



B A C W A
BAY AREA
CLEAN WATER
AGENCIES

Executive Board Meeting
AGENDA
Friday, September 15, 2017, 8:30 - 9:00 AM
EBMUD, Lab Library
2020 Wake Ave., Oakland, CA

<u>Agenda Item</u>	<u>Time</u>	<u>Pages</u>
ROLL CALL AND INTRODUCTIONS	8:30 AM	
PUBLIC COMMENT	8:33 AM	
CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER	8:34 AM	
CONSENT CALENDAR 1 August 18, 2017, BACWA Executive Board Meeting Minutes 2 July 2017 Treasurer's Reports	8:35 AM	2-8 9-18
APPROVALS & AUTHORIZATIONS 3 <u>Authorization</u> : Executive Director Authorization for Computer Courage Baywise website updates 4 <u>Approval</u> : Public Policy Institute of California Project Support 5 <u>Approval</u> : Amendment to the Carollo Agreement for Support in the Development of BAAQMD Rule 11-18	8:37 AM	19-26 27-29 30-41
OTHER BUSINESS - POLICY/STRATEGIC 6 <u>Discussion</u> : Final Agenda Pardee Technical Seminar 7 <u>Discussion</u> : Chlorine Residual BPA	8:45 AM	42-44 45-51
OTHER BUSINESS - OPERATIONAL 8 <u>Discussion</u> : Arleen Navarret Award Update CEWA Notice	8:50 AM	
9 SUGGESTIONS FOR FUTURE AGENDA ITEMS	8:57 AM	
NEXT MEETING The next regular meeting of the Board is scheduled for November 17, 2017 from 8:30 am – 12:30 pm at SFPUC, Hetch Hetchy Room, 13th Floor, 525 Golden Gate Ave., San Francisco, CA. The Pardee Seminar is scheduled for October 26-27, 2017 at the EBMUD Pardee Facility.	8:59 AM	
ADJOURNMENT	9:00 AM	

ROLL CALL AND INTRODUCTIONS

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

Other Attendees:

<u>Name</u>	<u>Agency/Company</u>
Amit Mutsuddy	San Jose
Bhavani Yerrapotu	City of Sunnyvale
Eric Dunlavey	San Jose
Jay Davis	SFEI
Kara Nelson	UC Berkeley
Nirmela Arsem	EBMUD
Tom Hall	EOA
Amada Roa	Delta Diablo
Denise Connors	Larry Walker Associates
Jenny Pang	Woodward & Curran
Daniella Brandao	CH2MHill Representing San Mateo
Yuyun Shang	EBMUD
Melissa Morton	Vallejo Sanitation & Flood Control District
David Williams	BACWA
Lorien Fono	BACWA
Sherry Hull	BACWA

PUBLIC COMMENT

None.

CONSIDERATION TO TAKE AGENDA ITEMS OUT OF ORDER – Item 5.b.i, a presentation on N Control Through Source Separation, was moved up on the agenda.

CONSENT CALENDAR

1. July 21, 2017, BACWA Executive Board Meeting Minutes – The approved minutes will be posted on the BACWA website.
2. June 2017 Treasurer’s Reports and Financial Summary – A Financial Summary Report was included in the Packet. A copy of the FY17 Budget as of June 30, 2017, (100% of the fiscal year) was included. It, along with the Summary, provides the Board with a concise overview of the Fund Balances and the current status of the Annual Budget and points out any variances in the budget to date. The Executive Director noted that the Funds Report includes a report on the

Alternative Investments and, because those investments are less liquid than previous investments, a report on BACWA liquidity in also provided. The Executive Director also pointed out that this report is the final report for FY17 and gave an overview of the FY17 Budget vs. Actuals.

Consent Calendar items 1 and 2 were approved in a motion made by Mike Connor and seconded by Jim Ervin. The motion carried with four yes votes and one abstention.

APPROVALS & AUTHORIZATIONS

3. Approval: Nutrient Management Strategy Voluntary Contribution of \$200k– A Board Authorization Request was included in the Packet. The Executive Director gave an overview and explanation of the timing of the payment.

Items 3 was approved in a motion made by Mike Connor and seconded by Jim Ervin. The motion carried unanimously.

4. Approval: A Board Authorization Request, Agreement with Solano Community College and BACWWE website screenshot were included in the Packet. The Executive Director gave an overview of the request.

Items 4 was approved in a motion made by Mike Connor and seconded by Lori Schectel. The motion carried unanimously.

OTHER BUSINESS-POLICY/STRATEGIC

Agenda Item 5 – Discussion: Nutrients

a. Regulatory

- i. Annual Report Data Update – The Regulatory Program Manager provided an update. Most agencies have submitted their data for the 2017 permit year to HDR.
- ii. Optimization/Upgrade Schedule Update – The Regulatory Program Manager provided an update on the schedule. The Optimization/Upgrade Final Report is expected at the end of this year.
- iii. 2nd Watershed Permit Update – A mark-up copy of the Letter of Intent was included in the Packet. The Executive Director gave an overview of the changes and members provided comments to update the letter.
- iv. Oro Loma Permit – The Regulatory Program Manager noted that Oro Loma is working with the Regional Water Board to permit a shallow water discharge during peak wet weather flows in exchange for performance-based nutrient limits. Their permit may also contain language about banking nutrient load reductions for a future trading scheme.

b. Technical Work -

- i. N Control Through Source Separation – Kara Nelson from UC Berkeley gave a presentation on the future of the N removal at the source. Her group is looking at resins to extract nitrogen from the wastewater flows from toilets. Attached is a [LINK](#) to the presentation.

c. Governance Structure –

- i. Planning Subcommittee Meeting #27 Debrief – The Agenda for the August 17, 2017 meeting was included in the Packet. A Board Member gave an overview noting three upcoming meetings: 1) the State of the Estuary on October 10th & 11th, 2017; 2) the RMP annual Meeting on October 6th, 2017; 3) the NMS Meeting on September 8th, 2017 where Dr. Senn will give a presentation on the Assessment Framework. It was suggested that BACWA members comment on how the framework can be changed to incorporate LimnoTech's review and provide better clarity on how to move ahead.

Agenda Item 6 – Discussion: RMP & NMS Update – Dr. Jay Davis of SFEI, and lead scientist to the RMP, first acknowledged the BACWA Representatives to the RMP. He then gave a presentation on the current status of the RMP programs and provided some potential future priorities. His presentation can be viewed at this [LINK](#).

Agenda Item 7 – Discussion: Mercury/PCBs Watershed Permit – A [LINK](#) to the current Mercury/PCBs Watershed Permit was included in the Packet along with a [LINK](#) to Attachment G. An Administrative Draft was received in early August. The Regulatory Program Manager gave an overview of the key issues, which are incorporating the sampling and analysis protocols developed by BACWA's Laboratory Committee in 2013; monitoring frequency for PCB congeners; testing in dry season; and updating the language on risk reduction. BACWA comments will be provided to the Water Board on August 22, 2017.

Agenda Item 8 – Discussion: WOTUS (Waters of the US) Proposal Issued in Federal Register – Several Memos and emails were included in the Packet. Additionally, a [Link](#) to FWQC Comments, a [Link](#) to the Congressional Brief, and a [Link](#) to the Federal Register were included in the Packet. The Executive Director gave an overview of the issue.

Agenda Item 9 – Discussion: Public Policy Institute of California Project Support – This discussion was carried forward from the last meeting. A letter from the Public Policy Institute of California requesting project support for their research project *Protecting Water Quality with a Changing Climate* was included in the Packet. The Executive Director gave an overview and requested input from the Board. The Board members agreed that BACWA would provide \$5,000 to the PPIC in FY18 in exchange for a seat at the table on the direction of the research project.

Agenda **Item 10** – Discussion: ELAP Regulations Update – Nirmela Arsem, EBMUD Lab Manager, gave an update on the status of the regulations. The Preliminary Draft was released and six workshops are being held. It is expected that the next release will be quite different, since the current draft had a lot of inconsistencies. ELAP adopted TNI Standards, but only Volume 1, which covers laboratory certification. Volume 2, which describes how ELAP should operate, was not adopted. This issue is on the agenda for the BACWA Joint Meeting with the Water Board in late August.

Agenda **Item 11** – Discussion: Draft Supplemental Environmental Project (SEP) Regulation Amendments – A Link to the Amendments was included in the Packet. Comments are due September 20, 2017. CASA is putting together comments. The biggest BACWA issue concerns whether or not SEP funds will be able to continue to fund the RMP. The Regional Water Board is reviewing and plans to make sure they do continue.

Agenda **Item 12** – Discussion: Bacterial Objectives Amendments to SIP & Ocean Plan – A BACWA Comment Letter sent to the State Water Resources Control Board on August 16, 2017 was included in the Packet. The Executive Director gave an overview of the letter, which recommended that the State Water Board require the use of mixing zones when calculating effluent limits where allowed by Basin Plans.

Agenda **Item 13** – Discussion: Toxicity Workshop – A Draft Agenda for the Toxicity Workshop scheduled for September 18, 2017 at Central San Headquarters was included in the Packet. The Regulatory Program Manager noted that Irene Liu-Wong of EBMUD was added to the agenda.

Agenda **Item 14** – Discussion: Final Agenda Pre-Pardee Technical Seminar – A Program for the Pre-Pardee Technical Seminar, scheduled for September 2017, was included in the Packet. The Executive Director gave an overview and requested any final input from the Board. No changes were suggested.

Agenda **Item 15** – Discussion: Draft Agenda Pardee Technical Seminar – A DRAFT Program for the Pardee Technical Seminar, scheduled for October 2017, was included in the Packet. The Executive Director gave an overview and requested input from the Board. No changes were suggested.

Agenda **Item 16** – Discussion: Water Board/BACWA Joint Meeting DRAFT Agenda (8/30/17) – A Draft Agenda for the meeting scheduled for August 30, 2017 was included in the Packet.

Agenda **Item 17** – Discussion: Sewer Lateral Ordinance Requirement – A Draft BACWA Comment Letter regarding the Tentative Order R2-2017-XXXX, NPDES No. CA0037699 for the Vallejo Flood & Wastewater District was included in the Packet. The Executive Director gave an overview of the issue. After discussion, it was decided that BACWA would not send the comment letter and would invite Vallejo to attend the Joint meeting with the Water Board.

OTHER BUSINESS-OPERATIONAL

Agenda **Item 18** – Discussion: Biosolids Survey – A LINK to the Survey was included in the Packet. The Regulatory Program Manager gave an overview. The Report is now out. Over one-half of biosolids by dry weight are now going to ADC, which will be problematic if ADC is phased out in the near future.

Agenda **Item 19** – Discussion: Options for Executive Board Meeting Venue(s) – an explanation and a list of options was included in the Packet. The Executive Director asked the Board for input on whether to change the venue for any upcoming meetings. It was decided that there would be no change for the remainder of calendar year 2017 and in calendar year 2018 the meetings would rotate between EBMUD Headquarters and the SFPUC, with one meeting during the year at San Jose.

Agenda **Item 20** – Discussion: Review of BACWA Representatives – A list of current BACWA Representatives was included in the Packet. The Executive Director suggested this issue be postponed to next month. The Board agreed.

Agenda **Item 21** – Discussion: BACWA Comment Letters – Three BACWA Comment Letters were included in the Packet. The Executive Director gave an overview of the letters.

Agenda **Item 22** – Discussion: State of the Estuary Presentation Submittal – BACWA's nomination of the Regional Sidestream Nutrient Removal Study was included in the Packet. Board members asked if more tickets could be made available considering BACWA large contribution. The Assistant Executive Director will pursue that with the State of the Estuary and notify the Board.

REPORTS

Agenda **Item 25** – Committee Reports – BACWA Committee Reports were included in the Packet.

AIR Committee: No meeting.

BAPPG: A Report from the August 2, 2017 meeting was included in the Packet.

Biosolids Committee: A Report from the July 20, 2017 meeting was included in the Packet.

Collections Committee: No meeting.

InfoShare - Asset Management: No meeting.

InfoShare – Operations & Maintenance: No meeting.

Lab Committee: No meeting.

Permits Committee: A Report from the August 8, 2017 meeting was included in the Packet.

Pretreatment Committee: No meeting.

Recycled Water Committee: No meeting.

Agenda **Item 26** - Discussion: Member Highlights - Executive Board Representatives (Board) were given an opportunity to provide updates from each of the Principal agencies. Non-principal members were also given an opportunity to report out on behalf of their agencies. No actions were taken on the report-outs.

EBDA: No report.

EBMUD: No report.

Central Contra Costa: Piloting a wet scrubber with five weeks of sampling of HCl, which is now regulated with new limits.

San Francisco: Will be attending the fact-finding trip to Denmark.

San Jose: Lots of construction continues.

Sunnyvale: Had a compliance inspection. No corrective actions. Emphasis was on maintenance management.

Palo Alto: No report.

Fairfield: No report.

Agenda **Item 27** - The **Executive Director's (ED) Report** for July 2017, along with the Board Calendar, and BACWA Action Items, were included in the Packet. It was noted that all 97 action items from FY17 and 8 of the 14 action items from FY18 have been completed.

Agenda **Item 28** - The **Regulatory Program Manager (RPM) Report** for July 2017 was included in the Packet.

Agenda **Item 29 - Other BACWA Representative Reports** – BACWA Representative were given an opportunity to provide updates. No actions were taken based on the reports.

- a. RMP-TRC: Rod Miller; Laura Pagano – No report.
- b. RMP Steering Committee: Karin North; Leah Walker; Jim Ervin – No report.
- c. Summit Partners: Dave Williams; Laura Pagano – No report.
- d. ASC/SFEI: Laura Pagano; Dave Williams; Karin North – No report
- e. Nutrient Governance Steering Committee: Jim Ervin; Mike Connor – No report.
- f. SWRCB Nutrient SAG: Dave Williams – No report.
- g. SWRCB Focus Group – Bacterial Objectives: Lorien Fono; Amy Chastain – No report.
- h. SWRCB Focus Group – Mercury Amendments to the State Plan: Tim Potter; Dave Williams; Laura Pagano – No report
- i. Nutrient Technical Workgroup: Eric Dunlavey – No report.
- j. NACWA Taskforce on Dental Amalgam: Tim Potter – No report.
- k. BAIRWMP: Cheryl Munoz, Linda Hu, Dave Williams – No report.
- l. NACWA Emerging Contaminants: Karin North, Melody La Bella – No report
- m. CASA Statewide Pesticide Steering Committee: Melody La Bella – No report.
- n. CASA State Legislative Committee: Lori Schectel – No report.
- o. CASA Regulatory Workgroup – Lorien Fono - No report.
- p. RMP Microplastics Liaison: Nirmela Arsem – No report.

- q. ReNUWIt: Mike Connor; Karin North – No report.
- r. AWT Certification Committee: Maura Bonnarens – No report.
- s. Bay Area Regional Reliability Project: Roger Bailey; Mike Connor – No report
- t. WaterReuse Working Group: Cheryl Munoz – No report.

Agenda **Item 30 - SUGGESTIONS FOR FUTURE AGENDA ITEMS.** None.

ANNOUNCEMENTS:

The next regular meeting of the Board is scheduled for **September 15, 2017 from 8:30 am – 8:45 pm** at the **EBMUD Treatment Plant, Lab Library, 2020 Wake Ave., Oakland, CA.** A **Pre-Pardee Seminar** is scheduled to follow from **8:45 am to 3:00 pm.**

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

The meeting adjourned at 12:36 pm.



MONTHLY FINANCIAL SUMMARY REPORT July 2017

Please note: The July 2017 Treasurer's Reports are Preliminary. EBMUD has not yet fully closed out FY17. Once FY17 is closed BACWA will receive final TR's for July 2017. BACWA Staff will inform the Board if there are any changes when providing the next Financial Summary.

Fund Balances

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

BACWA Fund: This fund provides the resources for BACWA staff, its committees, and other administrative needs. The ending fund balance on July 31, 2017 was \$1,080,406 which is significantly higher than the target reserve of \$160,000 which is intended to cover 3 months of normal operating expenses. \$556,682 of the ending fund balance is shown on the June Fund & Investments Balance Report as obligated to meet on-going operating line item expenses for BAPPG Committee Support, Legal services, IT services, Board meeting expenses, accounting services and BACWA staff support (including \$31,082 that was carried forward into FY18). This leaves an actual unobligated excess fund balance of \$523,724 as of July 31, 2017. As the details of what regulatory requirements will be included in the next Nutrient Watershed Permit, these excess funds may be transferred to the CBC fund and used to offset potential Nutrient Surcharge increases to the BACWA members.

CBC Fund: This fund provides the resources for completing special investigations as well as meeting regulatory requirements. The ending fund balance on July 31, 2017 was \$1,508,626 which is significantly higher than the target reserve of \$400,000. \$181,710 of the ending balance is obligated to meet line item expenses for completion of the Optimization/Upgrade Studies contract, the Risk Reduction contracts, and for technical support. This leaves an actual unobligated excess fund balance of \$1,326,917 as of July 31, 2017. Total Disbursements for FY18 from the CBC Fund will include the annual payment of \$880,000 to SFEI for the Nutrient Watershed Permit commitment plus the additional \$200,000 approved by the Board. As the details of what regulatory requirements will be included in the next Nutrient Watershed Permit, any excess CBC funds may be used to offset potential Nutrient Surcharge increases to the BACWA members.

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

Budget To Actual


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



MONTHLY FINANCIAL SUMMARY REPORT
July 2017

Revenues as of July 31, 2017 (8% of the FY) are at 0%. The first FY18 BACWA invoices were sent at the end of July 2017. The revenue reported in July 2017 is interest from the investment of Funds in LAIF for the 4th quarter of FY17.

Overall Expenses as of July 31, 2017 (8% of the FY) are at 3% and are tracking in accordance with the Annual Budget. No individual expense categories have a plus or minus 10% variance at this point in the fiscal year.

						
				8% of Budget		
<u>BACWA FY18 BUDGET</u>	<u>Line Item Description</u>	<u>FY 2018 Budget</u>	<u>Actuals July 2017</u>	<u>Actual % of Budget July 2017</u>	<u>Variance</u>	<u>NOTES</u>
REVENUES & FUNDING						
Dues	Principals' Contributions	\$487,095	\$0	0%	-\$487,095	FY18: 2% increase.
	Associate & Affiliate Contributions	\$178,573	\$0	0%	-\$178,573	FY18: 2% increase. Assoc: \$8,090; Affiliate: \$1,600 (\$197 over budget)
Fees	Clean Bay Collaborative	\$675,000	\$0	0%	-\$675,000	Prin: \$450,000; Assoc/Affil: \$225,000
	Nutrient Surcharge	\$800,000	\$0	0%	-\$800,000	Prin: \$533,335; Assoc/Affil: \$266,673
	Voluntary Nutrient Contributions	\$30,000	\$0	0%	-\$30,000	FY18: Palo Alto (\$30k)
Other Receipts	Other Receipts	\$0	\$0		\$0	
	AIR Non-Member	\$6,477	\$0	0%	-\$6,477	2% increase.
	BAPPG Non-Members	\$3,774	\$0	0%	-\$3,774	2% increase.
	Other	\$0	\$0		\$0	
Fund Transfer	Special Program Admin Fees	\$2,550	\$0	0%	-\$2,550	FY18: 2% increase (WOT only)
Interest Income	LAIF	\$12,000	\$5,788	48%	-\$6,212	BACWA, Legal, & CBC Funds invested in LAIF
	Higher Yield Investments	\$10,000	\$0	0%	-\$10,000	Alternative Investment Interest
	Total Revenue	\$2,205,469	\$5,788	0%	-\$2,199,681	
<u>BACWA FY18 BUDGET</u>	<u>Line Item Description</u>	<u>FY 2018 Budget</u>	<u>Actuals July 2017</u>	<u>Actual % of Budget July 2017</u>	<u>Variance</u>	<u>NOTES</u>
EXPENSES						
Labor						
	Executive Director	\$195,998	\$16,333	8%	-\$179,665	3.5% CPI (SF/Oakland/San Jose Metro Area Dec 2016)
	Assistant Executive Director	\$87,975	\$8,416	10%	-\$79,559	3.5% CPI (SF/Oakland/San Jose Metro Area Dec 2016)
	Regulatory Program Manager	\$116,438	\$7,592	7%	-\$108,846	3.5% CPI (SF/Oakland/San Jose Metro Area Dec 2016)
	Total	\$400,411	\$32,341	8%	-\$368,070	
Administration						
	EBMUD Financial Services	\$40,000	\$0	0%	-\$40,000	
	Auditing Services (Maze)	\$6,300	-\$4,358	-69%	-\$10,658	FY18: \$6,200 Accrued from FY17 to FY18, less \$1,832 paid for FY17 in July 2017.
	Administrative Expenses	\$7,500	\$82	1%	-\$7,418	Travel, Supplies, Parking, Mileage, Tolls, Misc.
	Insurance	\$4,500	\$0	0%	-\$4,500	
	Total	\$58,300	-\$4,276	-7%	-\$62,576	
Meetings						
	EB Meetings	\$2,500	\$119	5%	-\$2,381	Catering, Venue, other expenses
	Annual Meeting	\$10,000	\$0	0%	-\$10,000	Catering, Venue, other expenses.
	Pardee	\$6,000	\$0	0%	-\$6,000	Catering, Venue, other expenses
	Misc. Meetings	\$5,000	\$0	0%	-\$5,000	Holiday Lunch, Committee Chair Lunch, Staff Mtgs, Finance Comm, Summit Partners, CASA, NACWA, Toxicity WS
	Total	\$23,500	\$119	1%	-\$23,381	
Communication						
	Website Hosting (Computer Courage)	\$600	\$600	100%	\$0	
	File Storage (Box.net)	\$750	\$0	0%	-\$750	
	Website Development/Maintenance	\$1,200	\$0	0%	-\$1,200	Domains, website changes
	IT Support (As Needed)	\$2,600	\$0	0%	-\$2,600	
	Other Communication (MS, SM & Code42)	\$1,100	\$74	7%	-\$1,026	MS Exchange, Survey Monkey, CrashPlanPro (2)
	Total	\$6,250	\$674	11%	-\$5,576	

**FY 2018
BACWA BUDGET**

EXPENSES						
Legal						
	Regulatory Support	\$2,550	\$0	0%	-\$2,550	2% increase.
	Executive Board Support	\$2,050	\$0	0%	-\$2,050	2% increase.
	Total	\$4,600	\$0	0%	-\$4,600	
Committees						
	AIR	\$50,000	\$2,503	5%	-\$47,497	FY18: Agrmt with Carollo for \$50,000. RPM lunches will also be included, but not in budget.
	BAPPG	\$100,000	\$18,928	19%	-\$81,072	FY18: Includes CPSC @ \$10,000 and Pest. Reg Spt. @ \$15,000
	Biosolids Committee	\$3,100	\$0	0%	-\$3,100	Includes WEF Conf
	Collections System	\$1,000	\$0	0%	-\$1,000	
	InfoShare Groups	\$1,200	\$140	12%	-\$1,060	Funds for 2 workgroups (Asset Mgmt & O&M)
	Laboratory Committee	\$6,000	\$0	0%	-\$6,000	Includes Tech Conf & Training
	Permit Committee	\$1,000	\$0	0%	-\$1,000	
	Pretreatment	\$7,000	\$0	0%	-\$7,000	Includes Training & Factsheet
	Recycled Water Committee	\$1,000	\$0	0%	-\$1,000	
	Misc Committee Support	\$35,000	\$575	2%	-\$34,425	Carollo Rule 11-18
	Manager's Roundtable	\$1,000	\$0	\$0	-\$1,000	New line item in FY18
	Total	\$206,300	\$22,146	11%	-\$184,154	
Collaboratives						
	Collaboratives					
	State of the Estuary (biennial)	\$0	\$0		\$0	Biennial in Odd Years. (Paid biennially in odd years for even year conference)
	Arleen Navarret Award	\$1,000	\$0		-\$1,000	Biennial in Even Years
	FWQC (Fred Andes)	\$7,500	\$0	0%	-\$7,500	
	Stanford ERC (ReNUWit)	\$10,000	\$0	0%	-\$10,000	
	CWCCG	\$0	\$0		\$0	
	Misc	\$3,000	\$0	0%	-\$3,000	FY18: Includes \$5,000 to PPIC approved by Board Sept, 2017
	Total	\$21,500	\$0	0%	-\$21,500	
Other	Unbudgeted Items					
	Passthrough	\$0	\$11,550		-\$11,550	Passthrough for Pharm Study; bal at end of FY17: \$23,100
	Other	\$0	\$0		\$0	Misc Expense Items Not Budgeted
		\$0	\$11,550		\$0	
Tech Support	Technical Support					
	Nutrients					
	Watershed	\$880,000	\$0	0%	-\$880,000	
	NMS Voluntary Contributions	\$0	\$0		\$0	FY18: \$200,000 add'l funds approved by Board August 2017
	Additional work under permit	\$100,000	\$0	0%	-\$100,000	FY18: Increased at Board's request
	Opt/Upgrade/Annual Reporting Studies	\$372,298	\$0	0%	-\$372,298	FY18: Balance remaining on agreement at end of FY16 less FY17 budgeted amount
	Nutrient Program Coordination	\$50,000	\$0	0%	-\$50,000	
	Voluntary Nutrient Contributions	\$30,000	\$0	0%	-\$30,000	FY18: Palo Alto (\$30k)
	General Tech Support	\$50,000	\$0	0%	-\$50,000	
	Risk Reduction	\$0	\$0		\$0	FY18: CIEA extended to 9/30/17 - \$9,853.69 remaining at 7/1/17
	Total	\$1,482,298	\$0	0%	-\$1,482,298	
	TOTAL EXPENSES	\$2,203,159	\$62,554	3%	-\$2,140,605	
	NET INCOME BEFORE TRANSFERS	\$2,310	-\$56,766			
	TRANSFERS FROM RESERVES	\$0				
	NET INCOME AFTER TRANSFERS	\$2,310				

CHECK ON BACWA LIQUIDITY THRESHHOLD

	FY18												FY19	BUDGET
	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Totals FY 18</u>
BEGINNING UNOBLIGATED FUND BALANCE	\$2,945,799	\$2,852,202	\$3,309,972	\$2,687,743	\$3,145,513	\$3,603,283	\$3,509,686	\$3,416,089	\$3,322,492	\$3,228,895	\$3,135,298	\$3,041,701	\$2,948,104	
Average Monthly Revenues	\$0	\$551,367	\$551,367	\$551,367	\$551,367	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,205,469
Average Monthly Expenditures (Less Large one time Expenses)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	(\$93,597)	\$1,123,159
Less Large Expenditures	\$0	\$0	(\$1,080,000)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
NET AVAILABLE FOR INVESTMENT	\$2,852,202	\$3,309,972	\$2,687,743	\$3,145,513	\$3,603,283	\$3,509,686	\$3,416,089	\$3,322,492	\$3,228,895	\$3,135,298	\$3,041,701	\$2,948,104	\$2,854,507	
NEW INVESTMENTS														
Higher Yield (non-liquid)	(\$905,000)	(\$605,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	(\$905,000)	
MATURITIES/Called														
Higher Yield (non-liquid)	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
AVAILABLE LIQUID FUNDS	\$1,947,202	\$3,004,972	\$1,782,743	\$2,240,513	\$2,698,283	\$2,604,686	\$2,511,089	\$2,417,492	\$2,323,895	\$2,230,298	\$2,136,701	\$2,043,104	\$1,949,507	
TARGET AVAILABLE LIQUID FUNDS	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	\$1,500,000 ok	

BACWA Fund Report as of July 31, 2017

BACWA FUND BALANCES - DATA PROVIDED BY ACCOUNTING DEPT.							
DEPTID	DESCRIPTION	FISCAL YEAR BEGINNING FUND BALANCE	TOTAL RECEIPTS TO-DATE	TOTAL DISBURSEMENTS TO-DATE	MONTH-ENDING FUND BALANCE	OUTSTANDING ENCUMBRANCES	MONTH-END UNOBLIGATED FUND BALANCE
800	BACWA	1,140,008	2,952	62,554	1,080,406	492,780	587,626
804	LEGAL RSRV	300,000	-	-	300,000	-	300,000
805	CBC	1,505,790	2,836	-	1,508,626	(2,034)	1,510,660
802	AIR	-	-	-	-	-	-
	SUBTOTAL 1	2,945,799	5,788	62,554	2,889,032	490,746	2,398,286
810	WOT	109,916	-	-	109,916	-	109,916
	SUBTOTAL 2	109,916	-	-	109,916	-	109,916
811	PRP84	117,907	-	-	117,907	-	117,907
	SUBTOTAL 3	117,907	-	-	117,907	-	117,907
	GRAND TOTAL	3,173,622	5,788	62,554	3,116,855	490,746	2,626,109

Top Chart: Reflects CASH on the Books Includes Encumbrances
Bottom Chart: Reflects CASH in the Bank Includes Payables (bills received but not paid)
Allocations: Priority for non-liquid investments

BACWA INVESTMENTS BALANCES - DATA PROVIDED BY TREASURY DEPT.														
DEPTID	DESCRIPTION	FISCAL YEAR BEGINNING FUND BALANCE	TOTAL RECEIPTS TO-DATE	TOTAL DISBURSEMENTS TO-DATE	MONTH-ENDING FUND BALANCE	RECONCILIATION TO FINANCIAL STATEMENTS	MONTH-END RECONCILED FUND BALANCE	UNINVESTED CASH BALANCES	LAIF INVESTMENTS AMOUNTS	LAIF INVESTMENTS PERCENTAGE	ALTERNATIVE INVESTMENTS AMOUNTS	ALTERNATIVE INVESTMENTS IDENTIFIERS	ALTERNATIVE INVESTMENT INSTRUCTIONS AND NOTES	
800	BACWA	1,140,008	2,952	62,554	1,080,406	62,610	1,143,016	-	1,143,016	51%	-	n/a	priority # 3 for allocation	
804	LEGAL RSRV	300,000	-	-	300,000	-	300,000	-	-	0%	300,000	AR5	priority # 1 for allocation	
805	CBC	1,505,790	2,836	-	1,508,626	-	1,508,626	-	903,626	40%	605,000	6F5,G64,PS5	priority # 2 for allocation	
802	AIR	-	-	-	-	-	-	-	-	0%	-	n/a	This fund is gone	
	SUBTOTAL 1	2,945,799	5,788	62,554	2,889,032	62,610	2,951,642	-	2,046,642	90%	905,000			
810	WOT	109,916	-	-	109,916	-	109,916	109,916	-	0%	-		pass-through funds, no allocation	
	SUBTOTAL 2	109,916	-	-	109,916	-	109,916	109,916	-	0%	-			
811	PRP84	117,907	-	-	117,907	-	117,907	117,907	-	0%	-		pass-through funds, no allocation	
815	PRP50	-	-	-	-	-	-	-	-	0%	-		pass-through funds, no allocation	
	SUBTOTAL 3	117,907	-	-	117,907	-	117,907	117,907	-	0%	-			
	GRAND TOTAL	3,173,622	5,788	62,554	3,116,855	62,610	3,179,465	227,823	2,262,600		905,000			

verification (215,958) - 215,958
To be used to cover Reconciliation to Financial Statements (\$215,958)

Reconciliation to Trial Balance - accrual basis

Per Report above:

General	5,788
WOT	-
PROP	-
subtotal	5,788

Billings-Pending Receipts

4686	Mem Contrib	949,095
4687	Transfer	-
4690	Assoc Contrib	-
4696	Other	533,335
4731	State Grant	-
4732	Grant Retention	-
subtotal		1,482,430

Trial Balance Revenue Accounts

4411	Interest	(5,788)
4686	Mem Contrib	(949,095)
4687	Transfer	
4690	Assoc Contrib	
4696	Other	(533,335)
4731	State Grant	
4732	Grant Retention	
subtotal		<u>(1,488,218)</u>
Difference		0

Estimated Figures - We don't have July 2018 Financial Statements yet to verify the balances

BACWA Revenue Report as of July 31, 2017

FUND #	DEPARTMENT	JOB	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
					Admin & General	Contributons	Interest, Transfers, Others	Admin & General	Contributons	Interest, Transfers, Others	ACTUAL	
800	BACWA	1011099	Principal's Contributions	487,095	-	-	-	-	-	-	-	487,095
800	BACWA	1011133	Assoc.& Affiliate Contr	178,573	-	-	-	-	-	-	-	178,573
800	BACWA	0408511	Administrative & General	-	-	-	-	-	-	-	-	-
800	BACWA	1014251	Non-Member Contributions (BAPPG)	3,774	-	-	-	-	-	-	-	3,774
800	BACWA	1011109	Fund Transfers	2,550	-	-	-	-	-	-	-	2,550
800	BACWA	1011117	BDO- Interest Income from LAIF	12,000	-	-	2,952	-	-	2,952	2,952	9,048
800	BACWA	1011108	BDO Other Receipts	-	-	-	-	-	-	-	-	-
800	BACWA	1014252	BDO Non-Member Contr AIR	6,477	-	-	-	-	-	-	-	6,477
800	BACWA	1014511	BDO-Alternative Investment Inc	10,000	-	-	-	-	-	-	-	10,000
800	BACWA	1014550	BDO-Other Receipts (PHARM)	-	-	-	-	-	-	-	-	-
BACWA TOTAL				700,469	-	-	2,952	-	-	2,951	2,952	697,517
802	LEGAL	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	-	-	-
LEGAL TOTAL				-	-	-	-	-	-	-	-	-
805	WQA-CBC	1011099	BDO Member Contributions	675,000	-	-	-	-	-	-	-	675,000
805	WQA-CBC	1011108	BDO Other Receipts	800,000	-	-	-	-	-	-	-	800,000
805	WQA-CBC	1011117	BDO- Interest Income from LAIF	-	-	-	2,836	-	-	2,836	2,836	(2,836)
805	WQA-CBC	1014511	BDO-Alternative Investment Inc	-	-	-	-	-	-	-	-	-
805	WQA-CBC	1014528	BDO-Voluntary Nutrient Contrib	30,000	-	-	-	-	-	-	-	30,000
WQA CBC TOTAL				1,505,000	-	-	2,836	-	-	2,837	2,837	1,502,163
TOTAL				2,205,469	-	-	5,788	-	-	5,788	5,788	2,199,681

	DEPARTMENT	JOB	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
					Admin & General	Contributons	Interest, Transfers, Others	Admin & General	Contributons	Interest, Transfers, Others	ACTUAL	
810	WOT	1011099	BDO Member Contributions	-	-	-	-	-	-	-	-	-
810	WOT	1011108	BDO Other Receipts	-	-	-	-	-	-	-	-	-
810	WOT	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	-	-	-
WOT TOTAL				-	-	-	-	-	-	-	-	-

	DEPARTMENT	JOB	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
					Admin & General	Contributons	Interest, Transfers, Others	Admin & General	Contributons	Interest, Transfers, Others	ACTUAL	
811	PROP 84			-	-	-	-	-	-	-	-	-
PROP TOTAL				-	-	-	-	-	-	-	-	-

Grand Total				2,205,469	-	-	5,788	-	-	5,788	5,788	2,199,681
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BACWA Expense Detail Report as of July 31, 2017

EXPENSE TYPE	JOB	AMENDED BUDGET	CURRENT PERIOD				YEAR TO DATE				OBLIGATED	UNOBLIGATED
			ENC	PV	DA	JV	ENC	PV	DA	JV		
LABOR												
AS-Executive Director	1011123	195,998	179,665	16,333	-	-	179,665	16,333	-	-	195,998	-
AS-Assistant Executive Directo	1011124	87,975	79,559	8,416	-	-	79,559	8,416	-	-	87,975	-
AS-Regulatory Program Manager	1011149	116,438	108,846	7,592	-	-	108,846	7,592	-	-	116,438	-
ADMINISTRATION												
AS-EBMUD Financial Services	1011125	40,000	40,000	-	-	-	40,000	-	-	-	40,000	-
AS-Audit Services	1014512	6,300	6,300	1,842	-	(6,200)	6,300	1,842	-	(6,200)	1,942	4,358
AS-BACWA Admin Expense	1011118	7,500	-	-	82	-	-	-	82	-	82	7,418
AS-Insurance	1011126	4,500	-	-	-	-	-	-	-	-	-	4,500
MEETINGS												
GBS-Meeting Support-Exec Bd	1014513	2,500	881	119	-	-	881	119	-	-	1,000	1,500
GBS-Meeting Support-Annual	1014514	10,000	-	-	-	-	-	-	-	-	-	10,000
GBS-Meeting Support-Pardee	1014515	6,000	-	-	-	-	-	-	-	-	-	6,000
GBS-Meeting Support-Misc	1014516	5,000	-	-	-	-	-	-	-	-	-	5,000
GBS- Meeting Support	1011122	-	-	-	-	-	-	-	-	-	-	-
COMMUNICATION												
CAR-BACWA Website Hosting	1014517	750	-	-	600	-	-	-	600	-	600	150
CAR-BACWA File Storage	1014518	1,200	-	-	-	-	-	-	-	-	-	1,200
CAR-BACWA IT Support	1014519	2,600	2,600	-	-	-	2,600	-	-	-	2,600	-
CAR-BACWA IT Software	1014520	1,100	-	-	74	-	-	-	74	-	74	1,026
CAR-BACWA Website Dev/Maint	1011116	600	-	-	-	-	-	-	-	-	-	600
LEGAL												
LS-Regulatory Support	1011107	2,550	2,550	-	-	-	2,550	-	-	-	2,550	-
LS-Executive Board Support	1011110	2,050	2,050	-	-	-	2,050	-	-	-	2,050	-
COMMITTEES												
AIR-Air Issues&Regulation Grp	1014253	50,000	47,498	2,503	-	-	47,498	2,503	-	-	50,000	-
BC-BAPPG	1011147	100,000	67,777	8,224	10,705	-	67,777	8,224	10,705	-	86,705	13,295
BC-Biosolids Committee	1011101	3,100	-	-	-	-	-	-	-	-	-	3,100
BC-Collections System	1011097	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-InfoShare Groups	1011102	1,200	-	-	140	-	-	-	140	-	140	1,060
BC-Laboratory Committee	1011103	6,000	-	-	-	-	-	-	-	-	-	6,000
BC-Permit Committee	1011098	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-Pretreatment Committee	1011146	7,000	-	-	-	-	-	-	-	-	-	7,000
BC-Water Recycling Committee	1011100	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-Manager's Roundtable	1014111	1,000	-	-	-	-	-	-	-	-	-	1,000
BC-Miscellaneous Committee Sup	1011104	35,000	7,407	575	-	-	7,407	575	-	-	7,982	27,018
COLLABORATIVES												
CAS-Arleen Navaret Award	1012201	1,000	-	-	-	-	-	-	-	-	-	1,000
CAS-FWQC	1012202	7,500	-	-	-	-	-	-	-	-	-	7,500
CAS-Stanford ERC	1011969	10,000	-	-	-	-	-	-	-	-	-	10,000
CAS-CWCCG	1011148	-	-	-	-	-	-	-	-	-	-	-
CAS-PSSEP	1011112	-	-	-	-	-	-	-	-	-	-	-
CAS-Misc Collaborative Sup	1014521	3,000	-	-	-	-	-	-	-	-	-	3,000
BDO-Contract Expenses (PHARM)												
BDO-Contract Expenses (PHARM)	1014551	-	11,550	11,550	-	-	11,550	11,550	-	-	23,100	(23,100)
BACWA TOTAL		720,861	556,682	57,153	11,601	(6,200)	556,682	57,153	11,601	(6,200)	619,236	101,625
TECH SUPPORT												
WQA-CE Addl Work Under Permit	1014254	100,000	57,000	-	-	-	57,000	-	-	-	57,000	43,000
WQA-CE-Technical Support	1011127	50,000	-	-	-	-	-	-	-	-	-	50,000
WQA-CE CASA Chem of Concern	1011128	-	-	-	-	-	-	-	-	-	-	-
WQA-CE Opt-Upgrade Studies	1014255	372,298	114,856	-	-	-	114,856	-	-	-	114,856	257,442
WQA-CE Risk Reduction	1014023	-	9,854	-	-	-	9,854	-	-	-	9,854	(9,854)
WQA-CE-Nutrient WS Permit Comm	1014021	880,000	-	-	-	-	-	-	-	-	-	880,000
WQA-CE-Program Mgmt	1011131	50,000	-	-	-	-	-	-	-	-	-	50,000
WQA-CE Voluntary Nutr Contrib	1014529	30,000	-	-	-	-	-	-	-	-	-	30,000
TECH SUPPORT (CBC) TOTAL		1,482,298	181,710	-	-	-	181,710	-	-	-	181,710	1,300,588
GRAND TOTAL		2,203,159	738,391	57,153	11,601	(6,200)	738,391	57,153	11,601	(6,200)	800,946	1,402,213
							TOTAL	62,554				
WOT												
Administrative Support	1011142	-	-	-	-	-	-	-	-	-	-	-
BDO Contract Expenses	1011143	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-
Page 16 of 51												
GRAND TOTAL (BDO, CBC, WOT)		2,203,159	738,391	57,153	11,601	(6,200)	738,391	57,153	11,601	(6,200)	800,946	1,402,213

Proposition Revenue Report as of July 31, 2017

DEPTID	DEPARTMENT	JOB	REVENUE TYPE	AMENDED BUDGET	CURRENT PERIOD			YEAR TO DATE				UNOBLIGATED
					Admin & General	Contributons	Interest, Transfers, Others	Admin & General	Contributons	Interest, Transfers, Others	ACTUAL	
811	Prop84BayAreaIntegRegnlWtrMgmt	1011117	BDO- Interest Income from LAIF	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1011142	Administrative Support	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1011691	Water Efficient Landscape Reba	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1011705	Regional Green Infrastructure	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012209	Water Efficient LRP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012210	Bay Friendly Landscape TP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012211	Weather Based Irrigation Cntrl	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012212	High Efficiency Toilet & UR	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012213	High Efficiency Toilet & UI	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012214	High Efficiency Clothes Washrs	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012215	Napa Co. Rainwater HP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012216	Conservation Program Admin	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012219	Flood Infrastructure Mapping T	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012220	Stormwater Improvements & PBP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012221	Richmond Shoreline & San PFP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012222	Pescadero Integrated FRAH	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012223	Restoration Guidance, San FC	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012224	SF Estuary Steelhead MP	-	-	-	-	-	-	-	-	-
811	Prop84BayAreaIntegRegnlWtrMgmt	1012225	Watershed Program Admnstrtn	-	-	-	-	-	-	-	-	-
PROP 84 TOTAL				-	-	-	-	-	-	-	-	-

Proposition Expense Detail Report as of July 31, 2017

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



EXECUTIVE DIRECTOR AUTHORIZATION

FILE NO.: 18-21

DATE: Sept. 11, 2017

TITLE: Executive Director Authorization for Agreement with Computer Courage for updates to the Baywise website in FY18.

RECOMMENDED ACTION

BACWA Executive Director authorization for an agreement with Computer Courage, in an amount not to exceed \$1,400.00, to provide as needed updates to the Baywise website for the period of July 1, 2017 – June 30, 2018.

SUMMARY

The BAPPG web site requires periodic maintenance and enhancements in order to stay current. The BAPPG approved FY 18 budget includes funds for web site updates. This authorization will utilize BAPPG budgeted funds for FY 18 to make as-requested enhancements to the BAPPG web site. BAPPG has budgeted \$1400 in FY 18 for web site work. This not to exceed \$1,400 authorization will allow as-needed services as requested by BAPPG.

FISCAL IMPACT

There is no impact to the BACWA Budget. The funds are available within the BAPPG portion of the BACWA FY18 Budget and will be funded by the BAPPG line item in the approved FY18 BACWA budget.

ALTERNATIVES

- Do not complete this work – this is not recommended as there are needed changes to the website.
- Select another consultant to conduct the work – this is not recommended since Computer Courage developed and hosts the Baywise website.

Attachments:

1. Computer Courage Agreement

Approved:

David R. Williams

David R. Williams,
BACWA Executive Director



Award Winning Custom Web Development

Project proposal: Computer Courage Hourly Website Development
for Baywise.org

Client: BACWA

Delivered on: September 11, 2017

Submitted by: Web Team

Budget and Billing Model

At Computer Courage, we bill on at Time and Materials basis. We work carefully to provide estimates for work and stick to project or task scope and budget. Additional details can be found in the Fine Print section of this proposal.

We perform our work at an hourly rate of \$150, with a 10% discount for nonprofits. Work on the Baywise.org website will be billed at \$135/hour. We bill in one minute increments.

Description	Price
Ongoing Hourly Support for Baywise.org at \$135/hour As needed for FY18, not to exceed \$1,400	\$1,400
Total	\$1,400

The Fine Print

Our Time & Materials Budget Model

We charge on a time & materials basis, at the rate specified in the Budget section of this proposal. We charge a single rate for all labor performed on your project, including but not limited to design, development, project management, client meetings, testing, consulting, and launch.

We pride ourselves in making extremely careful preparations to build realistic cost estimates that factor in all of the complexities of a true project. We use a careful process and powerful tools to track and report hours usage during the project itself to keep in line with our estimates. We provide written notification of requests that reasonably appear to change project estimates. We work with our clients and their budget estimate to carefully manage a project toward its estimated budget, providing warning if the actual project work, complexity, requests, revisions, or details may impact the budget. Together, we share a responsibility for managing the time spent on the project and meeting the initial goals. This model has proven to be the most successful model for our clients and for us.

Computer Courage will send monthly invoices which BACWA agrees to pay within the 30 day payment term. If an invoice is not paid by the due date, the project will pause until the invoice is paid, affecting timeline.

Plugin Licensing Usage

We offer use of our developer licenses of Gravity Forms and Advanced Custom Fields plugins. The client is responsible for purchasing any other paid plugins or services they wish to use on the site.

Computer Courage Website and Tagline

Computer Courage reserves the right to use the client's name, site description, and link on our online portfolio, and to place our linked tagline on the client's site unless client requests otherwise in writing,

Managed WordPress Hosting

Managed WordPress Hosting is supplied in coordination with a carefully selected partner. Our hosting clients are subject to the Terms of Service and Privacy Policy of the partner, which can be found here: <http://goo.gl/61B3c>. Computer Courage's ability to provide uptime, performance, security, and backup restores is limited by the performance of the partner.

3 Party Solution Limitations and Open Source Licensing

Solutions are based on the implementation of some 3 party solutions, including WordPress and plugins. Client acknowledges that the software deliverable may contain open source software licensed by various open source platforms, and client agrees that client's use and ownership of the materials may be subject to all applicable third party open source and end user software licenses, including but not limited to General Public License (GPL) v3.0 available at www.gnu.org.

Customer Content

Computer Courage does not claim any ownership rights in the client's content that you provide to us in connection with our hosting service. However, to provide the service, we need you to grant us a right to use the Customer Content. As such, you hereby grants to us, our affiliates, providers of Third Party Services, and subcontractors a non-exclusive, fully-paid, perpetual, royalty-free, transferable, revocable, worldwide license to use, modify, publicly perform, publicly display, reproduce, and distribute the Customer Content (in whole or in part) but only to the extent necessary to provide the service.

Payment, Terms, Cancellation

We offer annual (\$600/year/site) or monthly (\$50/month/site) billing cycles, with the option for automatic credit card payment. Hosting for each month must be paid in advance. Either party can cancel any time with a 30 day written notice. In the case of nonpayment by the client, Computer Courage offers a 30 day grace period with written warning. After 30 days, Computer Courage reserves the right to disable the hosting and/or remove the site from our servers. We will provide a full backup of the site in the case of cancellation.

Managed WordPress Hosting Hosting Partner

Managed WordPress Hosting is supplied in coordination with a carefully selected partner, WP Engine. Every hosting client is subject to the Terms of Service and Privacy Policy of the partner, which can be found here: <http://goo.gl/61B3c>. Computer Courage's ability to provide uptime, performance, security, and backup restores may be limited by the performance of the partner.

DNS Hosting Partner

We offer DNS services at no extra charge in coordination with a carefully selected partner, DNS Made Easy. Every hosting client who uses our DNS service is subject to the Policies and Terms of Service of the partner, which can be found at <https://goo.gl/gVQnYw>. Computer Courage's ability to provide uptime, performance, security, and backup restores may be limited by the performance of the partner.

Security

We will maintain reasonable administrative, physical and technical safeguards designed to help ensure the security of our internal networks from malicious activity and to provide for the privacy, confidentiality, and integrity thereof. However, security is a shared responsibility. You agree to use the hosting service in such a way as to maintain the security of our services and network (e.g. by only uploading software that has been demonstrated to be secure and not sharing passwords).

Should we determine that there has been a security breach that has compromised your account we agree to notify you as soon as reasonably possible but only after we have investigated the breach and fulfilled our legal obligations under applicable law. You agree to the same notification obligations should you determine that there has been a breach.

Definition of Hosting Support

We offer "hosting support" included in this agreement at no extra charge. Hosting support is defined as labor spent managing the service, performing maintenance on the servers, answering questions about the hosting, responding to outages, and performing updates to WordPress and plugins. All other labor, including (but not limited to) programming, WordPress consulting, design, website changes, project management, site enhancements, security enhancements, and content edits is considered billable labor and is excluded from this agreement and charged at our normal hourly rates.

Disclaimer, Limitation of Liability, Indemnification

All services provided by Computer Courage under this agreement are provided on an "as is" basis without warranty of any kind and Computer Courage makes no warranties or conditions of any kind, express, implied or statutory, related to or arising in any way out of the services. Computer Courage specifically disclaims any implied warranty of merchantability, non-infringement or fitness for a particular purpose. In no event shall Computer Courage be liable for indirect, consequential, incidental, punitive, or special damages (including, but not limited to, damages for loss of business profits, business interruption, delays, loss of DATA and the like) arising out of the use, or the inability to use, or any defects in equipment, systems OR services pursuant to this agreement, regardless of whether such liability is based on breach of contract, tort, failure of essential purpose or otherwise and even if Computer Courage has been advised of the possibility of such damages.

WITHOUT LIMITING THE ABOVE, COMPUTER COURAGE'S TOTAL CUMULATIVE LIABILITY UNDER THIS AGREEMENT OR ARISING FROM THE SERVICES SHALL NOT EXCEED THE GREATER OF: (I) THE TOTAL AMOUNT OF FEES ACTUALLY PAID TO COMPUTER COURAGE BY CLIENT UNDER THIS AGREEMENT DURING THE 12 MONTHS PRECEDING ANY CLAIM OR (II) THE TOTAL AMOUNT OF COMPUTER COURAGE, INC.'S APPLICABLE INSURANCE COVERAGE. "COMPUTER COURAGE" INCLUDES COMPUTER COURAGE, INC., ITS AFFILIATES, SUBCONTRACTORS, AND THEIR RESPECTIVE PARTNERS, OFFICERS, DIRECTORS, SHAREHOLDERS, OWNERS, AGENTS AND EMPLOYEES.

You agree to indemnify, defend and hold harmless Computer Courage, our affiliates, and their respective officers, directors, employees and agents (each an "Indemnified Party" and, collectively, the "Indemnified Parties") from and against any and all claims, damages, losses, liabilities, suits, actions, demands, proceedings (whether legal or administrative), and expenses (including, but not limited to, reasonable attorney's fees) threatened, asserted, or filed by a third party against any of the Indemnified Parties arising out of or relating to (i) your use of the services, (ii) any breach or violation by you of this agreement; or (iii) any acts or omissions by you. The terms of this section shall survive any termination of this Agreement.



Why Us?

Computer Courage is an award winning web development firm headquartered in Berkeley, CA. Since 2006 Computer Courage has partnered with growing businesses, nonprofits, and educational institutions to build customized, easy to manage web solutions. Our team consists of programmers, designers, technicians, project managers and support staff.

At Computer Courage we design beautiful, compelling, and functional websites that make it easy for visitors to easily find what they're looking for and quickly convert into paying customers. Our approach centers on creating a mindful and goal-oriented website visitor experience.

We do this by listening to you, understanding your target audience, and putting our extensive online knowledge to work on a plan that will improve your business goals and change the way you think about the potential of the internet.

NEXT STEPS

1. Please read the contract on the previous page to make sure you understand all the details involved with us working together. It's really important to us that everything is transparent and understood from the beginning so that we lay a solid foundation for a great working relationship.
2. If you have any questions at all, please let us know. We're happy to clarify any points and there may be some items that we can sort out together. We're committed to finding the best way to work together.
3. Once you feel confident about everything and are ready to move forward, please click the 'sign here' button below.
4. Sign in the box that pops up to make the acceptance official.
5. Once we receive notification of your acceptance, we'll contact you shortly to sort out next steps and get the project rolling.
6. We'll email you a separate copy of the signed contract for your records.
7. If you'd like to speak to us by phone, don't hesitate to call 510-525-2226

Adam Schwartz

David R. Williams
BACWA



BACWA BOARD AUTHORIZATION REQUEST

AGENDA NO.: 4

FILE NO.: 18-22

MEETING DATE: Sept 15, 2017

TITLE: BACWA Support of Public Policy Institute of California

RECEIPT

DISCUSSION

RESOLUTION

X APPROVAL

RECOMMENDED ACTION

Approve support in FY18 for the Public Policy Institute of California in the amount of \$5,000.

SUMMARY

BACWA received a letter from PPIC requesting support of their upcoming research project: *Protecting Water Quality with a Changing Climate*. The Board suggested approval of \$5,000 in support in FY18 and a desire to have BACWA's input considered as the research is being conducted.

The PPIC budget for the project is approximately \$200k. They have established a sponsorship level of contribution at \$15k. As a sponsor, an organization would be name in the report. At a \$5k level of funding, BACWA would be considered an event supported. Following the completion of the project, public outreach would be conducted by PPIC and at these public outreach events, BACWA would be mentioned as sponsoring the outreach event. Other supporters of the research include CASA at \$25k and EPA as part of a larger \$1M grant to PPIC.

PPIC indicated that they would welcome BACWA's input at various stages of the research project. One of the first chances for input would be in reviewing a survey that will be sent to wastewater agency managers regarding the impacts of the drought and climate change on their organizations. Other opportunities for input will be available as the research progresses.

FISCAL IMPACT

\$3,000 in Funds are available for this type of contribution in the BACWA Budget under Miscellaneous Collaborative Support. Contributing \$5k would result in that line item being over expended by \$2k in FY18.

ALTERNATIVES

No consideration of alternatives is required.

Attachments:

1. PPIC Request Letter
2. Copy of Minutes regarding this issue from August 18, 2017 BACWA Executive Board Meeting.

Approved:

Date:

Jim Ervin, BACWA Chair

June 8, 2017

Dave Williams
Executive Director
Bay Area Clean Water Agencies (BACWA)
PO Box 24055, MS 59
Oakland, CA 94623

Dear Dave,

At the suggestion of CASA Executive Director Bobbi Larson, I am pleased to provide this letter describing the Public Policy Institute of California's (PPIC) upcoming research project: ***Protecting Water Quality with a Changing Climate***. I hope that you will join CASA and others in the wastewater community in supporting this project, which will add to the ongoing conversation regarding preparing California for future climate variability.

Led by PPIC's Water Policy Center—with support from Jim Cloern (USGS), Jay Lund (UC Davis), Kurt Schwabe (UC Riverside), and Leon Szeptycki (Stanford)—the research project will begin in summer 2017. Building on lessons learned from the latest California drought, including a similar study recently conducted by PPIC on urban water suppliers, the project team will survey California's wastewater agencies to learn about institutional responses to drought and how agencies are preparing for anticipated future challenges.

Small workshops held in different regions will help the team gather feedback from local managers and stakeholders to hone the assessment and further explore survey responses. A qualitative assessment of local and state policies, planning, and impacts will be complemented by various quantitative analyses, such as data on influent and effluent flow rates and concentrations from treatment plants throughout the state during the latest drought. Flow rates and concentrations will be linked to conservation actions by retail water agencies to highlight the linkages and potential impacts of water conservation programs on treatment plants and their discharges. In addition, the impacts of drought and water conservation on recycled water use and the associated financial impacts arising from operational adjustments will be analyzed.

Findings will be summarized in a short, accessible report to be released in summer 2018. An accompanying communications strategy will help maximize the publication's impact on policymakers and the broader public discourse on California's water issues. Total project costs are estimated at roughly \$250,000 and we are actively seeking external funding from a range of partners to supplement support from the US EPA and demonstrate the broad appeal of this work.

Thank you for the opportunity to share this brief project description with you and for your Board's consideration of project support. Please feel free to contact me at (415) 291-4433 or hanak@ppic.org if you or your Board members have any questions.

Sincerely,



Ellen Hanak
PPIC Water Policy Center Director and Senior Fellow

From August 18, 2017 BACWA Executive Board Meeting Minutes:

Agenda **Item 9** – Discussion: Public Policy Institute of California Project Support – This discussion was carried forward from the last meeting. A letter from the Public Policy Institute of California requesting project support for their research project *Protecting Water Quality with a Changing Climate* was included in the Packet. The Executive Director gave an overview and requested input from the Board. The Board members agreed that BACWA would provide \$5,000 to the PPIC in FY18 in exchange for a seat at the table on the direction of the research project.



BACWA EXECUTIVE BOARD ACTION REQUEST

AGENDA NO.: 5

FILE NO.: 18-23

MEETING DATE: September 15, 2017

TITLE: Approve Amended Scope and Budget - Estimate the Economic Impact of the Proposed Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 18 (Rule 11-18) on BACWA Members

☐ RECEIPT

☐ DISCUSSION

☐ RESOLUTION

☒ APPROVAL

RECOMMENDED ACTION

Authorize amended scope and budget to provide support for BACWA's response to proposed BAAQMD Rule 11-18.

SUMMARY

The Draft Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Draft Rule, Rule 11-18) is the Bay Area Air Quality Management District's (BAAQMD's) effort to protect public health from toxic air pollution from existing facilities. The Draft Rule will affect publicly owned treatment works (POTWs), as well as hundreds of other facilities with air permits through the Bay Area. On February 17, 2017, BACWA executed a contract with Carollo Engineers to look at the cost impacts of the Rule on BACWA member agencies.

Since the execution of the original contract, the focus for this work has changed following several meetings with BAAQMD staff. The first contract was amended on April 18, 2017, with no change in budget, to shift the focus of the work from diesel particulate matter, which was assumed to be the focus of the Rule for POTWs, to updating emissions factors for eleven of the largest POTWs. Since then, BAAQMD has requested proximity data for all POTWs in the Region, as well as more recent and detailed emissions information for eleven of the largest POTWs. Because of this change in number of POTWs and information needed for each POTW, the effort has exceeded what was originally budgeted. The amended scope and budget are intended to allow the consultant to continue the work associated with 11-18, informing BACWA members of its impact, and delivering information requested by BAAQMD staff.

Although this amendment does not conform to the Board policy of not increasing contracts by more than 25% of the original contract amount, staff believes that given the changing nature of this work as more information is received, the need to revised the original scope plus add some additional scope of work items and the fact that the consultant team is up to speed and has already completed some of the work in the original contract, warrants moving forward with an amendment to the original contract versus entering into an entirely new agreement.

FISCAL IMPACT

This amendment will utilize \$20,624 in funds from the approved budget line item for Miscellaneous Committee Support.

ALTERNATIVES

1. Do not approve amended scope and budget – This alternative is not recommended because it will result in not meeting BACWA’s commitment to provide BAAQMD staff with information to help inform Rule 11-18 implementation.
2. Hire another consultant to do this work – This alternative is not recommended since the consultant team has already undergone a competitive selection process to provide support to BACWA’s AIR committee, and this contract is included as a non-budgeted item in their scope of work.

Attachments:

SOW

Budget

Carollo Agreement

Approved:

Date:

James Ervin, Chair
BACWA



September 13, 2017

Mr. David Williams
Executive Director
Bay Area Clean Water Agencies (BACWA)
P.O. Box 24055, MS 59
Oakland, CA 94623

Subject: Amendment to the original scope and budget for completion of the Estimate the Economic Impact of the Proposed Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 18 (Rule 11-18) on BACWA Members

Dear Mr. Williams:

Thank you for requesting our revised proposal to estimate the economic impact of the proposed BAAQMD Rule 11-18 on BACWA members. We are submitting the following revised proposed scope of services and budget based on direction provided by the BACWA Executive Board, as well as information received from BAAQMD staff during meetings held March through August to discuss how BACWA can work in conjunction with BAAQMD staff to update draft prioritization scores and estimate the economic impact on publicly owned (wastewater) treatment works (POTW) rate payers subject to the Rule.

SCOPE OF SERVICES

In order to provide accurate model inputs for BAAQMD staff to develop Health Risk Assessments, as well as to estimate the economic impact of the proposed BAAQMD Rule 11-18 on BACWA member facilities in conjunction with BAAQMD staff, we recommend the following tasks:

Task 1. Develop and/or collect information to support POTW involvement in Rule 11-18 development and compliance.

Task 1a. Identify BACWA Member Facilities Listed in the Implementation Schedule.

The purpose of this task was to identify and list those facilities assigned to Phase 1 of the implementation schedule for targeted POTW sources of toxic air contaminants (TACs) (e.g., treatment plants, wet weather facilities, pump stations, etc.). As all POTWs were moved to Phase 2 of the implementation schedule, this task now includes all POTWs listed. We will survey member agencies for information related to their facility (e.g., the type and size of facility). The list and information collected will be documented in a spreadsheet.

Task 1b. Determine Potential TBARCT to Comply with the Proposed Rule 11-18.

The purpose of this task is to identify and list the Toxic Best Available Retrofit Control Technologies (TBARCT) that may be required by BAAQMD to comply with the proposed Rule 11-18. The BAAQMD provided a draft list of retrofit technologies that qualify as TBARCT, which will serve as a starting point for this task. This task also includes direct communication with BAAQMD staff (via phone or in-person meetings - assuming one in-person meeting) and review of available state and local air district databases for potential TBARCT options. The list of potential TBARCT will be

documented in the same spreadsheet referenced in Task 1a. In addition, this task also includes review of the draft TBARCT guidance document to be released in early September, as well as development of a comment letter on behalf of BACWA.

Task 1c. Update Model Inputs for BACWA Facilities.

The BAAQMD database emissions factors used to estimate draft prioritization scores do not reflect current POTW influent flow or concentrations or accurate proximity adjustment factors (PAFs). BACWA will continue to aid in collecting current influent flow and concentration data for the 11 facilities identified in the BAAQMD pilot study and PAFs for all facilities. We will also continue to work and meet directly with BAAQMD staff (assuming one meeting) to update the data inputs in their model to develop more accurate estimates of emissions.

Task 2. Prepare Draft and Final Letter Report Summarizing the POTW Planning Process.

BACWA will draft a letter report for BAAQMD providing a summary of the POTW master planning process and the frequency of updates to those planning efforts, addressing regulatory and environmental documentation considerations, cross media issues, rate payer impacts, funding and Proposition 218 considerations, capital improvement program (CIP) implementation schedule development and transparency, and the POTW Board process.

A draft letter report will be provided for review by the BACWA Air Issues and Regulatory (BACWA AIR) Committee and Executive Board. All edits and comments received on the draft letter report will be addressed and a final draft letter report will be submitted to the BACWA AIR Committee and the BACWA Executive Board. Final edits and comments will be addressed and a final letter report will be submitted to the BACWA AIR Committee, the BACWA Executive Board, and BAAQMD staff.

Task 3. As-needed Work.

As BACWA continues discussions with BAAQMD, additional work may be identified. This task encompasses any additional efforts that are approved by the BACWA Executive Board.

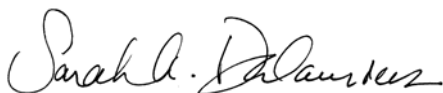
PROPOSED ENGINEERING COST/SCHEDULE

Our proposed engineering fee to perform Tasks 1 through 3 of the amended scope of services (in addition to the original scope) is approximately \$20,624 (the fee per task is provided in the attached table of labor hours). We will commence work upon notice to proceed and complete this work by June 30, 2018.

We appreciate your consideration on this project and look forward to working with you and your staff. Please do not hesitate to contact us if you have any questions or require additional information on this proposal. You can reach us at sdeslauriers@carollo.com (925-932-1710) and cmizutani@sbcglobal.net (925-686-5533) if you have any questions.

Sincerely,

CAROLLO ENGINEERS, P.C.



Sarah A. Deslauriers, P.E.

MIZUTANI ENVIRONMENTAL



Courtney Mizutani, P.E.

Carollo Engineers
ORIGINAL - LABOR AND COST ESTIMATE

BAY AREA CLEAN WATER AGENCIES EXECUTIVE BOARD

**ESTIMATE THE ECONOMIC IMPACT OF THE PROPOSED BAY AREA AIR QUALITY MANAGEMENT DISTRICT
REGULATION 11, RULE 18 (RULE 11-18) ON BACWA MEMBERS
April 18, 2017**

A. Labor Hours

Task	Task Description	SD	CM	TM	Support	Total Hours	Labor Cost
		\$182	\$175	\$259	\$109	Hours	Cost
1	Identify BACWA Member Facilities Listed in Phase 1 of the Implementation Schedule	4	12	0	0	16	\$ 2,828
2	Determine Potential TBARCT to Comply with the Proposed Rule 11-18	4	16	2	0	22	\$ 4,046
3	Update Model Inputs for Phase 1 BACWA Facilities (assumes 1 in person meeting with BAAQMD)	20	24	0	0	44	\$ 7,840
4	Prepare Draft and Final Letter Report Summarizing the POTW Planning Process	8	4	0	0	12	\$ 2,156
5	Prepare Draft and Final Proposal to Work with BAAQMD	24	24	0	4	52	\$ 9,004
Labor SUBTOTAL		60	80	2	4	146	\$ 25,874
						Total	\$ 25,874

Legend:

SD Sarah Deslauriers
CM Courtney Mizutani
TM Tom Mossinger (Technical Review)
Support Word Processing Support Staff

Carollo Engineers
AMENDED - ADDITIONAL LABOR AND COST ESTIMATE

BAY AREA CLEAN WATER AGENCIES EXECUTIVE BOARD

**Amendment to: ESTIMATE THE ECONOMIC IMPACT OF THE PROPOSED BAY AREA AIR QUALITY MANAGEMENT DISTRICT
REGULATION 11, RULE 18 (RULE 11-18) ON BACWA MEMBERS
September 13, 2017**

A. Labor Hours

Task	Task Description	SD	CM	TM	Support	Total Hours	Labor Cost
		\$182	\$175	\$259	\$109	Hours	Cost
1	Develop and/or Collect Information to Support POTW Involvement in Rule 11-18 Development and Compliance	26	72	0	0	98	\$ 17,332
2	Prepare Draft and Final Letter Report Summarizing the POTW Planning Process - Complete	0	0	0	0	0	\$ -
3	As Needed Work	8	8	0	4	20	\$ 3,292
Labor SUBTOTAL		34	80	0	4	118	\$ 20,624
						Total	\$ 20,624

Legend:

SD Sarah Deslauriers
CM Courtney Mizutani
TM Tom Mossinger (Technical Review)
Support Word Processing Support Staff

BAY AREA CLEAN WATER AGENCIES PROFESSIONAL SERVICES CONTRACT

This PROFESSIONAL SERVICES CONTRACT, effective February 17, 2017, is between Bay Area Clean Water Agencies ("BACWA"), a joint powers agency which exists as a public entity separate and apart from its Member Agencies, created January 4, 1984 by a Joint Powers Agreement between Central Contra Costa Sanitary District, East Bay Dischargers Association, East Bay Municipal Utility District, the City and County of San Francisco and the City of San Jose, with a mailing address of P.O. Box 24055, MS 59, Oakland, CA 94623, and Carollo Engineers, Inc. ("Consultant"), a private corporation doing business at 2700 Ygnacio Valley Road, Suite 300, Walnut Creek, CA 94598 for professional services as described in any Exhibit A attached hereto.

In consideration of the mutual covenants, stipulations and agreements, the parties agree as follows:

Description and Standard of Services to be Performed

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

Payment for Services

6. The contract will begin Feb. BACWA will pay Consultant based on the rates in Exhibit B, up to a maximum amount payable of \$25,956.00. The term of this agreement shall not extend beyond June 30, 2017 but may be extended for additional one year terms at BACWA's discretion for an additional two years, ending June 30, 2019. If, upon reaching the end of the term of the contract, the Board elects to extend the contract, the amount of the extended contract will be negotiated at the time the contract is extended.
7. Consultant shall submit invoices monthly via email to Sherry Hull, Assistant Executive Director, at shull@bacwa.org with a copy to Lorien Fono, Regulatory Program Manager, at lfono@bacwa.org. Invoices shall include the hours charged by each employee, a brief description of the work performed, and a description of costs for which Consultant seeks reimbursement and which are specified in Exhibit B.
8. Payments under this Contract will be due thirty (30) days after BACWA's receipt of invoices. BACWA may withhold from any progress or final payment any damages, backcharges or claims incurred or anticipated by BACWA to the extent caused by Consultant.

Document Ownership and Retention

9. Consultant will maintain all financial records relating to this Contract in accordance with generally accepted accounting principles and for at least three years following termination of this Contract. Consultant will grant BACWA and its representatives access upon request to all such records and all other books, documents, papers, drawings, and writings of Consultant that refer or relate to this Contract.
10. All drawings, specifications, reports, programs, manuals, and other work product of Consultant that result from this Contract ("Work Product") will be considered the exclusive property of BACWA. Consultant agrees that it will not use, disclose, communicate, publish or otherwise make available to third parties any products, analyses, data, compilations, studies, proposals, technical or business information, and any other information related to the Services provided to BACWA without BACWA's prior written approval.

Indemnification

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

Insurance

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

Assignment

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

Independent Contractor

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

Termination of Contract; Suspension of Services

15. This contract shall automatically terminate on June 30, 2017. Either party may also terminate this Contract in whole or in part at any time for its convenience. For a termination for convenience, the termination will be effective thirty (30) days following receipt of a written notice of termination by one party from the other. BACWA may terminate this Contract in whole or in part for cause, in which event the termination will be effective ten (10) days after Consultant's receipt of BACWA's written notice and Consultant's failure during that period to cure the default.

Dispute Resolution

16. Consultant will give prompt written notice to BACWA of any claim, dispute or other matter in question, but in no event will Consultant give such notice later than ten (10) days after Consultant's becoming aware of the event or circumstance giving rise to the claim, dispute or matter in question.
17. All claims, disputes and other matters in question between BACWA and Consultant arising out of or relating to this Contract will be subject to alternative dispute resolution. If both parties agree to arbitration it will be conducted in accordance with the Commercial Arbitration Rules of the American Arbitration Association then in effect. Notice of the demand for arbitration will be filed in writing with the other party to this Contract and with the American Arbitration Association. Any arbitration arising out of or relating to this Contract will include, by consolidation, joinder or joint filing, any other person or entity not a party to this Contract that is substantially involved in a common issue of law or fact and whose involvement in the consolidated arbitration is necessary to achieve a final resolution of a matter in controversy therein. This agreement to arbitrate will be specifically enforceable by any court with jurisdiction thereof.
18. A demand for dispute resolution by either party will be made within a reasonable time after the claim, dispute, or other matter in question has arisen, and in no event will it be made after the date when institution of court litigation based on such claim, dispute or other matter in question would be barred by the applicable period of limitations. For all claims by BACWA against Consultant, the applicable period of limitations will not commence to run, and any alleged cause of action will not be deemed to have accrued (whether such action is based on negligence, strict liability, indemnity, intentional tort or other tort, breach of contract, breach of implied or express warranty, or any other legal or equitable theory), unless and until BACWA is fully aware of all three of the following: (1) the identity of the party(ies) responsible, (2) the magnitude of the damage or injury and (3) the cause(s) of the damage or injury. The contractual limitations period and discovery rule provided herein applies in lieu of any otherwise applicable statute or related case law.
19. The failure of either party to enforce any provision of this Contract will not constitute a waiver by that party of that or any other provision of this Contract.

Severability

20. BACWA and Consultant agree that if any term or provision of this Contract is determined to be illegal, in conflict with any law, void or otherwise unenforceable, and if the essential terms and provisions of this Contract remain unaffected, then the validity of the remaining terms and provisions will not be affected and the offending provision will be given the fullest meaning and effect allowed by law.

Survival

21. All rights and obligations set out in this Contract and arising hereunder will survive the termination of this Contract (i) as to the parties' rights and obligations that arose prior to such termination and (ii) as is necessary to give effect to rights and obligations that arise after such termination but derive from a breach or performance failure that occurred prior to the termination.

This Contract constitutes the entire, legally binding contract between the parties regarding its subject matter. No waiver, consent, modification or change of terms of this Contract is binding unless in writing and signed by both parties.

The following documents are incorporated into and made a part of this Contract. Any conflicts between these documents and this Contract will be resolved in favor of this Contract.

Exhibit A – Scope of Work & Schedule

Exhibit B – Hourly Rates/Reimbursable Expenses

CONSULTANT: CAROLLO ENGINEERS, INC.

2700 Ygnacio Valley Road, Suite 300

Street Address

Walnut Creek, CA 94598

City, State, Zip Code

86-0899222

Tax Identification No.



Consultant Signature

2/22/17

Date

Lydia Holmes, Vice President

Name, Title

2/17/17

BACWA Signature

Date

Laura Pagano, BACWA Chair

Name, Title

EXHIBIT A

SCOPE OF SERVICES

Estimation of the economic impact of the proposed BAAQMD Rule 11-18 on BACWA member facilities as it relates to diesel generators will include the following tasks:

Task 1. Identify Impacted BACWA Member Facilities.

The purpose of this task is to identify and list the facilities impacted (treatment plants, wet weather facilities, pump stations, etc.) and the number and size of diesel generators at those facilities. The base list of impacted facilities will be created from the BAAQMD's Draft Rule 11-18 Mailer Distribution List. We will then survey member agencies for additional information related to each facility (e.g., the type of facility, number, and size of diesel generators, etc.). The list and additional information collected will be documented in a spreadsheet, which will serve as the basis for determining the potential economic impact of the proposed Rule 11-18.

Task 2. Determine Potential TBARCT to Comply with the Proposed Rule 11-18.

The purpose of this task is to identify and list the Toxic Best Available Retrofit Control Technologies (TBARCT) that may be required by BAAQMD to comply with the proposed Rule 11-18. At this point in time, it is not clear what would be considered TBARCT under this Rule. The BAAQMD stated they will release a list of technologies in February 2017 that would qualify as TBARCT, which will serve as a starting point for this task. This task may also include direct communication with BAAQMD staff and review of available state and local air district databases for potential TBARCT. The list of potential TBARCT will be documented in the same spreadsheet referenced in Task 1.

Task 3. Develop Cost Estimate to Implement TBARCT at BACWA Facilities.

The purpose of this task is to estimate a range of planning level costs for BACWA member facilities that may need to implement TBARCT to comply with the Proposed Rule 11-18, in the event it were to be adopted. The cost estimates will be performed in the same spreadsheet referenced in Task 1 by facility.

Task 4. Prepare Draft and Final Summary Letter Report.

The information collected in Tasks 1 through 3, the cost estimating methodology, and the cost estimates developed for BACWA facilities will be summarized and presented in a draft letter report for review by the BACWA Air Issues and Regulatory (BACWA AIR) Committee. All edits and comments received from the BACWA AIR Committee on the draft letter report will be addressed and a final draft letter report will be submitted to the BACWA Executive Board for their review. Final edits and comments will be addressed and a final letter report will be submitted to both the BACWA AIR Committee and the BACWA Executive Board.

SCHEDULE

Work will commence upon notice to proceed and Carollo will complete this work by April 30, 2017.

EXHIBIT B

HOURLY RATES/REIMBURSABLE EXPENSES

Sarah Deslauriers	\$182
Courtney Mizutani	\$175

**Carollo Engineers
LABOR AND COST ESTIMATE**

BAY AREA CLEAN WATER AGENCIES EXECUTIVE BOARD

**ESTIMATE THE ECONOMIC IMPACT OF THE PROPOSED BAY AREA AIR QUALITY MANAGEMENT DISTRICT
REGULATION 11, RULE 18 (RULE 11-18) ON BACWA MEMBERS
January 13, 2017**

A. Labor Hours

Task	Task Description	SD	CM	TM	Total Hours	Labor Cost
		\$182	\$175	\$259	Hours	Cost
1	Identify Impacted BACWA Member Facilities	24	24	0	48	\$ 8,568
2	Determine Potential TBARCT to Comply with the Proposed Rule 11-18	4	16	2	22	\$ 4,046
3	Develop Cost Estimate to Implement TBARCT at BACWA Facilities	16	24	2	42	\$ 7,630
4	Prepare Draft and Final Summary Letter Report	16	16	0	32	\$ 5,712
Labor SUBTOTAL		60	80	4	144	\$ 25,956
					Total	\$ 25,956

Legend:

SD Sarah Deslauriers
CM Courtney Mizutani
TM Tom Mossinger (Technical Review)

		Draft PROGRAM			
		BACWA ANNUAL TECHNICAL SEMINAR			
		October 26 - 27, 2017			
		EBMUD Pardee Facility			
<u>Day</u>	<u>Time</u>	<u>Theme</u>	<u>Attendees</u>	<u>Item</u>	<u>Topic</u>
Thur	8:30 AM		BACWA Members and Staff		<u>Breakfast</u>
	9:15 AM	BACWA Operational			<u>Financial</u>
				1	FY 18 Budget
				2	5 Year Plan
					-Assumptions for Future Dues/CBC/Nutrient Surcharges
					-5 Year Plan Scenarios
				3	Brainstorming on How To Make BACWA Better
					-Board Meetings
					-Committees
					-Outreach
					-Representation
					-Engagement
	10:30 AM	Nutrients - 2nd Watershed Permit			<u>Update and Discussion</u>
				4	Confirmation on Approach
					-Review of Nutrient Surcharge and Annual Updates
					-Establishing a Baseline for Early Actions
					-Shallow Water Discharges
					-The Role of Trading
					-Scope of the Regional Study on Non-Grey Scape Alternative for Nutrient Reduction
					-Need for Subgroup Management of Efforts
	Noon				<u>Lunch</u>
	12:45 PM	Nutrients - 2nd Watershed Permit (con't)			
	1:45 PM	Other Regulatory Issues	Board/ED/Staff/Associates		<u>Update and Discussion</u>
				5	Toxicity
					-Debrief on the BACWA Toxicity Workshop
					-Update on Toxicity Provisions

					-Options being discussed by Summit Partners
				6	Other Regulatory Hot Topics
					-Biosolids Survey
					-BACWA's Role in TNI Implementation
					-Private Sewer Lateral Provisions in Permits
	3:00 PM				<u>Break</u>
	3:15 PM			7	Regulatory Update
					-CEC Voluntrary Participation
					-SFEI's Microplastics Strategy
					-Regulatory Issue Matrix
				8	Engaging the Water Board
					-2nd WS Permit
					-Chlorine Residual
					-Toxicity
					-PCB/Hg WS Permit
	4:45 PM		WB/D. Senn Arrives		<u>Break for Day</u>
	6:30 PM		Board/ED/Staff/Associates/ WB/D. Senn		<u>Dinner</u>
Fri	8:00 AM	Coordination with WB	BACWA Members/Staff/WB/David S./HDR		<u>Breakfast</u>
					<u>Update and Discussion</u>
	8:30 AM			9	Watershed Permit Compliance
					-Optimization/Updgrade Update on Findings
					-Cost of No Net Loading Increase
					-Group Annual Report
					-Capital Projects
					-Recycling
					-Sea Level Rise
	10:15 AM			10	Concise Summary on State of the Science
					-Update on Science Plan with Projected Incresed Funding
					-Next Steps on the Assessment Framework
	10:30 AM				<u>Break</u>

	10:45 AM			11	2nd WS Permit
					-Status on Funding
					-Establishing a Baseline
					-How Shallow Water Discharges Fit in 2nd WS Permit
					-Role of Trading
					-Scope of Work for Regional Study on Non-Grey Scape Alternatives
	12:00 PM				<u>Lunch</u>
	11:00 AM			12	PCB/Hg Watershed Permit
				13	Chlorine Residual Basin Plan Amendment
	1:30 PM			14	<u>Other Technical/Regulatory Issues</u>
					-Impact of BAAQMD Regulations
					-Toxicity Plan
					-DWR Survey on Recycling
					-Recycled Water Permitting
					-Update on CEC's Management Strategy
					-Status of work on near shore discharges
					-Other Issues
	2:45 PM				<u>Adjourn</u>

CHLORINE RESIDUAL BASIN PLAN AMENDMENT TECHNICAL ASSISTANCE SCOPE OF WORK (09/07/2017)

CHEMICAL USAGE AND COMPLIANCE PROBLEM ASSESSMENT

Task 1. Compile Recent POTW Chlorine Residual Excursion Information

Review CIWQS records from 1/1/2010 through 6/30/2017 and compile table of chlorine residual excursions reported and assessed with minimum mandatory penalties (MMPs) in Region 2. Assumes records will include every hour on the hour reporting based on 2004 agreement between RWB and BACWA. Review associated monthly self-monitoring report (SMR) transmittal letters and 5-day violation letters and compile associated event information on chlorine residual event durations, causes, and actions taken to prevent similar events from reoccurring. Prepare summary statistics and graphical summaries of events from that period including frequency, magnitude and duration. Provide narrative summary and interpretation of causes of most frequent events, corrective actions required, and likelihood of impacts on biota in receiving water.

Estimated Hours: 60

Task 2. Survey Representative POTW Dechlorination Equipment and Control Strategies and Estimate Bay Area Dechlorination Chemical Usage

Conduct survey coordinated through BACWA Permits Committee to obtain information from representative small, medium, and large POTWs on current dechlorination equipment and control strategies used to comply with the 0.0 mg/L instantaneous maximum chlorine residual effluent limit. Summarize types of dechlorination equipment in use and dechlorination chemical addition control strategies used (e.g., add X mg/L or X % excess dechlorination chemical above measured chlorine residual). Prepare summary of total annual Bay area dechlorination chemical usage and estimate of amount of excess chemicals added to maintain consistent compliance with the 0.0 mg/L effluent limit.

Estimated Hours: 60

Task 3. Estimate Reduction in Chlorination and Dechlorination Chemical Usage Between Enterococcus Effluent Limits Derived with 10:1 Dilution Credit versus End-of-Pipe

The vast majority of POTW bacteriological effluent limits have historically been calculated end-of-pipe (zero dilution credit). The SWB is in the process of adopting new state-wide enterococcus (marine/estuarine) and *e. coli* (freshwater) water quality objectives. The new objectives may allow RWBs discretion to apply dilution credits in calculating bacteriological WQBELs. Conduct a desktop analysis to estimate the reduction in chlorination and dechlorination chemicals that could occur if WQBELs were calculated using 10:1 dilution credit.

Estimated Hours: 30

EFFLUENT LIMIT ALTERNATIVES ANALYSIS

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

Evaluate the pros and cons of replacing the Table 4-2 Chlorine Residual instantaneous maximum effluent limit with the saltwater and freshwater UPEPA 1-hour average and 4-day average chlorine WQC as WQBELs, versus including the WQC elsewhere in the Basin Plan Implementation Plan (Chapter 4), versus adopting the 1-hour average and 4-day average chlorine WQC as Water Quality Objectives in Basin Plan Chapter 3.

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

For adoption as WQBELs, prepare technical and regulatory rationale for why limits should be expressed on a 1-hour basis instead of average weekly and average monthly, as is otherwise required by NPDES regulations unless deemed to be impractical. Rationale should address the impracticality of adequately protecting aquatic life with weekly or monthly average limits based on the acute toxicity of chlorine.

Estimated Hours: 80

Task 5. Evaluate Approaches for Determining Compliance with a 1-Hour Average Limit Using Continuous Monitoring Data

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

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

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

Estimated Hours: 100

Task 6. Conduct Electronic Research for Examples of Minimum (Reporting) Levels Developed for On-Line Continuous Monitoring Chlorine Residual Systems

The SIP establishes MLs for evaluating compliance with priority pollutant based effluent limits. TRC is not a priority pollutant but is a toxic pollutant. MLs have not been established for TRC by the SIP or in this Region. WQBELs calculated for deep water dischargers using actual dilution credit, as is now done for total ammonia based effluent limits, are unlikely to result in compliance problems. WQBELs for shallow-water dischargers calculated using no dilution or limited dilution (e.g., Basin Plan Table 4-6 Cyanide dilution credit) would likely result in widespread non-compliance in the absence of a technically defensible ML set at a level above the WQBEL. Conduct electronic literature search for examples of chlorine residual minimum levels/reporting levels established for on-line continuous monitoring systems. Evaluate the potential applicability of existing definitions of MLs, RLs, Practical Quantitation Limits (PQL), and Levels of Quantitation (LOQ) to on-line chlorine residual monitoring systems. Document examples of where dilution credits have been used in permits in calculation of chlorine residual WQBELs. Evaluate current applicability of RL recommended in SWB April 2008 study.

Estimated Hours: 40

FIELD AND LABORATORY STUDIES

Task 7. Develop and Coordinate POTW Field Study to Update SWB 2008 Study “Investigation of Continuous Online Measurement of Chlorine and Sulfite in Wastewaters”

Work with stakeholders to review and identify recommended changes, if any, to field study protocols used in SWB 2008 study. Coordinate with BACWA to identify POTW's with continuous monitoring chlorination/dechlorination systems to participate in study. Assume that there would be a minimum of one small, medium and large POTW with chlorination/dechlorination systems representative of those in use in the Bay area. Coordinate with BACWA to develop a scope of work for a control system technology firm with expertise in chlorination and dechlorination control systems to assist in developing the workplan for this study and to provide as-needed technical support during the study. Goals of the study would be to collect sufficient on-line and ancillary bench-top data to support development of one or more Reporting Limits (RL) and associated data reporting frequencies for compliance evaluation.

Estimated Hours: 180

Task 8. Coordinate Laboratory and Field Studies to Investigate Chlorine Residual Decay Rates in Effluent Outfalls and Receiving Waters

There is an acknowledged, but unquantified, reduction in chlorine residual concentrations when effluent is discharged through an outfall and/or into a receiving water. Coordinate with BACWA Permits and Laboratory Committees to develop sampling and analysis protocols to develop effluent chlorine residual decay rate estimates (curves) for mixtures of chlorinated effluent and receiving water(s). Similar protocols would be developed for discharges to effluent interceptors as a surrogate for estimating decay during conveyance through an outfall.

Estimated Hours: 60

IMPACT ANALYSIS AND DOCUMENTATION

Task 9. Evaluate Impacts for Shallow and Deep Water Dischargers Under Alternative Approaches for Calculating Chlorine Residual WQBELs

A. Effluent Chlorine Residual Compliance Rates

B. Receiving Water Impacts

C. Changes in Dechlorination Chemical Usage

Estimated Hours: 40

Task 10. Summarize Technical and Regulatory Analyses in Suitable Format for Draft Basin Plan Amendment Staff Report

Compile information from Tasks 1-9 and organize it in a manner and format consistent for use in a BPA example to be selected by RWB staff.

Estimated Hours: 120

Task 11. Provide Technical Support for Completing CEQA Checklist and Related Portions of the Substitute Environmental Document (SED)

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

Estimated Hours: 40

Task 12. Provide Technical Support for Water Board Stakeholder Outreach Efforts

Provide assistance to RWB staff on development of technical materials for project kick-off meeting with stakeholders and for the CEQA scoping meeting, responding to feedback from these stakeholder meetings, preparing materials for the draft BPA package, and peer review package.

Estimated Hours: 40

PROJECT MANAGEMENT SERVICES

Task 13. Water Board Coordination, Meetings, Document Reviews

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

Estimated hours: 54

Task 14. Project Administration

Provides for necessary and routine project administration functions such as processing agreements and monthly invoices. Assumes project will be conducted over approximately an 18-month period from notice to proceed.

Estimated hours: 36

Task 15. Supplemental Services

Lump sum amount to provide additional technical assistance for supplemental BPA related tasks. Services would be provided following development of task order(s) for new or extended BPA assistance and BACWA approval of task order and allocated budget.

Allocated Hours: 80

**CHLORINE RESIDUAL BASIN PLAN AMENDMENT TECHNICAL ASSISTANCE
BUDGET SUMMARY TABLE / PRELIMINARY TIMING**

Task Descriptions	Hours	Budget (\$)	Timing
Chem. Usage and Compl. Problem Assessment			Oct – Dec 2017
Task 1. Compile Chlorine Excursions	60		
Task 2. Survey POTW Equipment/Controls	60		
Task 3. Chem. Reductions via Bacti Limits	30		
Subtotal	150	38,500	
Effluent Limit Alternatives Analysis			Jan – Mar 2018
Task 4. Eval. Alts to Basin Plan 0.0 mg/L	80		
Task 5. Eval. Alts for Compliance Determin.	100		
Task 6. Research Alt ML/RL Approaches	40		
Subtotal	220	56,500	
Field and Laboratory Studies			Apr – Sep 2018
Task 7. Develop/Coord POTW Field Studies	180		
Task 8. Coord Lab/Field Cl ₂ Decay Studies	50		
Subtotal	230	59,000	
Impact Analysis and Documentation			Jul 2018 - Mar 2019
Task 9. Eval. Impacts on Shallow/Deep POTWs	40		
Task 10. Summarize Tech/Reg Analyses	120		
Task 11. Support CEQA/SED Preparation	40		
Task 12. Support WB Stakeholder Outreach	40		
Subtotal	240	61,500	
Project Management Services			
Task 13. RWB Coord., Mtgs., Doc. Reviews	54		On-going (18 months)
Task 14. Project Administration	36		
Task 15. Supplemental Services	80		As Needed, As Approved
Subtotal	170	43,000	
Cumulative Total		258,500	



Environmental and Public Health Engineering

2017 FEE SCHEDULE

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

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

PERSONNEL

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

Personnel Category	Hourly Rates
Principal Engineer	\$263
Managing Engineer/Scientist III.....	\$255
Managing Engineer/Scientist II	\$242
Managing Engineer/Scientist I	\$231
Senior Engineer/Scientist III – Project Leader	\$212
Senior Engineer/Scientist/Planner II.....	\$194
Senior Engineer/Scientist/Planner I.....	\$178
Associate Engineer/Scientist III	\$169
Associate Engineer/Scientist II.....	\$160
Associate Engineer/Scientist I	\$137
Technician	\$108
Clerical/Computer Data Entry	\$76

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

DIRECT EXPENSES

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

- Costs of sub-consultants or subcontractors
- Costs of special fees (insurance, permits, etc.)
- Costs of long-distance telephone, copying, drafting, blueprints, etc. (EOA copies charged at \$0.10 each for B&W, \$0.35 each for color. Large format \$0.15/sq ft for B&W, \$0.50/sq ft for color)
- Costs of color map production supplies (color ink and large format paper)
- Costs or rental of special equipment
- Costs of authorized travel outside Bay Area
- Automobile mileage directly related to services, at current IRS rate (2017 rate is \$0.535/mile)

INVOICES

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