Amount of first flush stormwater treated or diverted,
- Gallons of discharge diverted from Bay – including amount reused,
- Pollutant reduction to address TMDLs or 303D Listing.

Sediment Management

These projects should:

- Address conflicting goals with sediment management (e.g., impact to water quality and/or habitat management),
- Provide a beneficial reuse of sediment or solids in lieu of disposal.

Projects are further encouraged to:

- Be part of a sediment management program that addresses long-term maintenance goals,
- Identify the incremental costs of reuse over disposal and weighs the benefits over the impacts.

Invasives Management

These projects should:

- Address an invasive species that is present in more than one subregion,
- Employ top-down watershed approaches to eradicating the invasive species (headwaters or first occurrence locations are addressed first), where applicable, and
- Address how the site will be managed in the future.

Projects are further encouraged to:

- Be adaptive to climate changes (Project or program responds to climate change through adaptive management),
- Include ecosystem enhancement (where appropriate).

Riparian and Fisheries Restoration

These projects should improve riparian and fisheries resources of regional significance, and should:

- Rely on proven designs/methodologies,
- Address known limiting factors or threats (e.g., identified fish passage barrier, water quality impairment such as temperature or sedimentation, low flow resulting from over-allocation, or habitat deficiency like substrate or cover),
- Affect substantial area of high quality or potential high quality habitat in manner consistent with ecological principles (e.g., favors native assemblage, leads to improved match with natural hydrograph, creates long-term channel stability and function, etc.),
- Include metrics of habitat improvements for specific priority habitats/species (miles of upstream habitat opened, % percent riparian cover established, etc.); for fisheries, addresses life stage concerns/population bottlenecks,
- Tie to explicit regional priorities,
- Include sufficient post-project monitoring and long term commitment to management.

Protection of Water Source Areas

These projects should protect and/or enhance surface and groundwater source areas of regional significance. Proposals should:

- Include conservation practices or land acquisition in a priority watershed serving multiple needs (habitat, water storage, groundwater recharge, etc.),
- For land conservation projects, establish permanency and/or site control,
- Include identified commitment to long term management,
- Include adequate baseline documentation and site management planning,
- Address public access needs and/or concerns.

ATTACHMENT B

Proposed BAIRWM 2015 Prop 84 Round Screening Criteria

Proposals will be evaluated on each of the BAIRWM and Eligibility Criteria. Factors are either Screening (Y/N) or Qualitatively Scored (1-6). Relative rankings will be used only as a first pass and will be evaluated along with additional information requested from participants, including specific metrics of benefit (e.g. acre-feet water savings or equiv.) to determine potential packaging options for consideration by the Coordinating Committee.

BAIRWM FACTORS	**Factor 1**	**In Plan?**	***(Y/N)***
		Goals/ Objectives	***(1-3 pts) (Total of 200 points allocated among the 5 goals; 10 points per objective until 40 points maximum per goal [for Flood goal, 40 points if all objectives addressed]) - Tier into 3 categories: 1 pt 1-66, 2pt 67-123, 3 pts 124-200***
	Factor 2	**Readiness to Proceed**	***(1-3 pts) 1 – conceptual or early planning, 2 – in CEQA or final design phase, 3 – CEQA, all permitting complete, ready to proceed.***
	Factor 3	**Provides 25% match**	***(Y/N)***
	Factor 4	**Provides 2 Physical Benefits**	***(Y/N)***
		Physical Benefits	***(1-6) 1 - does not discuss benefits or evidence of minor benefits for project type*** ***3- evidence of moderate benefits for project type*** ***6 - evidence of high level of benefit for project type***
	Factor 5	**Benefit-Cost**	***(1- 3) 1- not discussed or B/C below 1*** ***2- B/C between 1-3*** ***3- B/C above 3***
	Factor 6	**Cash for Consultant**	***(Y/N)***
	Factor 7	**Collaboration**	***(1-3) 1 - does not discuss or only narrow collaboration*** ***2 - moderate level of partners, some limitations to partnership*** ***3 - broad collaboration appropriate to project type***
	Factor 8	**Degree of Integrated Benefits**	***(1-4 pts) 1- benefits in only one FA or resource area, 2 - benefits 2 FAs or resource areas, 3 - benefits in 3 FAs or resource areas, 4 - benefits in 4 FAs or resource areas***
	Factor 9	**Proposal indicates scalability**	***(Y/N)***
	Factor 10	**Impact/Effect**	***(1-3) 1 - does not discuss or impact constrained to approx 1/3 of relevant part of region or less; no relevance to regional priorities*** ***2- brings benefits to a significant proportion of relevant region (up to 2/3); somewhat relevant to regional priorities*** ***3 - benefits large portions in nearly all of relevant region; highly relevant to regional priorities***
Eligibility		**CASGEM**	***Proponent has groundwater monitoring authority? Has jurisdiction over a high or medium subbasin? Are those fully claimed?***

Executive Board Special Meeting Agenda

SF Bay Regional Water Board / BACWA Executive Board Joint Meeting
February/March 2015
SF Bay Water Board, 1515 Clay Street, St. 1400 Oakland, CA

ROLL CALL AND INTRODUCTIONS

PUBLIC COMMENT

DISCUSSION/OTHER BUSINESS

1. Nutrients
    a. Nutrient Science Plan
    b. Optimization/Upgrade Studies
    c. Assessment Framework
    d. Permitting approaches
2. Toxicity testing – numeric limits in permits
3. Recycled Water Permitting – 96-011 vs. 2014-0090
    a. Recycled filtrate
4. Risk Reduction Update
5. SSO Enforcement Options
6. RMP Status & Trends Monitoring for the CTR Pollutants
7. Joint Meetings with WB
    a. Pardee Technical Seminar 2015
8. Other Misc Items with Minor Updates (note: may not get to these)
    a. State CECs Phase 2 Study
    b. Selenium Update
    c. State Bacterial Objectives Scoping Document

ADJOURNMENT

Executive Board Special Meeting Notes

Joint Meeting with Water Board

Friday, March 13, 2015, 1:30 p.m. – 3:30 p.m.

Regional Water Board, 1515 Clay Street, St. 1400 Oakland, CA

ROLL CALL AND INTRODUCTIONS

Executive Board Representatives: Laura Pagano, Vice Chair (San Francisco Public Utilities Commission); Dave Williams (East Bay Municipal Utility District); Mike Connor (East Bay Dischargers Authority); Tim Potter and Jean-Marc Petit (Central Contra Costa Sanitary District); James Ervin (City of San Jose).

Other Attendees: Bruce Wolfe (San Francisco Bay Regional Water Quality Control Board); Tom Mumley (San Francisco Bay Regional Water Quality Control Board); Bill Johnson (San Francisco Bay Regional Water Quality Control Board); Lila Tang (San Francisco Bay Regional Water Quality Control Board); Lorien Fono (BACWA); Dan Jackson (City of Benicia); Lenny Rather (Oro Loma Sanitary District); Tom Hall (EOA).

PUBLIC COMMENT - no comment

DISCUSSION/OTHER BUSINESS

1. SSO Enforcement

Options developed by BACWA were presented to the Water Board (WB) staff. BACWA focused on the option of a template that could be completed on a voluntary basis by an agency with accompanying parameters for applicability and assessing penalties under an Administrative Civil Liability (ACL). The WB was open to further discussion and BACWA agreed to develop a straw man to bring back to the WB for discussion.

2. Pardee

All were reminded of the Pardee 2015 Technical Seminar from October 21-23, 2015.

3. Toxicity

A lengthy discussion ensued on the BACWA Toxicity meeting with EPA and how the WB would address BACWA's comment on the toxicity provisions in the Las Gallinas Valley Sanitary District permit. It was generally agreed that the approach the WB is taking on the use of dilution would not present problems with deep water dischargers but may present issues for the shallow water dischargers. The WB felt this was a difficult issue and there were regulatory constraints to solving. The WB agreed to work with BACWA on resolutions that were doable within the Basin Plan.

4. **Nutrients**

The WB explained their view of the Assessment Framework (AF) and how it would be used to indicate whether or not there were problem areas in the Bay. It would not result in immediately implementing numeric limits but would lead to robustly monitoring and modeling

the Bay. BACWA expressed concerns about the lack of transparency in the development of the AF. The WB sated that the scientific approach would be used and that data would be gathered, hypothesis established and then tested. The WB stated that the AF is part of the overall Nutrient Management Strategy. BACWA raised the concern that the AF would not be linked to beneficial uses in the Bay. One suggestion was to allow the AF Report to remain in draft form for an extended period of time to better assess how it was being used and outcomes that resulted.

The WB restated their position on their proposed permitting approach would be a no net loading increase approach for the next permit with load caps either Bay-wide or by subembayment. When asked what would dissuade the WB from using the approach the response was load projections that showed caps were not needed.

5. Recycling

There was discussion of recycling efforts being planned between Sunnyvale and the Santa Clara Valley Water District. The WB supports recycling in a big way The question was raised as to how future projects would be permitted, either under the Region 2 96-011 or the State permitting process. It appears that projects under permits now can continue but that new projects would be required to come under the new State permitting system. The WB agreed to take a look and get back to BACWA with clarifications. The WB was also encouraged to promote recycling with refineries whenever possible.

6. **Risk Reduction**

BACWA informed the WB of the intent to solicit proposals for funding NGO efforts to reduce risks to subsistent fisherman. The WB concurred with the approach.

7. **RMP CTR Monitoring**

There was a discussion on the use of RMP funds for monitoring to update 10 year old receiving water data and whether or not such expenditures were good value given the limited funding resources and the great need for data. The WB felt there may be some pollutants for which there is no longer reasonable potential in the Bay. The WB agreed to work with BACWA to figure out the best approach to future monitoring for CTR pollutants. Robert Schlipf will be the WB contact on this effort.

8. **Other Items**

Brief updates were provided on CEC's and selenium

ADJOURNMENT

The meeting adjourned at 3:30 pm

Bay Area Clean Water Agencies
Collection Systems Committee
Small Work Group on SSO Enforcement Options

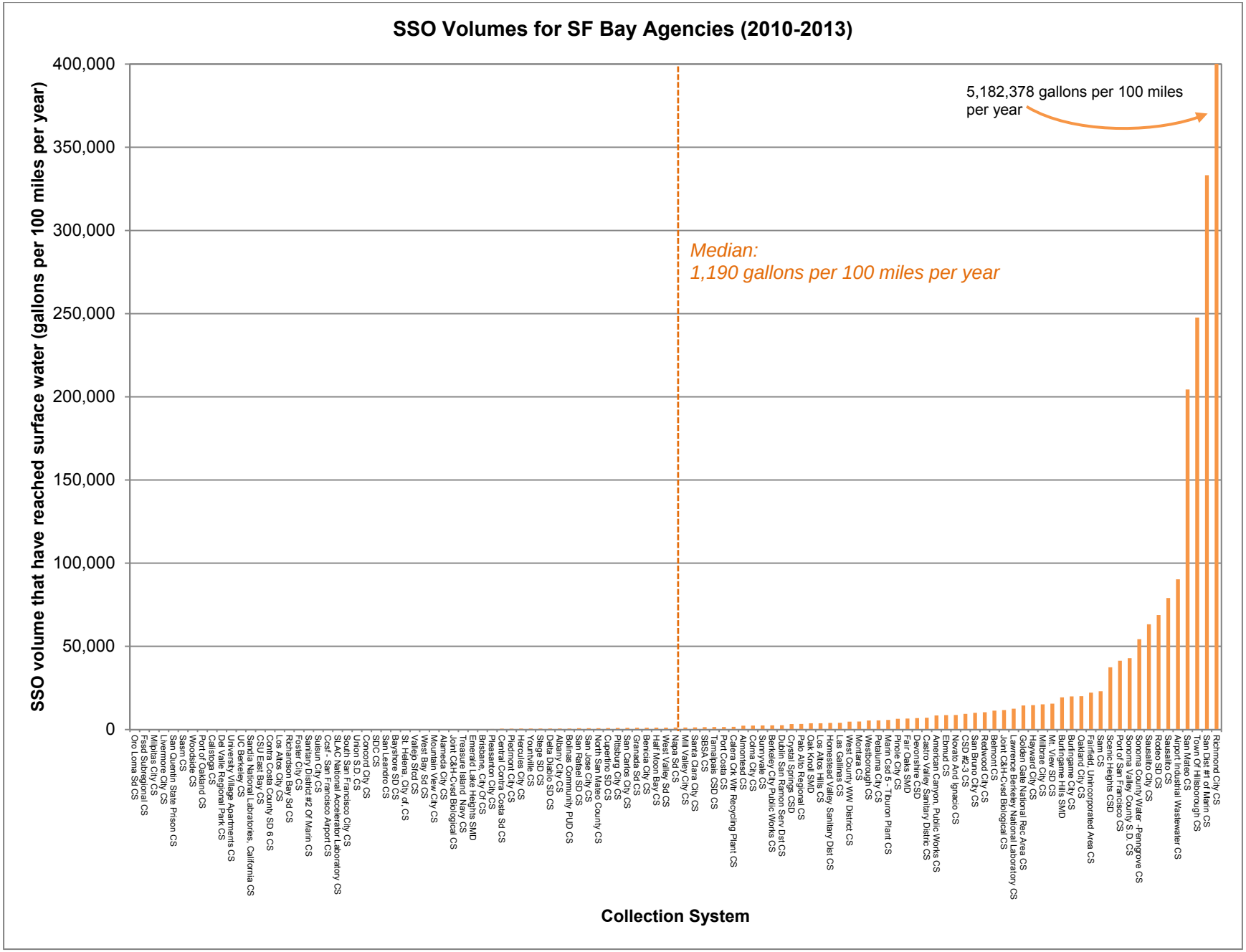
Description of Concept: ACL Template for Sanitary Sewer Overflows
September 19, 2014

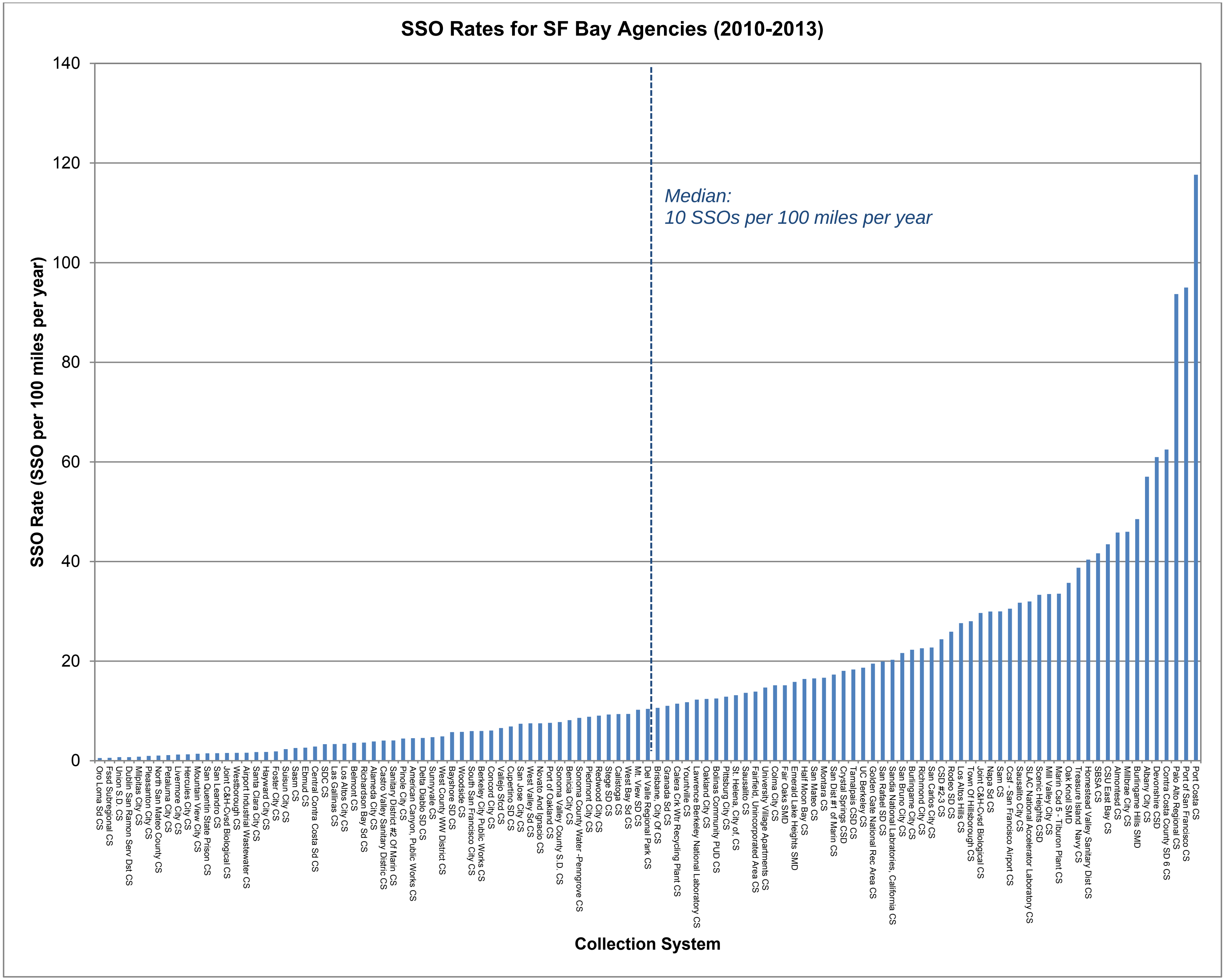
Collection system agencies in the Bay Area desire proactive enforcement action when sanitary sewer overflows (SSOs) occur. This is how the ACL template program would work: A collection system agency, if it meets the conditions outlined below, would approach Regional Water Board staff requesting "diligent prosecution," and present a (completely filled out) ACL template which would result in a monetary penalty. Regional Water Board staff would act within 60 days of receiving the completed template form.

The conditions for being able to use the ACL template would be as follows:

- The previous 3-year average annual SSO volume reaching surface water would have to be less than 8,500 gallons per 100 miles of sewer per year (this value represents the 75th percentile SSO volume for the 113 Bay Area agencies reporting to CIWQS during the four calendar years 2010-2013).
- The trigger of 8,500 gallons/100 miles does not include SSOs from laterals.
- An agency could request any number of years for the penalty to cover, up to 5 years.
- The template would be valid for use on total SSO volume to a surface water less than 50,000 gallons/100 miles.
- An agency could only use the template a maximum of once per year.
- The decision for an agency to use the template is optional.
- The penalty would be a fixed amount of $1,000, plus $0.30/gallon.

Applicability:	POTWs and Satellite Collection Systems
Monetary Penalty:	Yes
Requirement for Action Beyond Penalty:	No
Implementation:	Need buy-in from Regional Water Board staff ahead of time that they would be receptive to this approach (ACLs are common enforcement mechanisms for Regional Water Board staff). Also need to get buy-in from Regional Water Board staff on content of template form, conditions for penalty, and a commitment to issue ACL within 60 days.


SSO Volumes for SF Bay Agencies (2010-2013)
SSO volume that have reached surface water (gallons per 100 miles per year)
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
5,182,378 gallons per 100 miles per year
Median:
1,190 gallons per 100 miles per year
Collection System


SSO Rates for SF Bay Agencies (2010-2013)
SSO Rate (SSO per 100 miles per year)
140
120
100
80
60
40
20
0
Median:
10 SSOs per 100 miles per year
Oro Loma Sd CS
Fssd Subregional CS
Union S.D. CS
Dublin San Ramon Serv Dst CS
Milpitas City CS
Pleasanton City CS
North San Mateo County CS
Petaluma City CS
Livermore City CS
Hercules City CS
Mountain View City CS
San Quentin State Prison CS
San Leandro CS
Joint C&H-Cvsd Biological CS
Westborough CS
Airport Industrial Wastewater CS
Santa Clara City CS
Hayward City CS
Foster City CS
Suisun City CS
Sasm CS
Ebmud CS
Central Contra Costa Sd CS
SDC CS
Las Gallinas CS
Los Altos City CS
Belmont CS
Richardson Bay Sd CS
Alameda City CS
Castro Valley Sanitary Distric CS
Sanitary District #2 Of Marin CS
Pinole City CS
American Canyon, Public Works CS
Delta Diablo SD CS
Sunnyvale CS
West County WW District CS
Bayshore SD CS
Woodside CS
South San Francisco City CS
Berkeley City Public Works CS
Concord City CS
Vallejo Sfcd CS
Cupertino SD CS
San Jose City CS
West Valley Sd CS
Novato And Ignacio CS
Port of Oakland CS
Sonoma Valley County S.D. CS
Benicia City CS
Sonoma County Water -Penngrove CS
Piedmont City CS
Redwood City CS
Stege SD CS
Calistoga CS
West Bay Sd CS
Mt. View SD CS
Del Valle Regional Park CS
Brisbane, City Of CS
Granada Sd CS
Calera Crk Wtr Recycling Plant CS
Yountville CS
Lawrence Berkeley National Laboratory CS
Oakland City CS
Bolinas Community PUD CS
Pittsburg City CS
St. Helena, City of, CS
Sausalito CS
Fairfield, Unincorporated Area CS
University Village Apartments CS
Colma City CS
Fair Oaks SMD
Emerald Lake Heights SMD
Half Moon Bay CS
San Mateo CS
Montara CS
San Dist #1 of Marin CS
Crystal Springs CSD
Tamalpais CSD CS
UC Berkeley CS
Golden Gate National Rec Area CS
San Rafael SD CS
Sandia National Labratories, California CS
San Bruno City CS
Burlingame City CS
Richmond City CS
San Carlos City CS
CSD #2-3 CS
Rodeo SD CS
Los Altos Hills CS
Town Of Hillsborough CS
Joint C&H-Cvsd Biological CS
Napa Sd CS
Sam CS
Ccsf - San Francisco Airport CS
Sausalito City CS
SLAC National Accelerator Laboratory CS
Scenic Heights CSD
Mill Valley City CS
Marin Csd 5 - Tiburon Plant CS
Oak Knoll SMD
Treasure Island Navy CS
Homestead Valley Sanitary Dist CS
SBSA CS
CSU East Bay CS
Almonteso CS
Millbrae City CS
Burlingame Hills SMD
Albany City CS
Devonshire CSD
Contra Costa County SD 6 CS
Palo Alto Regional CS
Port of San Francisco CS
Port Costa CS
Collection System

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Attorneys for Petitioner
Bay Area Clean Water Agencies

BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Bay Area Clean Water Agencies' Petition for Review of Action and Failure to Act by the California Regional Water Quality Control Board, San Francisco Bay Region, in Adopting Order No. R2-2012-0096 and Accompanying Monitoring and Reporting Program.	PETITION FOR REVIEW; PRELIMINARY POINTS AND AUTHORITIES IN SUPPORT OF PETITION (WATER CODE SECTIONS 13320); REQUEST TO PLACE PETITION IN ABEYANCE FOR TWO (2) YEARS

Petitioner, Bay Area Clean Water Agencies ("BACWA"), in accordance with section 13320 of the Water Code, hereby petitions the State Water Resources Control Board ("State Water Board") to review Order No. R2-2012-0096 ("PCB Permit") of the California Regional Water Quality Control Board, San Francisco Bay Region ("Regional Water Board"). The final order amended the National Pollutant Discharge Elimination System ("NPDES") Permit No. CA0038849, regulating Poly-Chlorinated Biphenyls ("PCBs") in Waste Discharge Requirements for Municipal and Industrial Wastewater Discharges to the San Francisco Bay, and superseding Order No. R2-2007-0077, as amended by Order No. R2-2011-0012. A copy of the Order is attached to this Petition as **Exhibit A**. A copy of the Petition has been sent to the Regional Water Board. The issues and a summary of the bases for the Petition follow. At such time as the full administrative record is available and any other materials are submitted, BACWA will file a more detailed memorandum in support of the Petition.[1]

[1] The State Water Board's regulations require submission of a memorandum of points and authorities in support of a petition, and this document is intended to serve as a preliminary memorandum. However, it is impossible to prepare a thorough memorandum or a memorandum that is entirely useful to the reviewer in the absence of the complete administrative record, which has not yet been requested since the petition has been requested to be placed in abeyance .

DOWNEY BRAND LLP

1. NAME AND ADDRESS OF PETITIONER:

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Executive Director
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(510) 287-1351 (Fax)
Email: dwilliams@bacwa.org

However, all materials in connection with this Petition for Review should also be provided to the BACWA's counsel at the following addresses:

Melissa Thorme
Downey Brand LLP
621 Capitol Mall, 18th Floor
Sacramento, California 95814
Telephone: (916) 444-1000
Email: mthorme@downeybrand.com

2. THE SPECIFIC ACTION OF THE REGIONAL BOARD WHICH THE STATE BOARD IS REQUESTED TO REVIEW:

BACWA seeks review of Order No. R2-2012-0096 amending NPDES Permit No. CA0038849 ("PCB Permit"). The specific issues and permit requirements which the State Water Board is requested to review include the following: (A) Improper effective date; (B) The inappropriate application of numeric effluent limitations without reasonable potential; (C) Inconsistent monitoring requirements among permittees; (D) Monitoring requirements using Method 1668c sampling; (E) POTWs' limited source control options and risk reduction abilities; and (F) The opportunity to allow mercury and PCB adjustments for treatment of stormwater and landfill leachate.

The State Water Board is also requested to review the Regional Water Board's actions in adopting the amendments to NPDES Permit No. CA0038849 for compliance with due process, the California Water Code, the California Administrative Procedures Act ("APA"), the Policy for

Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California ("SIP"), and EPA regulations.

3. THE DATE ON WHICH THE REGIONAL BOARD ACTED:

The Regional Water Board adopted the PCB Permit on **December 12, 2012**.

4. A STATEMENT OF THE REASONS THE ACTION WAS INAPPROPRIATE OR IMPROPER:

A. Inaccurate Permit Effective Date

The Order was adopted on December 12, 2012. The Order set an effective date nineteen days later, on January 1, 2013. Pursuant to the NPDES Memorandum of Agreement between the U.S. Environmental Protection Agency and the California State Water Resources Control Board (Sept. 22, 1989) at page 22, section II.F.2, the permit should have been effective on the 50th day after the date of adoption.

B. Numeric effluent limitations on individual POTW discharges of PCBs are inappropriate.

BACWA recognizes that it has been the Regional Water Board's intent to implement Wasteload Allocations (WLAs) for POTWs via NPDES permits containing numeric effluent limits that represent current treatment plant performance. BACWA asked, however, that the Regional Water Board not apply numeric limits. Because issuing this PCB Permit without numeric limits is allowed by law, because of the paucity of data used to calculate performance-based limits and conduct reasonable potential analyses,[2] and because this permit is inconsistent with approaches taken in other areas of the country, the PCB Permit should be revised. BACWA's proposed approach would not foreclose the Regional Water Board from reissuing the permit with

[2] In addition to BACWA's comments submitted to the Regional Water Board, other entities, including the U.S. Environmental Protection Agency ("USEPA"), among others, raised similar concerns regarding the small data set on which the effluent limits were initially based using 1999-2001. (*See*, Response to Written Comments for Order No. R2-2011-0012, p. 24.) The limits have not been changed (*see* PCB Permit at pg. F-24) not withstanding that substantial time has passed since 2001 and additional data should have been used to ensure that the limits are truly performance-based and attainable.

enforceable water quality based effluent limits, if necessary, using more recent data on PCB concentrations in wastewater from more samples and more facilities.

1. Numeric effluent limits are not required by law and are infeasible to calculate with the limited data used.

The PCB Permit inappropriately requires numeric effluent limitations, based on "current" performance, that are consistent with the wasteload allocations in the TMDL. (Order at pg. F-24.) While numeric limits are often preferred because they provide the permittee, regulatory agencies, and the public with a straightforward and transparent mechanism for ascertaining compliance with regulations, these limits are not mandatory or appropriate in all circumstances. Federal regulations require a reasonable potential analysis prior to the imposition of effluent limits and, *where reasonable potential exists*, requires that permits contain effluent limitations that are "consistent with the assumptions and requirements of any available wasteload allocation for the discharge." (40 C.F.R. §122.44(d)(1)(iii) and then 40 C.F.R. §122.44(d)(1)(vii)(B).[3]) These limitations, however, do not need to be numeric. (*See also, Communities for a Better Environment (CBE) v. State Water Board/Tesoro*, 109 Cal.App.4th 1089, 1103-07 (2003); 40 C.F.R. § 122.44(d) (federal rules do not mandate numeric limitations); 40 C.F.R. §122.2 (the definition of "effluent limitation" refers to any restriction and does not specify that the limitation must be numeric).)

Moreover, federal regulations explicitly allow permit writers to express limitations as best management practices ("BMPs") when numeric limits are infeasible. (40 C.F.R. § 122.44(k)(3).) Numeric limitations for PCBs may be infeasible to meet and are also infeasible to calculate due to the outdated and small data set being used. The final effluent limits in the Order were calculated using the same data used to determine WLAs in the TMDL. This data set comprises only nine (9)

[3] The Regional Water Board asserts that §1.3 of the SIP, allows the Board to skip the mandated finding of reasonable potential if a TMDL has been developed. (*See* PCB Permit at F-16, and Response to Written Comments for Order No. R2-2007-0077, p. 20.) However, this is inaccurate. The SIP at §1.3 states that "The RWQCB shall conduct the analysis in this section for each priority pollutant with an applicable criterion or objective, excluding priority pollutants for which a Total Maximum Daily Load (TMDL) has been developed, to determine if a water quality-based effluent limitation is required in the discharger's permit." This section also allows the Regional Water Board, in Step 7, to consider 303(d) *listings* when determining if a water quality-based effluent limitation is required. However, the SIP does not remove the federal requirement of determining reasonable potential under 40 C.F.R. § 122.44(d)(1)(i)-(iii). If no reasonable potential is found, the Regional Water Board may then use §4.1 of the SIP to guide limit allocations, which need not equate exactly to the WLA, but must merely be "consistent" with the WLA.

samples from five (5) secondary treatment plants, and fourteen (14) samples from four (4) advanced secondary treatment plants.[4] (*See* Order No. R2-2011-0012, previous PCB Permit, at pg. F-8.) The small data set used in not only more than a decade old, it represented only twenty-three percent (23%) of the municipal permittees being regulated. A total of seventy-seven percent (77%) of the municipal permittees were not represented at all in the small data set used.

Additionally, the final effluent limits were based on samples analyzed for approximately forty (40) PCB congeners using Method 1668a (or similar). However, the PCB Permit requires compliance to be determined using Method 608, which permittees have previously utilized. (PCB Permit at pg. F-28). As a result of this disparity between the basis for the final effluent limits and the analyses to be conducted under the permit, the effluent limits are unsubstantiated.

Finally, the data set from the advanced secondary municipal wastewater treatment plants was documented in a study, which concluded that significant variability existed among the three laboratories receiving split samples for PCBs. The study report concluded that "[d]espite the use of methods in this study that are generally considered state-of-the-art, the inter-lab differences found in these results indicate that careful consideration of reported results in the context of historic data and other internal and external checks requiring a degree of professional judgment are still needed in addition to more routine evaluations of accuracy and precision." (*See* South Bay/Fairfield-Suisun Trace Organic Contaminants in Effluent Study, p. 31, (March 28, 2001).) In deference to the report's conclusions, these data should not have been used for the development of final effluent limits, which have serious compliance and enforcement ramifications. Even with the selected upper

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[4] The limited data set resulted in artificially low effluent limitations. For example, effluent limits for advanced secondary facilities were calculated based on 14 data points that were drawn from the 2001 SFEI Report. Each of these data points is an average of split sample results for "Total PCBs" (in this case the sum of approximately those congeners typically measured by the SFEI's Regional Monitoring Program (RMP)), from three different labs (The Final Staff Report of the Proposed Basin Plan Amendment implementing the TMDL for PCBs in San Francisco Bay, 2008, p. 44 and 2001 SFEI Report, Appendix A Tables 7 and 8). The use of these averages as the data set that serves as the basis of effluent limits calculations decreases the coefficient of variation which in turn *results in a lower AMEL and MDEL*.

In addition, results from any of the three labs were not included in totals and averages if they were much greater than those measured by the other two (2001 SFEI Report, Page 10), even when "no obvious causes could be found or corrected" to explain these differences (SFEI 2001 Study, Page 13). This practice also *resulted in an overall lower long-term average, and therefore lower effluent limits*.

confidence limit, this data set is too old,[5] was too small, and the variation is too great to conclude that the proposed limits accurately reflect current performance.[6]

Further, the Final Staff Report for the Proposed Basin Plan Amendment implementing the TMDL for PCBs in San Francisco Bay supports the fact that numeric effluent limits require additional reliable data:

> "Developing effluent limits for PCBs that accurately reflect treatment system performance require a substantial data set that accounts for system variability of a difficult to measure pollutant that is present at very low levels..." (Final Staff Report for the Proposed Basin Plan Amendment implementing the TMDL for PCBs in San Francisco Bay, Regional Water Board, 2008, p.71)

For these reasons, the imposed limits are inconsistent with the TMDL implementation plan's statement that be based on current performance.[7] Therefore, BACWA requests that the State Water Board remove the numeric limits, or remand the PCB Permit to the Regional Water Board with instruction that the permit not contain numeric limits until additional, more recent and reliable data can be collected and utilized. This approach is consistent with applicable regulations, and has recently has been used in other parts of the country. For example, in 2010, the USEPA issued a permit to the District of Columbia Water and Sewer Authority for their Blue Plains Wastewater

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[5] Courts have previously held that only the last three years of data should be used since data before that timeframe may not accurately reflect the actual plant performance. *See City of Woodland v. CVRWQCB and SWRCB, Order Granting Writ of Administrative Mandamus,* Alameda County Superior Court Case No. RG04-188200 (May 16, 2005) at page 13 (if no detections in 3 years prior to date of RWQCB Order, then no reasonable potential and the Order should not contain limits for that substance); *see also* 40 C.F.R. §122.21(j)(4)(vi)(suggesting using last 4.5 years of data).

[6] It should also be noted that each of the three labs chose different analytical techniques to measure PCBs (2001 SFEI Report, Page 9), and estimated that the "Total PCBs" measured by the RMP typically account for slightly over half of "Total PCBs" that include all 209 congeners (2001 SFEI Report, Page 2). Uncertainty regarding the accuracy of data from the 2001 SFEI Report led to the Regional Water Board's decision not to include effluent limits for dioxins in the 2003 reissuance of the three South Bay POTW NPDES permits (*See* Page 18 of Order No. R2-2003-0078). Therefore, *including effluent limits for PCBs based on data from this same study with very similar data quality issues is inconsistent with the Regional Water Board's 2003 decision*.

[7] The proposed limits are not performance-based mass limits based on the historical PCB discharge data for each discharger. The POTWs in each group all share the same concentration-based limits irrespective of historical performance. As the Regional Water Board acknowledged, POTWs that serve areas with more industry or historical industrial sites are likely to have more residual PCBs in their system when compared to a POTW with mostly residential customers. (*See*, Response to Written Comments for Order No. R2-2007-0077, p. 8.) New permit limits should always be based on the flow and treatment capacity, along with the influent loadings and effluent discharge, of each individual POTW. To set these numeric limits, the Regional Water Board indicated that additional data would be needed to derive truly performance-based limits. Therefore, deferral of numeric limits until that data are available is warranted. *Id.*

Treatment Plant (NPDES Permit Number DC002119). The TMDL WLA that the permit implemented was based on four (4) samples from the facility and, in lieu of numeric limits, required that the permittee monitor for PCBs and develop and implement BMPs to reduce sources of PCBs. (*See* NPDES Permit Number DC002119, p. 10.) BACWA believes that a similar approach is warranted here.

2. Reasonable potential has not been demonstrated for all permittees.

Under applicable federal regulations, NPDES permits must contain effluent limitations for all pollutants that are discharged at levels that "will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard." (40 C.F.R. §122.44(d)(1)(i)-(iii); 40 C.F.R. §123.25(a)(15) (making section 122.44 applicable to State Programs).) To determine whether a discharge has "reasonable potential," the permitting authority must consider existing controls on point and non-point sources, the variability of the pollutant in the effluent, and the dilution of the effluent in the receiving water." (40 C.F.R. §122.44(d)(1)(ii).) While 303(d) listings may be considered, a 303(d) listing alone is inadequate to require an effluent limitation if the permittee is not causing or contributing to that impairment. (*See accord* Tosco Order, SWRCB Order No. WQ 2001-06, p. 20.) Permittees without the reasonable potential to cause or contribute to an instream exceedance of an applicable water quality standard are not required to be subjected to effluent limitations. (*See* SWRCB Order No. 2003-0012, p.15-16; Order Granting Writ of Administrative Mandamus, *City of Woodland v. CRWQCB for Central Valley Region*, Alameda County Sup. Ct., Case No. RG04-188200 (May 16, 2005) at pages 4, 13.)

Inadequate data was used, since data was not available or not used for all POTWs covered by the PCB Permit. (*See* PCB Permit at F-46 (data with no attribution to any particular facility).) Nevertheless, the PCB Permit contains effluent limitations for *all* POTWs despite effluent data only being available for the nine (9) plants whose effluent data served as the basis for the TMDL WLAs. By automatically *presuming* reasonable potential for all municipal permittees in Tables 1A, the result is requirements are more stringent than mandated by federal law. (*See supra* footnote 3.) Because these requirements are more stringent than federal law, additional analysis under Water

Code section 13263, including the factors contained in Water Code section 13241, was therefore required. (*City of Burbank v. SWRCB,* 35 Cal. 4th 613, 618, 628 (2005).)

Moreover, it has been this Regional Water Board's practice to require collection of data prior to imposing effluent limits when data are limited. For example, while the Regional Water Board was waiting for municipal permittees to collect priority pollutant data pursuant to a 13267 letter issued on August 6, 2001, effluent limits were not mandated in permits when data were not available. Now that those (non-PCB) data have been collected and are available, the Regional Water Board has issued NPDES permits with effluent limits for these parameters, but only when reasonable potential was shown to exist.

Finally, it is not clear that effluent limits are even necessary since PCB loads are well below the POTW aggregate waste load allocation identified by the TMDL. These low loads are a testament to the excellent pollution prevention efforts by the region's POTWs.

For these reasons, the State Water Board should remove all effluent limitations from the PCB Permit for dischargers without demonstrated reasonable potential, or remand to the Regional Water Board to do the same. At the very least, language should be inserted into the PCB Permit stating that these limits, while intended to be reflective of current performance, will be revised should new information become available demonstrating that they are not.

C. Provide consistent monitoring requirements for all major POTWs.

BACWA requests that the frequency of monitoring using Method 1668c be the same as for all major dischargers as the frequency for total PCBs for all major permittees, at a semi-annual frequency . (*See* PCB Permit at E-3.) The PCB Permit's rationale that increased monitoring annually is justified based on agency resources to conduct the monitoring is not persuasive as larger POTWs do not necessarily have more financial resources to undertake this expensive analysis than do smaller ones. (*See* PCB Permit at F-28.) In addition, as the PCB Permit recognizes at page F-28, "monitoring for these additional congeners is unnecessary for evaluating compliance with the PCBs TMDL and for tracking PCB loads to San Francisco Bay." For these reasons, and because the disparity was inadequately justified, the State Water Board should modify

the PCB Permit so that all major dischargers monitor on a semi-annual frequency, or remand to the Regional Water Board to do the same.

D. Remove Additional Congener Monitoring Requirements until Method 1668C is Approved and a Corresponding Sampling and Analysis Plan is prepared and implemented.

On September 23, 2010, the USEPA issued a *draft* rule approving Method 1668c, but has yet to finalize the rule or address concerns raised about the inter-laboratory validation of that method. (*See accord* 75 Fed. Reg. 58024.)

Method 1668C was considered for promulgation by the EPA in 2012. The EPA received 35 comment letters on the method. Of these comments, only five (5) supported the approval of this method, and thirty (30) opposed citing various reasons including the many shortcoming of the inter-laboratory study conducted by EPA, data reproducibility, ubiquitous problem of background contamination, etc. The EPA deferred the promulgation of this method, and EPA staff have stated it will not be promulgated until after an interlaboratory validation study can be conducted.

In its comments on the PCB Permit, BACWA suggested that, until the sampling, analytical and reporting protocols for Method 1668C are further refined, the data gathered under that proposed method is of insufficient quality for a reevaluation of TMDL wasteload allocations and BACWA requested that the permit allow that some of the resources used for routine monitoring be reallocated to fund a special interlaboratory comparison study, and that the permit acknowledge the insufficient quality of the data collected. That was not done.

Therefore, BACWA requests review of this issue by the State Water Board and a ruling that, until this new methodology is approved by USEPA, it is appropriate for permittees to only conduct analyses with the approved Method 608.[8] Although the Regional Water Board found that "these monitoring and reporting requirements bear a reasonable relationship to the Regional Water Board's need for and the benefits obtained from the reports," there is no evidence to support this finding. (PCB Permit at F-28.) Moreover, due to the extremely high analytical costs of

[8] The larger issue is whether compliance will be based on Method 1668c at some point in the future. It is possible there are POTWs in the Bay Area who would not meet the proposed limits if Method 1668c is used for future

approximately $800-1,000 per sample and since the data appears not to be used for any purpose, this additional monitoring merely adds a large burden with no resultant benefits.

USEPA-approved methodologies, including sampling and analysis protocols, are needed in order to generate high quality, consistent and comparable data. Sampling consistency will improve the data available to refine the TMDL WLAs and to calculate future permit limits. For these reasons, the State Water Board should clarify the PCB Permit to make clear that only approved methodologies may be used for sampling, or remand to the Regional Water Board to do the same.

E. Recognize that POTW source control options and risk reduction impact for PCBs are limited.

The PCB Permit requires that Dischargers "develop and implement programs to identify and control manageable sources of mercury and PCBs," and "to implement and participate in programs to reduce mercury and PCB-related risks to humans from consumption of San Francisco Bay/Delta fish." (PCB Permit at 16-17 and F-30.) POTWs contribute relatively very little PCBs to the San Francisco Bay. In addition, POTWs do not generate PCBs, but may merely be conduits for PCBs that have been inadvertently introduced into wastewater collection systems.

Removal of PCBs from effluent is accomplished primarily through solids removal, which is why the TMDL indicates that POTWs will be required to "maintain optimum treatment performance for solids removal." (*See* PCB TMDL at A-7.) Other than solids removal, few source control measures are available to POTWs. In light of the absence of other source control options available to POTWs, the PCB Permit should only require optimization of solids removal, not a broader source control program.

Further, since PCBs have been phased out and significant changes in sources are not expected, requiring *annual* source identification and control evaluations and risk reduction programs may be unnecessary. For the reasons provided herein, the State Water Board should clarify the PCB Permit as requested, or remand to the Regional Water Board to do the same.

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compliance. Many POTWs have not conducted many Method 1668c analyses and do not know whether they would be in compliance using that more sensitive analytical method.

F. **Allow mercury and PCB adjustments for treatment of stormwater and landfill leachate**.

The PCB Permit allows POTWs that may accept and treat municipal separate storm sewer system ("MS4") flows to apply an adjustment to their PCB discharge concentrations prior to determining compliance with limits. (PCB Permit at 19.) The diversion and treatment of MS4 flows will also remove mercury, another pollutant of concern that is associated with solids. A similar adjustment, therefore, should also be allowed for mercury as is the case for adjustments for Recycled Water Use for Industrial Dischargers. (PCB Permit at 17-18.) Additionally, some POTWs in the San Francisco Bay area treat leachate from landfills. For these reasons, the State Water Board should modify the PCB Permit to allow "credits" for POTWs that treat stormwater or landfill leachate when calculating and reporting Total PCB and mercury concentrations in their effluent, or remand to the Regional Water Board to do the same.

5. THE MANNER IN WHICH THE PETITIONER IS AGGRIEVED:

The Regional Water Board's Order No. R5-2012-0096, as did its predecessor Order No. R2-2011-0012 (which also was petitioned by BACWA) prematurely established numeric effluent limits of PCBs, which are not required by law and may be infeasible to meet and are infeasible to calculate with existing data. The Board failed to establish the reasonable potential of permittees to cause or contribute to the exceedance of water quality standards, prior to establishing effluent limits, which is contrary to the requirements of federal law and regulations. Further, the Board mandated inconsistent monitoring requirements among permittees, and requires monitoring using method 1668C, a method not yet approved by the USEPA. The Board failed to adequately address the fact that POTWs do not generate PCBs and are limited in their ability to implement source controls and risk reduction programs.

The Board did provide for PCBs discharge concentration adjustments for POTWs who accept and treat municipal separate storm sewer system flows; but, the Board did not provide similar adjustments for mercury and for treatment of landfill leachate. Additionally, the Board provided an inaccurate effective date for the permit. And, finally, the PCB Permit does not clearly specify that

the PCB effluent limitations and discharge specifications are intended to reflect current performance only, but may not do so.

6. THE SPECIFIC ACTION BY THE STATE OR REGIONAL BOARD WHICH PETITIONER REQUESTS:

BACWA seeks an Order by the State Water Board that will modify Order No. R2-2012-0096, or remand to the Regional Water Board for revisions and with direction, to: (A) Remove numeric effluent limitation on discharges of PCBs where no reasonable potential exists, and impose limitations as best management practices for those permittees who have demonstrated a reasonable potential to cause or contribute to an excursion of the water quality standard; (B) Provide consistent monitoring requirements for all major POTWs; (C) Remove monitoring requirements using Method 1668C until that method is finally approved by USEPA and a Sampling and Analysis Plan is prepared and implemented; (D) Recognize that POTW source control options and risk reduction abilities for PCBs are limited; (E) Correct the effective date to 50 days after the adoption of the permit; and (F) Make any other changes necessary to provide clarification.

7. A STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL ISSUES RAISED IN THE PETITION:

BACWA's preliminary statement of points and authorities are set forth in Section 4 above. BACWA may supplement this statement upon receipt and review of the administrative record.

8. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE REGIONAL BOARD AND TO THE DISCHARGER:

A true and correct copy of this Petition was mailed by First Class mail on January 11, 2013 to the Regional Water Board at the following address:

San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400,
Oakland, California 94612

9. A STATEMENT THAT THE SUBSTANTIVE ISSUES OR OBJECTIONS RAISED IN THE PETITION WERE RAISED BEFORE THE REGIONAL BOARD, OR AN EXPLANATION WHY NOT.

The substantive factual and legal issues and objections set forth in this Petition were presented to the Regional Board either before, during, or after the PCB Permit adoption hearing on this matter. In fact, many are carried over from a previous petition on the last version of the PCB Permit since requested modifications were not made.

10. REQUEST FOR PETITION TO BE HELD IN ABEYANCE

BACWA requests this Petition be placed in abeyance for two years, until January 11, 2015, to allow the opportunity for resolution of these matters in further discussion and exchanges between the BACWA and the Regional Water Board.

Respectfully submitted,

DATED: January 11, 2013 DOWNEY BRAND LLP

By:_____
MELISSA A. THORME
Attorneys for Petitioner
BAY AREA CLEAN WATER AGENCIES

1296974.1

DOWNEY BRAND LLP

Sherry Hull

From: Dave Williams
Sent: Wednesday, March 18, 2015 4:38 PM
To: Sherry Hull
Subject: agenda item # 17: BACWA and BPC

Please include in packet

Regarding a relationship with BPC

The relationships BPC has with others works pretty simply. For example, BPC would list BACWA as a member on their webpage and collateral. When events take place that are mutually beneficial or of interest, we would list each other as In-Kind Sponsors at no cost to either party. Like their upcoming Decision Makers Conference (DMC) on April 9th, the In-Kind Sponsors are promoting the DMC via their members by two E Blasts and their webpage. In return, one ticket is provided to the In-Kind Sponsor to attend.

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

BACWA Mercury/PCB Watershed Permit Risk Reduction Compliance

Request for Proposals 2015

Announcement Date: xxx

PROGRAM OVERVIEW

The Bay Area Clean Water Agencies (BACWA) seeks proposals to increase awareness and understanding of fish contamination issues and reduce exposure to chemicals from eating fish caught in San Francisco Bay.

Funding Available: $50,000 is available for this grant program.

Size of Grants: Applicants may apply for any funding amount up to $50,000.

Timeline: Work for projects awarded will be conducted for up to three years.

Eligibility of Applicants: Applicants must be a non-profit organization, federally recognized or non-federally-recognized tribe, or local government agency, including public K-12 schools.

Application Deadline: Proposals must be received by BACWA by 5:00 p.m. on xxxx

Award Date: BACWA anticipates notifying successful applicants by xxxx.

BACKGROUND

While fish is an important part of a healthy diet, most fish caught in San Francisco Bay contain elevated levels of harmful chemicals, including mercury and polychlorinated biphenyls (PCBs). The presence of these chemicals in Bay fish is the basis for the current health advisory (see http://www.oehha.ca.gov/fish/general/sfbaydelta.html), which recommends that fish consumers limit the types and amounts of fish they eat as a way to limit their exposure to these chemicals.

The clean-up and management of mercury and PCBs in San Francisco Bay is the long term goal of state and local regulatory agencies. However, risk reduction activities in

the interim can address the possible health risks to consumers of Bay fish. The San Francisco Bay Fish Project (http://sfei.org/sfbfp), which concluded in 2012, developed educational materials and funded grants to community-based organizations that communicated directly with affected populations.

BACWA is a local government agency created by a joint powers agreement in 1984. Our membership includes local clean water agencies that provide sanitary sewer services to the more than seven million people living in the nine county SF Bay Area. BACWA members are permitted under the Regional Water Quality Control Board's Watershed Permit governing discharge of mercury and PCBs to the San Francisco Bay (http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2012/R2-2012-0096.pdf). As part of compliance with this permit, BACWA partially funded the San Francisco Bay Fish Project, and will continue that work by funding a grant program to further risk reduction activities in the San Francisco Bay.

TYPES OF PROJECT THAT CAN BE FUNDED

This grant program will assist local organizations/agencies and tribes in conducting projects that:

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

Projects funded by the grant program must be directed to consumers of fish from San Francisco Bay. Consumers include populations who catch and consume fish from San Francisco Bay, as well as their families and friends who consume their catch. This program does not address commercial fishing activities.

This grant program seeks projects that focus on consumers of San Francisco Bay fish who are most at risk. We define these "at-risk" populations below. Projects must include San Francisco Bay fish consumers from one or more of these at-risk populations:

1. *Moderate-to-high consumers* - Populations are most at risk if they consume moderate-to-high amounts of San Francisco Bay fish on a regular basis (i.e., greater than one time per month for at least 6 months of the year).
2. *Consumers of highly contaminated* species - The level of contaminants in San Francisco Bay fish varies widely by species. Some species, such as white croaker and shark, contain very high levels of chemicals and consumption should be

avoided or restricted. Some populations are at risk if they eat these highly contaminated species from San Francisco Bay.

3. *Sensitive populations* - Because mercury exposure is most harmful to an unborn child or children, at-risk populations also include women of childbearing age, especially pregnant women, and children. Sensitive populations must also be consumers of fish from San Francisco Bay.

WHO CAN APPLY?

Applicants must be a non-profit organization, federally-recognized or non-federally recognized tribe, or a local government agency, including public K-12 schools. Due to the limited amount of funding available and the competitive nature of these grants, we encourage applicants to form collaborative partnerships.

GEOGRAPHIC AREA OF PROJECTS

Project activities may be conducted anywhere as long as they are directed to consumers of fish from San Francisco Bay. For purposes of this program, San Francisco Bay includes: The central Bay east of the Golden Gate Bridge, including San Leandro Bay; the South Bay; and the North Bay including Richardson Bay, San Rafael Bay, San Pablo Bay, the Carquinez Strait, Suisun Bay, Grizzly Bay, and Honker Bay.

APPLICATION PROCEDURE

All the information listed below must be included in your application for it to be considered complete.

1. Application Cover Page

2. Description of Organization and Qualifications (one page maximum)

- Describe the mission and history of your organization.
- Describe your organization's qualifications for conducting the project. Highlight any fish-related activities or health outreach and education activities that you have conducted.
- Describe the qualifications and experience of the staff who will implement and evaluate the project.

3. Intended Audience and Geographic Area (one page maximum)

The projects must be directed to consumers of fish from San Francisco Bay, as defined above.

- Describe the intended audience served by the project.

- If your project is not directed to fishing populations at San Francisco Bay fishing locations, describe your strategy for demonstrating that the intended audience consumes fish from San Francisco Bay.
- Describe your organization's experience in working with the intended audience.
- Describe the geographic area or areas where the project will take place.

4. Project Activities (two page maximum)

Proposed activities must

(1) Promote awareness and understanding of fish consumption advisories, contamination issues, or health risks and benefits associated with eating San Francisco Bay fish; and/or

(2) Promote reductions in human exposure to mercury and PCBs from consumption of fish from San Francisco Bay.

Projects may address both (1) and (2).

- Describe in detail your plan for developing and implementing the project, including specific activities and tasks.
- Explain why you are choosing your specific approach and the changes you anticipate will result from your activities.
- Describe how the project includes at-risk consumers of SF Bay fish as defined above.
- Describe how the project will address the cultural, literacy, or language needs of the intended audience.

5. Project Evaluation (one page maximum)

The project evaluation will describe how you will monitor progress, measure what you accomplish, and determine the success of your project.

- Describe your overall plan for evaluating your project.
- Describe the specific changes that you anticipate will result from project activities. These specific changes may include increases in awareness or knowledge, intent to change behavior, or actual changes in behavior.
- Describe how the specific changes that will result from your project will be measured.
- Describe the evaluation data that will be collected, including any evaluation tools (such as questionnaires) you will use to measure the specific changes that will result from project activities.
- Include an estimate of the number of consumers of fish from San Francisco Bay your project will reach.

6. Timeline Template

Please provide information about the project tasks and schedule. Project should be no more than 3 years in duration.

7. Project Budget Form (Attachment 1)
Please provide the information requested in Attachment 1. Applicants do not need to use the form from Attachment 1 but should follow the general format.

8. Additional Attachments

- Non-profit organizations must include documentation of non-profit status such as an exemption letter from the U.S. Internal Revenue Service.
- Supporting materials, such as examples of educational materials or letters of support, may be included. Limit supporting materials to 5 pages.

SELECTION PROCESS

Selection will be based on the score of each proposal using the points listed in the table below.

Table 1. Application Scoring

	Points
Description of Organization and Qualifications	20
Intended Audience and Geographic Area	10
Project Activities	50
Project Evaluation	10
Timeline and budget	10
TOTAL	100

PROJECT AWARD

BACWA anticipates notifying successful applicants by xxxx.

Organizations that receive grant funding will sign a contract with BACWA, which will include a scope of work and requirements for receiving payments. In addition to fulfilling the activities described in the proposal, grantees will be required to attend annual meetings with BACWA and the Regional Water Quality Control Board to give updates

on their projects. Any materials produced as a result of the grant award must mention BACWA as the funding sources.

QUESTIONS?

Please submit your specific questions to Lorien Fono by email at lfono@bacwa.org.

HOW TO SUBMIT AN APPLICATION

Proposals may be submitted by email to lfono@bacwa.org. Proposals must be received by BACWA by 5:00 p.m. on Friday, xxxx. We will send an acknowledgement by email upon receiving your application.

Attachment 1: PROJECT BUDGET FORM

(The applicant does not need to use this form, but should follow the general format and include the information listed below.)

Name of Organization: _____

Project Title: _____

Requested Amount *($50,000 maximum)*: $_____

		Requested	In-Kind Support	Total Project Amount
Personnel:				
	Salaries & wages[1]			
	Description *(Example*: health educator @ $3000/mo. x 25% for 6 mo.)			
	Consultant & contract services[2]			
	Description *(Example:* graphic artist @ $100/hour for 20 hours)			
	Total Personnel			
Operating Expenses				
	Supplies/Materials/Printing[3]			
	Equipment[4]			
	Travel			
	Other (describe):			
	Total Operating Expenses			
	Indirect Costs[5]			
Total Budget				

1. For all project staff include position title, salary, percentage time, and number of months the staff will be supported by the grant.
2. For all consultant and contract services, describe the type of services provided, and include hourly rate and number of hours.
3. Include office supplies, training materials, postage, etc.
4. Please describe equipment costs above $500 such as the purchase of a computer. 5. Indirect costs include rent, utilities, and indirect administrative support. Indirect costs should not exceed 15% of the sum of total personnel and total operating expenses.

Sherry Hull

From: Sherry Hull
Sent: Tuesday, March 17, 2015 9:22 AM
To: Sherry Hull
Subject: BAAQMD Water Sector Gap Analysis
Attachments: BAAQMD Water Gap Analysis draft_Feb 2.docx; Appendix A.DOCX

From: Elyse.Engel@ch2m.com [mailto:Elyse.Engel@ch2m.com]
Sent: Friday, February 27, 2015 9:47 AM

Subject: BAAQMD Water Sector Gap Analysis

BACWA AIR,

As you are aware, BAAQMD is working on developing a regional climate protection strategy. As part of that strategy, BAAQMD is conducting sector-based "gap analyses" to see how GHG emissions are growing in each sector, compared to the regional goal of reducing emissions 80% below 1990 levels by 2050. Attached is the current version of the draft Water Sector Gap Analysis, which has already been shared with a team of outside stakeholders (including folks from CARB, SFPUC, SWRCB, etc.). Given that this analysis is likely to shape future GHG policies in the Bay Area, we think it imperative for the BACWA AIR members to review and provide feedback. As you review, keep in mind that this is a working draft and that the BAAQMD is continuing to make changes and incorporate comments received.

Two questions BAAQMD has asked us to consider (as we review this draft) are as follows:

1. To calculate indirect GHG emissions associated with the water sector, BAAQMD first estimated Bay Area-wide water consumption, and then used the CEC report (http://www.energy.ca.gov/2006publications/CEC-500-2006-118/CEC-500-2006-118.PDF) to assign water-energy proxy to the water consumed. BAAQMD used the Northern California water-energy proxy. BAAQMD has received feedback from the group that there are more accurate and specific water-energy proxies that could be used for the Bay Area, rather than using the proxy from this report. **Do we agree? Do we feel that the carbon intensity of water pumped, treated, consumed, etc. in the Bay Area is different and, if so, do we have any suggestions on where to obtain more appropriate values?**

2. BAAQMD used a 2013 report (http://bairwmp.org/docs/2013-bairwm-plan-update/2013-final-plan/San%20Francisco%20Bay%20Area%20IRWMP%20Final_September%202013.pdf) to estimate water consumption in the Bay Area. **Do we think these figures are accurate? Do we feel there is a better resource to obtain more accurate information on total water consumption in the Bay Area?** Please keep in mind that BAAQMD is trying to determine the total GHG emissions associated with the Bay Area water sector, which includes the energy required to pump, convey, treat, and dispose of water in the Bay Area (as well as direct emissions associated with POTWs in the Bay Area).

To ensure our ability to provide timely feedback to BAAQMD, **please provide your comments to Elyse Engel (elyse.engel@ch2m.com) no later than Monday, March 9th**.

Thanks,
Elyse

Elyse Engel, EIT
Associate Engineer
Environment & Nuclear Market

CH2M HILL

1737 North First Street, Suite 300
San Jose, California 95112
Direct 669.800.1012 x31012
Fax 408.436.4829
elyse.engel@ch2m.com

Draft BAAQMD Water Sector Gap Analysis

Jaclyn Winkel, Senior Environmental Planner

This Water Sector Gap Analysis is part of an effort by the Bay Area Air Quality Management District (Air District) to develop a Regional Climate Protection Strategy for the Bay Area. The purpose of the Gap Analysis is to identify the magnitude of greenhouse gas (GHG) emission reductions needed in order to meet the State's and the Air District's goal of reducing region-wide GHG emissions 80% below 1990 levels by 2050. By defining the "gap," we hope that policy solutions can be more easily identified to help achieve the 2050 goal. This Gap Analysis looks at GHG emissions in the water sector, and considers major policies at the federal, state, regional and local levels that will affect these emissions.

Sector Definition

California's water system includes infrastructure developed to support the capture, use, conveyance, storage, conservation, and treatment of water and wastewater. Greenhouse gases from the water sector are primarily associated with the energy required to pump, convey, and treat water. The water sector also includes GHG emissions which are directly emitted from wastewater treatment and composting facilities (for example, GHG emissions from combustion sources or methane emitted from wastewater while it is being treated in anaerobic conditions).

The sector does not include emissions associated with heating water, because that is covered in the Green Building sector.

Overlap with other sectors: There is quite a bit of overlap between the water sector and other sectors, including energy and agriculture. Water is used to grow crops, support urban and industrial needs, and produce energy. Many GHG reduction measures addressing water use may be reflected in those other sectors.

Baseline & Forecast

The GHG emissions associated with the water sector fall into two categories: direct emissions and indirect emissions.

Direct Emissions: The Bay Area GHG inventory for water includes GHGs that are directly emitted from water and wastewater treatment facilities. Greenhouse gases are emitted from wastewater collection, treatment, and storage systems through the volatilization of organic compounds at the liquid surface. Other GHG emissions come from combustion sources. Methane is emitted from wastewater when it is treated in anaerobic conditions. Nitrous oxide (N2O) emissions are associated with the degradation of nitrogen compounds present in wastewater, and are emitted as a result of the nitrification and denitrification processes. The Air District's inventory is consistent with the California Air Resources Board's (ARB) methodology for developing and projecting emissions inventories for water emissions. The Air District's GHG emissions inventory is updated on a regular basis to reflect anticipated emission reductions from state regulations, including measures adopted by ARB in conjunction with the AB 32 Scoping Plan.

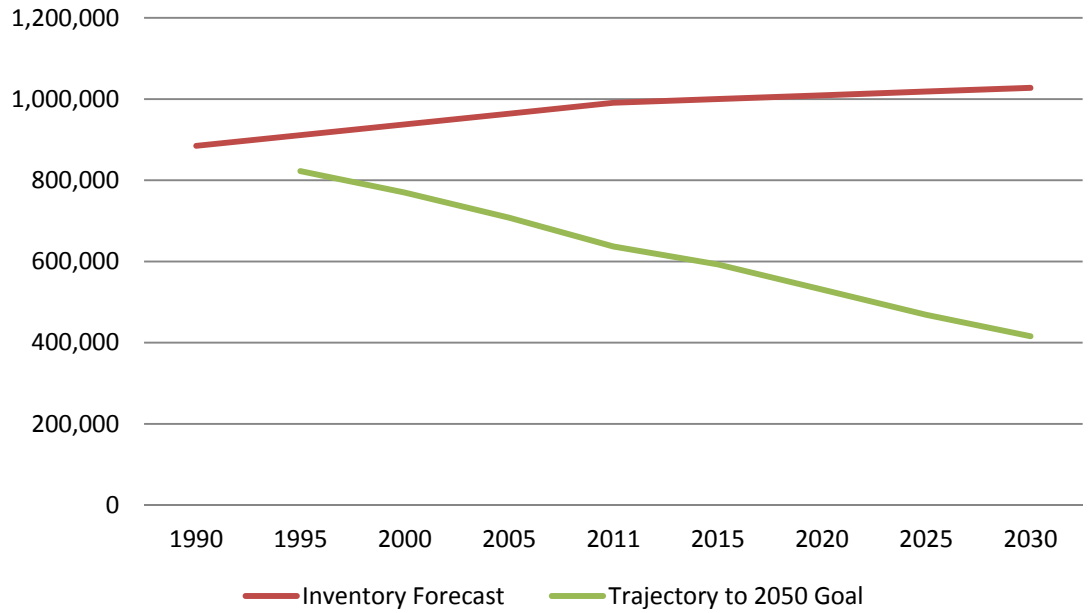
Indirect Emissions: GHG emissions from the water sector are also associated with the energy required to pump, convey, and treat water and wastewater throughout the Bay Area. The Bay Area GHG inventory does not include indirect emissions. To estimate indirect GHG emissions associated with the water sector, Air District staff: 1) estimated total water consumption in the Bay Area; 2) determined the

amount of energy required to pump, convey, and treat the total water and wastewater consumed in the Bay Area; and 3) calculated the GHG emissions associated with this energy use. Additional information on the methodology and data sources used to estimate the indirect GHG emissions for the water sector is located in Appendix A.

Key findings from an analysis of projected Bay Area water sector emissions through 2030 are summarized below.

Figure 1 shows Bay Area GHG water emissions (direct and indirect) from 1990 to 2011, and also shows projected GHG emissions through 2030 under a business-as-usual scenario. The business-as-usual projection assumes that no additional policies or actions will be put in place to reduce GHG emissions from this sector. The Trajectory to 2050 Goal (green line) represents a straight trajectory between 1990 emissions levels and the emissions level needed to achieve the 2050 goal. As shown in Figure 1, emissions from the water sector have been increasing since 1990, and are projected to continue increasing through 2030. To reach the trajectory to the state's and the Air District's 2050 goal, water sector emissions in 2030 would need to decrease from ~1.02 MMT CO2e per year to ~415,000 MT CO2e per year, which is a 60% reduction from what water emissions are projected to be if no further actions are taken. However, in recent years, federal, state, and local policies and measures have been implemented which will help to close the emissions gap. See the Policy Impacts discussion below.

Figure 1: Bay Area GHG Emissions from Water Sector: 1990 - 2030 (metric tons per year CO2e)



In 2011, the largest proportion of GHG emissions in this sector was direct emissions from water and wastewater treatment facilities that are permitted by the Air District. Over time, direct emissions are projected to increase while indirect emissions are projected to decrease. The decline in indirect emissions is due to a cleaner statewide energy profile (33% renewable by 2020). Accordingly, it will be particularly important to reduce direct emissions from permitted facilities throughout the Bay Area,

although emission reduction opportunities relating to water use efficiency, recycling, and conservation to reduce water consumption should also be investigated. See Table 1.

Table 1: Water Emissions – Indirect v. Direct

	Percent of total 2011 Emissions	Percent of Projected 2030 Emissions
Direct Emissions	59%	67% *(14% increase)*
Indirect Emissions	41%	33% *(15% decrease)*

Policy Impacts

Below is a summary of key federal, state and local policies that may have an impact on water sector emissions in the Bay Area.

Federal Policies: Below is a list of federal policies / best practices that the federal government has in place to reduce GHG emissions from the water sector:

Federal Policies:

- Executive Order (EO) 13514[1] – requires federal agencies to reduce energy and water intensity and achieve other sustainability goals.
    - Water Conservation: Reduce potable water consumption intensity 26% by 2020 compared to a 2007 baseline. Reduce industrial, landscaping, and agricultural water use by 20% by 2020 compared to a 2010 baseline.

Federal Best Practices:

- President Obama's Climate Action Plan[2] - the Plan includes a number of goals and initiatives relating to water, including:
    - Directing federal agencies to support climate-resilient investments;
    - Conserving land and water resources;
    - Maintaining agricultural sustainability (provision of grants and technical support to agricultural water users for more water-efficient practices);
    - Energy efficiency (expand energy efficiency efforts promoted through the Clean Energy Ministerial programs, including reducing energy consumption at water and wastewater treatment facilities); and
    - Assistance local communities in increasing water storage and water use efficiencies.
- Water Sense, an EPA Partnership Program[3] – similar to the EPA's EnergyStar program, WaterSense helps people save water with a product label and tips for saving water indoors and out. Products bearing the WaterSense label have been independently certified to perform well; help save water, energy and money; and encourage innovation in manufacturing.

While Executive Order (EO) 13514 is required to achieve measurable reductions in water use, and therefore in associated energy, it is not likely to result in significant GHG emissions reductions in the water sector in the Bay Area because it is only applicable to federal agencies. Other federal efforts take

[1] http://www.epa.gov/greeningepa/practices/eo13514.htm
[2] http://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf
[3] http://www.epa.gov/WaterSense/about_us/index.html

a largely voluntary approach to reducing GHG emissions in the water sector, including the EPA's WaterSense program which helps people to save water with a product label and tips for reducing water use. The President's *Climate Action Plan* also includes a number of goals and initiatives relating to water, including the promotion of reduced energy consumption at water and wastewater treatment facilities and increased water conservation, which hold promise to achieve GHG emission reductions.

State Regulations and Policies: Below is a list of state policies / best practices that the state government has in place to reduce GHG emissions from the water sector:

State Regulations and Proposed Policies:

- California's 2009 Water Conservation Act (Senate Bill x7-7) specifically addresses urban and agricultural water conservation. The Act's key urban provision established a statewide goal to reduce per capita water use by 20% by 2020. To date, 400 urban water agencies have prepared water management plans (representing ~80% of California's population).
- The Updated Model Water Efficiency Landscape Ordinance: required all local agencies to adopt a water efficient landscape ordinance by January 1, 2010.
- State Water Resources Control Board (SWRCB) adopted recycled water and stormwater goals. Recycled water usage is to be increased above the 2002 usage levels by at least one million acre feet per year (AFY) by 2020 and by at least two million AFY by 2030. Stormwater usage is to increase above the 2007 usage levels by at least 500,000 AFY by 2020 and by at least one million AFY by 2030[4].
- Executive Order B-18-12[5]: Governor Brown took action to permanently reduce water consumption by directing state agencies and departments to reduce their overall water use by 10% by 2015 and 20% by 2020.
- Recommended Actions in the 2014 Scoping Plan Update[6]:
    - DWR and SWRCB to give priority to funding integrated management plans that include measures that will achieve GHG emission reductions (and should include numeric targets);
    - California Energy Commission to implement new water-related energy conservation measures and efficiency standards;
    - CPUC to complete water-energy nexus rulemaking by 2015 and continue implementation of joint water-energy utility efficiency programs and partnerships;
    - SWRCB and CPUC to incent resource-recovering wastewater treatment projects by 2015;
    - SWRCB and RWQCB by 2016 to implement green infrastructure permits to treat and capture urban runoff for local use;
    - Various state agencies to collaborate to guide adoption of GHG emission-reducing policies for water sector investments and action by 2015;
    - Various state agencies to collaborate to identify and incent implementation of rate structures that accurately reflect the economic, social, and environmental value of water in California while maintaining affordability for basic services;

[4] http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/docs/recycledwaterpolicy_approved.pdf

[5] http://gov.ca.gov/news.php?id=17508

[6] http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf

- SWRCB to develop a comprehensive groundwater management strategy and DWR and CDFA to provide technical and financial assistance to exceed SBx7-7 targets;
- SWRCB and RWQCB by 2016 to modify state and regional water board policies and permits to achieve conservation, water recycling, stormwater reuse, and wastewater to energy goals; and
- Promote water-energy conservation outreach and education.

Best Practices:

- Water-Energy Grant Program: California Dept. of Water Resources (DWR) Water-Energy Grant Program provides funds to implement water efficiency programs or projects that reduce GHG emissions, and reduce water and energy use[7].
- Water Use Efficiency (WUE) – Commercial, Industrial, and Institutional: California DWR WUE Commercial, Industrial, and Institutional Program disseminates information on improved water use efficiency technologies and helps develop and implement CII water use efficiency programs with local agencies[8].
- California DWR's California Water Plan: updated every 5 years with a goal of producing a strategic water plan that meets California Water Code requirements, guides state investments in innovation and infrastructure, and advances integrated water management and sustainable outcomes[9].

In summary, the state is currently implementing several policies and programs as part of an integrated water management effort that achieves GHG emission reductions within the water sector. The state is also undertaking a number of initiatives and programs, with the goal of reducing water use and GHG emissions in the water sector, which complement existing policies and are likely to achieve additional GHG reductions.

Local Policies: Air District staff compiled a database listing the policies and measures in locally adopted climate action plans (CAPs).Forty-nine of the locally adopted CAPs include policies and measures intended to reduce water sector GHG emissions. The measures in the CAPs are largely a combination of mandatory and voluntary measures and most are quantified (non-quantified measures are not anticipated to achieve substantive GHG emission reductions). Some policies are in place specifically to meet the requirements of SBx7-7, while others are intended to go above and beyond state requirements. In total, the measures in locally adopted CAPs are projected to achieve emission reductions of approximately 100,477 MT CO2-e through the implementation of a variety of mandatory and voluntary measures, such as increasing the use of recycled water, water efficient landscape ordinances, and other water conservation techniques. The estimated emission reductions are taken directly from the CAPs; these estimates have not been independently verified by Air District staff.

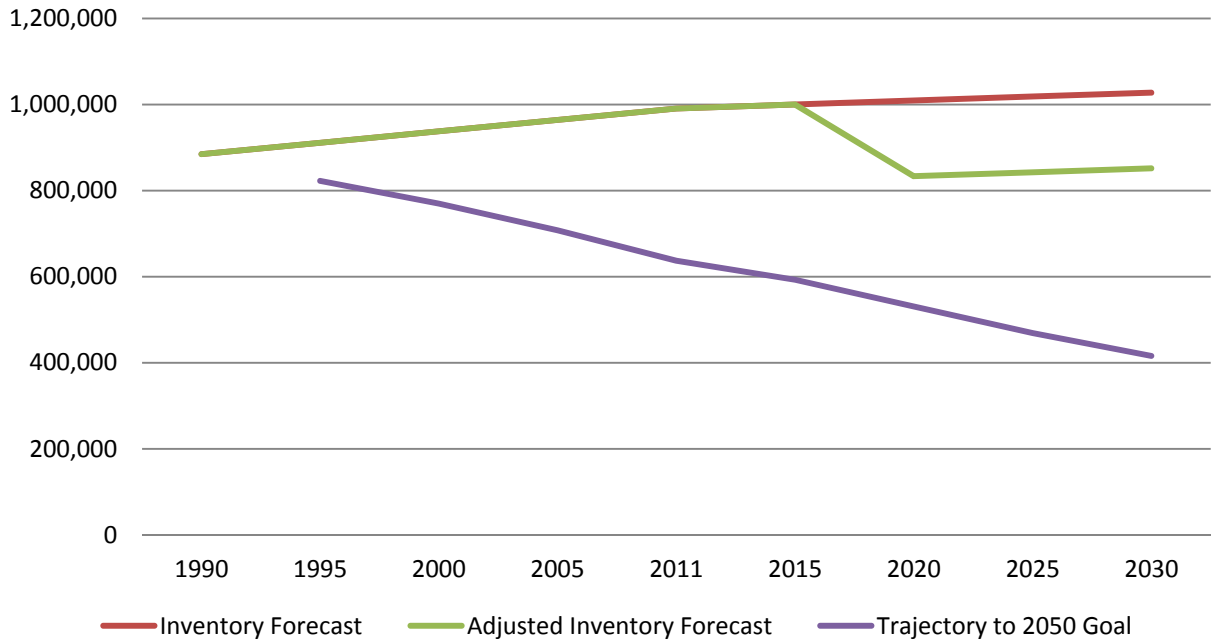
Combined effect of policies: California, at the state and local levels, is implementing several strategies to improve water use efficiency, recycling, and conservation that will achieve GHG emission reductions in the water sector. Key state regulations, in particular SBx7-7, the landscape ordinance, Executive Order B-18-12, and goals undertaken by the SWRCB are anticipated to reduce water consumption and therefore reduce associated GHG emissions. Other local actions and voluntary programs may achieve further reductions. However, it is difficult to determine precisely how much federal, state, and local

[7] http://www.water.ca.gov/waterenergygrant/index.cfm
[8] http://www.water.ca.gov/wateruseefficiency/cii/
[9] http://www.waterplan.water.ca.gov/

regulations and policies may help to close the water gap during the 2015 to 2030 period. Several local policies in adopted CAPs are a mix of mandatory and voluntary strategies. Several federal and state regulations pertain only to government agencies. Also, there is a lack of sufficient data that is necessary to measure reductions from certain state and federal regulations. For example, Federal Executive Order 13514 requires federal agencies to reduce potable water consumption intensity 25% by 2020 compared to a 2007 baseline, and to reduce industrial, landscaping, and agricultural water use by 20% by 2020 compared to a 2010 baseline. However, current data on water consumed by federal agency facilities and operations in the Bay Area is not available, and therefore estimating the reductions from EO 13514 is very difficult, requiring reliance on many assumptions.

Despite the difficulty in determining exactly how much the federal, state, and local policies described above may help to reduce the gap, it seems clear that regulations and policies already adopted, and currently under development, will fall well short of closing the estimated gap needed to reduce the water sector emissions by 60% from 2015 to 2030. Figure 2 shows the projected GHG emissions if the emission reductions from SBx7-7 were met, as well as the emission reductions achieved through implementation of measures in locally adopted CAPs.

Figure 2: Adjusted Bay Area GHG Emissions Projections: 1990 - 2030 (metric tons per year)



Potential Strategies

The analysis above suggests that closing the water sector GHG gap will require an emphasis on direct emissions from water and wastewater treatment facilities in the Bay Area. The Air District issues permits to these types of facilities and much of the emissions are controlled by the Air District's permit requirements and rules/regulations. However, there are also some GHG's being emitted within water/wastewater treatment facilities that are not being controlled by current Air District rules/regulations, such as methane emissions as well as fugitive emissions from anaerobic digester

lagoons and individual septic systems. Therefore emission reduction opportunities within the Air District's legal authority and jurisdiction may exist (i.e. new rules or regulations to control these emissions could be adopted and implemented). It will also be necessary for additional actions to be taken to reduce water consumption in order to further reduce indirect emissions. Water consumption in the Bay Area is projected to increase through 2035. Indirect emissions associated with water consumption are projected to decline but only because the state's energy profile is becoming cleaner over time.

Questions for Discussion

Did we calculate indirect emissions correctly?

Are there any data sources that we should be made aware of?

Is there any overlap between indirect or direct emissions that is not be accounted for (i.e. any double counting)?

Did we capture the right policies in the gap analysis?

Did we frame the trends correctly?

What kinds of policies/strategies are we going to have to pursue to achieve our 2050 goal?

What is best implemented at the federal vs. state vs. local vs. regional level?

How can the Bay Area contribute to policy development at the federal and state levels?

What should be implemented in the near vs. medium vs. long term?

What year(s) should serve as interim target(s)?

How should interim target(s) define reductions: a straight line interpolation to 2050? Front-loaded? Back-loaded? By economic sector?

Appendix A

Draft Water Sector Gap Analysis
Jackie Winkel, Senior Environmental Planner

This appendix describes the methodology and data sources used to estimate indirect greenhouse gas (GHG) emissions for the water sector gap analysis.

Indirect Emissions

California's water system includes infrastructure developed to support the capture, use, conveyance, storage, conservation, and treatment of water and wastewater. Greenhouse gases from the water sector are primarily associated with the energy required to pump, convey, and treat water/wastewater. The Bay Area GHG inventory prepared by the Air District does not include indirect emissions. To estimate indirect GHG emissions associated with the water sector, Air District staff: 1) estimated total water consumption in the Bay Area; 2) determined the amount of energy required to pump, convey, and treat the total water and wastewater consumed in the Bay Area; and 3) calculated the GHG emissions associated with this energy use.

1. **Water Consumption**: total water consumption in the Bay Area was derived from the report entitled "San Francisco Bay Area Integrated Regional Water Management Plan, September 2013" (IRWMP)[i]. The Bay Area IRWMP is a nine-county effort to coordinate and improve water supply reliability, protect water quality, manage flood protection, maintain public health standards, protect habitat and watershed resources, and enhance the overall health of the bay. The IRWMP was prepared in cooperation with a variety of public agencies throughout the Bay Area, including water districts, resource conservation districts, utility districts, and other interested stakeholders. The IRWMP defines the Bay Area "region" as being the jurisdiction of the San Francisco Bay Regional Water Quality Control Board Region 2, which includes all or portions of nine counties (Marin, Sonoma, Napa, Solano, Contra Costa, Alameda, Santa Clara, San Mateo and San Francisco). The region defined in the IRWMP is similar to the Air District's jurisdiction but not identical. The IRWMP(pg. 2-52 & 2-53) includes information on water consumed in the region (Bay Area) for 1990 (the baseline year for purposes of the gap analysis), 2010 (which was used as a proxy year for 2011 to align with the Air District's Bay Area GHG inventory) and projected water demand for a normal year in 2035 (which was used as a proxy year for 2030 to align with the Air District's Bay Area GHG inventory projections). See below.

    a. **1990**: ~990,000 acre feet per year (AFY)
    b. **2010** 1,278,000 AFY
    c. **2035**: 1,680,000 AFY

2. **Energy Required**: the amount of energy required to pump, convey, and treat the total water/wastewater consumed in the Bay Area was calculated using the water consumption estimates for the years 1990, 2010 and 2035. The amount of energy associated with this water consumption was estimated using the report entitled "Refining Estimates of Water-Related Energy Use in California, December 2006[ii]" (Water-Energy Report), prepared for the California Energy Commission. The report provides estimated water-energy proxies which represent the energy embedded in water (for both Northern and Southern California, and for both indoor and outdoor water uses). Table ES-1 is excerpted from pg. 2 of the Water-Energy Report and shows the recommended water-energy proxies for Northern California. The proxies are estimates of

the amount of energy needed for each segment of the water-use cycle in terms of the number of kilowatt-hours (kWh) needed to collect, extract, convey, treat, and distribute one million gallons (MG) of water, and the number of kWh's needed to treat and dispose of the same quantity of wastewater. Outdoor water use, such as landscape irrigation, typically either flows into storm drains or recharges groundwater or natural waterways, bypassing need for wastewater treatment and disposal. Therefore the water-energy proxy for outdoor wastewater treatment is zero.

Table ES-1

	Northern California – Indoor Uses (kWh/MG)	Northern California – Outdoor Uses (kWh/MG)
Water Supply & Conveyance	2,117	2,117
Water Treatment	111	111
Water Distribution	1,272	1,272
Wastewater Treatment	1,911	0
Regional Total	5,411	3,500

The US EPA estimates that approximately 30% of water consumed daily in the United States is devoted to outdoor use[iii]. Therefore 30% of the water consumed in the Bay Area was assumed to be associated with outdoor uses, and the remaining 70% of water consumed in the Bay Area was assumed to be associated with indoor uses. To estimate the energy required per water consumed, the water consumption estimates were translated from acre feet to gallons, were divided into indoor/outdoor uses, and were translated from gallons of water consumed to kWh per million gallons:

1 acre foot = 325,851 gallons[iv]

a. **1990**: ~990,000 acre feet per year (AFY)
   990,000 * 325,851 = 322,592,490,000 gallons

   Indoor water consumption (70%) in millions of gallons = (322,592,490,000 * 0.7) / 1,000,000) = 225,815
   Indoor water consumed in kWh:
   225,815 * 5,411 = **1,221,883,574**

   Outdoor water consumption (30%) in millions of gallons = (322,592,490,000 * 0.3) / 1,000,000) = 96,778
   Outdoor water consumed in kWh:
   96,778 * 3,500 = **338,722,115**

b. **2010:** 1,278,000 AFY
   1,278,000 * 325,851 = 416,593,986,480 gallons

   Indoor water consumption (70%) in millions of gallons = (416,593,986,480 * 0.7) / 1,000,000) = 291,616
   Indoor water consumed in kWh:
   291,616 * 5,411 = **1,577,933,043**

Outdoor water consumption (30%) in millions of gallons = (416,593,986,480 * 0.3) / 1,000,000) = 124,978
Outdoor water consumed in kWh:
124,978 * 3,500 = **437,423,686**

c. **2035**: 1,680,000 AFY
1,680,000 * 325,851 = 547,743,474,513 gallons

Indoor water consumption (70%) in millions of gallons = (547,743,474,513 * 0.7) / 1,000,000) = 383,420
Indoor water consumed in kWh:
383,420 * 5,411 = **2,074,687,958**

Outdoor water consumption (30%) in millions of gallons = (547,743,474,513 * 0.3) / 1,000,000) = 164,323
Outdoor water consumed in kWh:
164,323 * 3,500 = **575,130,648**

3. **Calculate GHG Emissions**: the indirect GHG emissions associated with the energy use calculated in step 2 was determined by applying PG&E emission factors[v] to each kWh of electricity for the years 1990, 2010 and 2035. PG&E is not the sole utility provider for the Bay Area; however, it does represent the majority of the power provided for the region. The emissions factor used to calculate emissions from electricity use in 1990 is the factor from a study published by Lawrence Berkeley National Laboratory, which cites an emission factor of 0.259 metric tons CO_2 per MWh (as recommended by PG&E). The emission factor for 2010 is based on actual third-party verified GHG inventory and is 0.202 metric tons CO_2 per MWh. The emission factor for year 2020 (0.131 CO_2 per MWh) was conservatively used as a proxy for 2035 because projected emission factors are not yet available.

a. **1990**:
Indoor water consumed: 2,074,687,958 kWh
kWh to MWh = 1,221,884 MWh
Indoor water in metric tons of CO_2 = 1,221,884 *0.259 = 316,468 metric tons CO_2

Outdoor water consumed: 338,722,115 kWh
kWh to MWh = 338,722 MWh
Outdoor water in metric tons of CO_2 = 388,722 * 0.259 = 87,729 metric tons CO_2

TOTAL (indoor + outdoor) = 404,197 metric tons CO_2

b. **2010**:
Indoor water consumed: 1,577,933,043 kWh
kWh to MWh = 1,577,993 MWh
Indoor water in metric tons of CO_2 = 1,577,993 *0.202 = 318,742 metric tons CO_2

Outdoor water consumed: 437,423,686 kWh
kWh to MWh = 437,424 MWh

Outdoor water in metric tons of CO_2 = 437,424 * 0.202 = 88,360 metric tons CO_2

TOTAL (indoor + outdoor) = 407,102 metric tons CO_2

c. **2035**:
Indoor water consumption projections: 2,074,687,958 kWh
kWh to MWh = 2,074,688 MWh
Indoor water in metric tons of CO_2 = 2,074,688 *0.131 = 271,784 metric tons CO_2

Outdoor water consumed: 575,130,648 kWh
kWh to MWh = 575,131 MWh
Outdoor water in metric tons of CO_2 = 575,131 * 0.131 = 75,342 metric tons CO_2

TOTAL (indoor + outdoor) = 347,126 metric tons CO_2

The calculated indirect GHG emissions for the years 1990, 2010 and 2035 were combined with the direct emissions from the Bay Area GHG Inventory for total GHG emission for the water sector. As mentioned previously, the 2010 indirect emissions were used as a proxy for 2011 and combined with the direct 2011 emissions, and the 2035 indirect emissions were used as a proxy for 2030 and were combined with the 2030 projected direct emissions.

a. **1990**: Direct Emissions (metric tons CO_2e) 480,488 + Indirect Emissions (metric tons CO_2) 404,197 = **884,685 metric tons of CO_2**
b. **2011**: Direct Emissions (metric tons CO_2e) 583,625 + Indirect Emissions (metric tons CO_2) 407,102 = **990,727 metric tons of CO_2**
c. **2030**: Direct Emissions (metric tons CO_2e) 680,488 + Indirect Emissions (metric tons CO_2) 347,126 = **1,027,614 metric tons of CO_2**

[i] http://bairwmp.org/docs/2013-bairwm-plan-update/2013-final-plan/San%20Francisco%20Bay%20Area%20IRWMP%20Final_September%202013.pdf
[ii] http://www.energy.ca.gov/2006publications/CEC-500-2006-118/CEC-500-2006-118.PDF
[iii] http://www.epa.gov/greenhomes/ConserveWater.htm
[iv] https://dnrc.mt.gov/wrd/water_rts/wr_general_info/wrforms/615.pdf
[v] http://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

EXECUTIVE DIRECTOR'S WRITTEN DETERMINATION REGARDING
THE FILING OF STATEMENTS OF ECONOMIC INTERST BY
PARTICULAR CONSULTANTS RETAINED BY BACWA

The undersigned Executive Director of Bay Area Clean Water Agencies ("BACWA") hereby finds and determines that: (i) those Consultants retained by BACWA by contract to perform scientific, environmental or design studies and to report to the BACWA Executive Board or to a BACWA Committee and/or to testify before State or Federal regulatory bodies, or to perform personnel training for BACWA or its Member Agencies, and (ii) those attorneys retained by BACWA not as General Counsel but, rather, to represent BACWA with regard to specific regulatory issues, perform a range of duties which are so limited in scope that such Consultants are not required to comply with the disclosure requirements described in BACWA's Conflict of Interest Code.

David R. Williams

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David R. Williams, Executive Director
BACWA