FUNDING AGREEMENT BETWEEN CITY/COUNTY ASSOCIATION OF GOVERNMENTS AND THE BAY AREA STORMWATER MANAGEMENT AGENCIES ASSOCIATION

This Agreement entered this _____, by and between the CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY, a joint powers agency formed for the purpose of preparation, adoption and monitoring of a variety of county-wide state-mandated plans, hereinafter called "C/CAG" and the Bay Area Stormwater Management Agencies Association, a nonprofit public benefit corporation organized under the Nonprofit Public Benefit Corporation Law, hereinafter called "BASMAA."

W I T N E S S E T H

WHEREAS, C/CAG manages the Countywide Water Pollution Prevention Program (Countywide Program) to provide support to its member agencies in meeting municipal stormwater pollution prevention requirements contained in the Municipal Regional Permit (MRP) issued by the San Francisco Bay Regional Water Quality Control Board; and,

WHEREAS, C/CAG, via the Countywide Program, is a member of BASMAA, a 501(c)(3) not-for-profit corporation designed to encourage stormwater management information sharing and cooperation, and to develop products and programs that would be more cost-effective when done regionally than could be accomplished locally. In addition, BASMAA provides a forum for representing and advocating the common interests of member programs at the regional and state level; and,

WHEREAS, C/CAG's membership in BASMAA requires payment of population-based pro-rata annual membership dues; and,

WHEREAS, BASMAA's Board of Directors, which includes a seat for the Countywide Program, annually determines which programs or projects will be done regionally to support local agency compliance efforts with the MRP and what each BASMAA member agency's cost share will be for those programs or projects; and,

WHEREAS, C/CAG, via the Countywide Program, agrees annually to participate in regional projects or programs through BASMAA; and,

WHEREAS, BASMAA generally requires annual payment in advance by its member agencies to support the organization and fund regional programs or projects; and,

WHEREAS, BASMAA performs its own competitive procurement processes when soliciting BASMAA support for regional programs or projects;

NOW, THEREFORE, IT IS HEREBY AGREED by the parties as follows:

1. **Services to be provided by BASMAA.** As needs are identified, C/CAG, via its representation on the BASMAA Board of Directors by the Manager of the Countywide Program, will decide annually which regional programs or projects it will participate in funding through BASMAA to support compliance efforts of C/CAG member agencies. Annually, BASMAA will adopt a budget and list of regional programs or projects to be funded by its member agencies and will invoice its

member agencies for their share of regional costs, including membership costs to fund administration of the BASMAA organization. Invoices will include project profiles for each adopted regional project detailing the scope of work, funding agencies, and timeframe. In consideration of the payments hereinafter set forth, BASMAA shall provide services in accordance with the terms, conditions and specifications set forth herein and in Exhibit A attached hereto and by this reference made a part hereof.

2. **Payments.** C/CAG shall annually pay BASMAA for both membership dues and its population-based share of regional program or project costs, for those programs or projects in which C/CAG commits to participate. For Fiscal Year 2016-17, C/CAG's population-based membership dues in BASMAA are $31,363 and C/CAG's share of regional project costs is $81,684. For Fiscal Year 2017-18, membership dues are assumed to be approximately $32,000 and C/CAG's share of regional project costs is $116,742. Regional projects and associated costs are as shown in Exhibit A. Given uncertainty associated with membership dues, population changes, and regional project costs, C/CAG is budgeting $20,000 in contingency funds for its share of BASMAA costs through Fiscal Year 2017/18. As such, payments under this agreement shall not exceed a total of $282,426. BASMAA shall submit to C/CAG for its approval annual invoices for payment to be made within sixty (60) days of the date of the invoice.

3. **Relationship of the Parties**. It is understood that this is an Agreement by and between Independent Contractor(s) and is not intended to, and shall not be construed to, create the relationship of agent, servant, employee, partnership, joint venture or association, or any other relationship whatsoever other than that of Independent Contractor.

4. **Non-Assignability**. BASMAA shall not assign this Agreement or any portion thereof to a third party without the prior written consent of C/CAG, and any attempted assignment without such prior written consent in violation of this Section automatically shall terminate this Agreement.

5. **Contract Term.** This Agreement shall be in effect as of _____ and shall terminate on _____; provided, however, C/CAG may terminate this Agreement at any time for any reason by providing 60 days' notice to BASMAA. Termination to be effective on the date specified in the notice. In the event of termination under this paragraph, BASMAA shall be paid for all services provided to the date of termination.

6. **Hold Harmless/ Indemnity**: BASMAA shall indemnify and save harmless C/CAG and its member agencies from all claims, suits or actions resulting from intentional misconduct, negligent acts, errors, or omissions in the performance by BASMAA of its duties under this Agreement. C/CAG shall indemnify and save harmless BASMAA and its member agencies from all claims, suits or actions resulting from intentional misconduct, negligent acts, errors, or omissions in the performance by C/CAG of its duties under this Agreement. The duty of the parties to indemnify and save harmless as set forth herein, shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

7. **Insurance**: BASMAA or its subcontractors performing the services on behalf of BASMAA shall not commence work under this Agreement until all Insurance required under this section has been obtained and such insurance has been approved by the C/CAG Staff. BASMAA shall furnish the C/CAG Staff with Certificates of Insurance evidencing the required coverage and there shall be a specific contractual liability endorsement extending BASMAA's coverage to include the contractual liability assumed by BASMAA pursuant to this Agreement. These Certificates shall

specify or be endorsed to provide that thirty (30) days' notice must be given, in writing, to C/CAG of any pending change in the limits of liability or of non-renewal, cancellation, or modification of the policy.

Workers' Compensation and Employer Liability Insurance: BASMAA shall have in effect, during the entire life of this Agreement, Workers' Compensation and Employer Liability Insurance providing full statutory coverage, conditioned upon BASMAA having employees.

Liability Insurance: BASMAA shall take out and maintain during the life of this Agreement such Comprehensive General Liability Insurance, including Bodily Injury Liability and Property Damage Liability Insurance as shall protect BASMAA, its employees, officers and agents while performing work covered by this Agreement from any and all claims for damages for bodily injury, including accidental death, as well as any and all operations under this Agreement, whether such operations be by BASMAA or by any sub-contractor or by anyone directly or indirectly employed by either of them. Such insurance shall be combined single limit bodily injury and property damage for each occurrence and shall be not less than $1,000,000 unless another amount is specified below and shows approval by C/CAG Staff.

Required insurance shall include:

		Required Amount	Approval by C/CAG Staff if Under $1,000,000
a.	Comprehensive General Liability	$ 1,000,000	
b.	Workers' Compensation (if applicable)	$ Statutory	

C/CAG and its officers, agents, employees and servants shall be named as additional insured on any such policies of insurance, which shall also contain a provision that the insurance afforded thereby to C/CAG, its officers, agents, employees and servants shall be primary insurance to the full limits of liability of the policy, and that if C/CAG, or its officers and employees have other insurance against a loss covered by such a policy, such other insurance shall be excess insurance only.

In the event of the breach of any provision of this section, or in the event any notice is received which indicates any required insurance coverage will be diminished or canceled, the C/CAG Chairperson, at his/her option, may, notwithstanding any other provision of this Agreement to the contrary, immediately declare a material breach of this Agreement and suspend all further work pursuant to this Agreement.

8. **Non-discrimination**. BASMAA and its subcontractors performing the services on behalf of the BASMAA shall not discriminate or permit discrimination against any person or group of persons on the basis or race, color, religion, national origin or ancestry, age, sex, sexual orientation, marital status, pregnancy, childbirth or related conditions, medical condition, mental or physical disability or veteran's status, or in any manner prohibited by federal, state or local laws.

9. **Accessibility of Services to Disabled Persons**. BASMAA, not C/CAG, shall be responsible for compliance with all applicable requirements regarding services to disabled persons, including any requirements of Section 504 of the Rehabilitation Act of 1973.

10. **Substitutions**: If particular people are identified in Exhibit A as working on this Agreement, BASMAA will not assign others to work in their place without written permission from C/CAG. Any substitution shall be with a person of commensurate experience and knowledge.

11. **Property of C/CAG**: Any system or documents developed, produced or provided under this Agreement shall become the sole property of C/CAG, or joint property of C/CAG and BASMAA if jointly funded.

12. **Access to Records**. C/CAG, or any of their duly authorized representatives, shall have access to any books, documents, papers, and records of BASMAA which are directly pertinent to this Agreement for the purpose of making audit, examination, excerpts, and transcriptions. BASMAA shall maintain all required records for three years after C/CAG makes final payments and all other pending matters are closed.

13. **Merger Clause**. This Agreement, including Exhibit A attached hereto and incorporated herein by reference, constitutes the sole agreement of the parties hereto with regard to the matters covered in this Agreement, and correctly states the rights, duties and obligations of each party as of the document's date. Any prior agreement, promises, negotiations or representations between the parties not expressly stated in this document are not binding. All subsequent modifications shall be in writing and signed by the C/CAG Chairperson. In the event of a conflict between the terms, conditions or specifications set forth herein and those in Exhibit A attached hereto, the terms, conditions or specifications set forth herein shall prevail.

14. **Governing Law.** This Agreement shall be governed by the laws of the State of California and any suit or action initiated by either party shall be brought in the County of San Mateo, California. Before any suit or action is initiated, the parties shall attempt to resolve the dispute through mediation. If, notwithstanding good faith efforts, the parties are unable to agree on the selection of a mediator, the matter may be submitted to Court for traditional resolution.

15. **Notices**. All notices hereby required under this agreement shall be in writing and delivered in person or sent by certified mail, postage prepaid and addressed as follows:

City/County Association of Governments of San Mateo County
555 County Center, 5th Floor
Redwood City, CA 94063
Attention: Matthew Fabry

Notices required to be given to contractor shall be addressed as follows:

BASMAA
P.O. Box 2385
Menlo Park, CA 94026
Attention: Geoff Brosseau, Executive Director

IN WITNESS WHEREOF, the parties hereto have affixed their hands on the day and year first above written.

Bay Area Stormwater Management Agencies Association (BASMAA)

By _____ _____

Tom Dalziel — Date
BASMAA Chair

By _____

Geoff Brosseau
BASMAA Executive Director

City/County Association of Governments (C/CAG)

By _____ _____

Alicia C. Aguirre — Date
C/CAG Chair

By _____

Nirit Erikson, C/CAG Legal Counsel

Exhibit A

BASMAA Annual Regional Program and Project Costs, Scopes, and Timeframes

BASMAA Projects – FY 16-17

	BASMAA Project	Project Budget	SMCWPPP Share
	Board of Directors		
1	EPA Grant Application	$32,500	$4,436
2	Pesticides Toxicity - Regulatory Modernization (C.9.f)	$32,000	$4,014
	Development Committee		
3	Alternative GI Facility Sizing Analysis (C.3.j.i.(2)(g))	$30,000	$4,095
	Monitoring / POCs Committee		
4	Infrastructure caulk study Sampling & Analysis Plan (C.12.e)	$20,000	$2,730
5	CW4CB Project Management and Related Tasks	$53,194	$7,261
6	POC Monitoring for Management Action Planning Support (C.8.f)	$45,000	$6,143
7	On-Call Services for Maintenance of RMC Monitoring Database (C.8.b/h)	$10,000	$1,365
8	Reasonable Assurance Analysis (RAA) Approach Support (C.11/12.c; C.11/12.d)	$80,000	$10,920
9	Managing PCBs-Containing Materials and Wastes during Building Demolition - Phase I: Developing an Implementation Framework, Guidance Materials, and Tools for Permittees (C.12.f)	$100,000	$13,650
	Public Information/Participation Committee		
10	IPM Partnership Program XVIII (OWOW) (C.9.e.ii.(1) / E.7.a)	$40,000	$3,764
	Trash Committee		
11	Receiving Water Trash Monitoring Program Plan (C.10.b.v)	$149,887	$23,305
	Totals	$592,581	$81,684

Geosyntec consultants

1111 Broadway, 6th Floor
Oakland, California 94607
PH 510.836.3034
FAX 510.836.3036
www.geosyntec.com

12 May 2016

Bay Area Stormwater Management Agencies Association
Attn: Geoff Brosseau, Executive Director
P.O. Box 2385
Menlo Park, California 94026

Sent via email to: geoff@brosseau.us

Subject: USEPA Water Quality Improvement Fund Grant Application

Dear Mr. Brosseau:

Geosyntec Consultants (Geosyntec) is pleased to provide this proposal for preparing a grant application for the USEPA Water Quality Improvement Fund. We understand that the grant application proposal must be received by USEPA Region 9 (via Grants.gov) by 5 pm on May 27, 2016. A preliminary summary for the proposed grant project is attached.

Geosyntec is submitting this proposal in partnership with EOA, Inc. and Larry Walker Associates (LWA). As EOA, LWA, and Geosyntec have been working closely with BASMAA on issues related to POC TMDL program implementation, we feel that this approach will allow the project to be conducted in a more effective fashion, thus helping BASMAA meet its goals for the project.

Geosyntec, EOA, and LWA are able to complete the proposed task in the required timeframe and will commence work immediately upon issuance of a notice to proceed. The schedule for the project would be as follows:

- May 13, 2016 – Notice to Proceed
- May 16 – 23, 2016 – Prepare draft application
- May 24 – 25, 2016 – BOD review draft application
- May 26, 2016 – Prepare final application
- May 27, 2016 – Final application submitted via Grants.gov

Our proposed budget for the project is $32,500, portioned among the three firms as follows:

- Geosyntec Consultants $20,000
- EOA, Inc. $7,500
- LWA $5,000

Thank you for inviting us to participate in this process.

Sincerely,

Lisa Austin
Principal

Adrienne Miller
Senior Professional

Enclosure: SFBWQIF Grant Proposal Summary (5-12-16)

B A S M A A

USEPA Region 9 San Francisco Bay Water Quality Improvement Fund Grant
Project Idea

This project would focus on assisting the Permittees with complying with the following four MRP provisions related to PCBs and mercury:

- C.12.f. Manage PCB-Containing Materials and Wastes During Building Demolition Activities So That PCBs Do Not Enter Municipal Storm Drains,
- C.12.e. Evaluate PCBs Presence in Caulks/Sealants Used in Storm Drain or Roadway Infrastructure in Public Rights-of-Way,
- C.8.f. Pollutants of Concern Monitoring, related to management action effectiveness evaluation, and
- C.12.d. Prepare Implementation Plan and Schedule to Achieve TMDL Wasteload Allocations.

The project partners would be the countywide stormwater programs and the match would largely be provided via MRP compliance-related tasks that Permittees/Programs are already planning to conduct.

Major Tasks

1. *Project Management, Oversight and Coordination*. Includes managing the grant, coordinating a Project Management Team, grant administration and reporting, formation and coordination of a Technical Advisory Committee, preparation of an overall project Quality Assurance Project Plan (QAPP), and outreach/transfer of lessons learned via the project.
2. *PCBs Building Material Management Implementation Framework.* Includes developing materials and tools to assist Permittees with developing a model PCBs in building materials control program and assessment tools. Scope of work is currently being developed by consultant team via a BASMAA regional project. This task will also include conducting trainings/workshops on implementing the model framework/protocols developed via the project.
3. *PCBs in Infrastructure Investigation and Management Guidance.* This task would focus on assisting Permittees with characterizing the levels of PCBs in caulks/sealants used in storm drain or roadway infrastructure and quantifying the potential PCB load reduction benefits that may result from public infrastructure improvement projects (such as parking garages, bridges, dams, storm drain pipes, and street improvements). Sub-tasks would include conducting a literature review to assess whether and how MS4s in other states have dealt with this issue; developing a Sampling and Analysis Plan (SAP); conducting monitoring per the SAP; and investigating the current identification, management, and disposal practices for PCBs-containing caulks and sealants during infrastructure

improvement projects and developing enhanced management practices for the purposes of reducing loads of PCBs entering the storm drain.

4. *POC Monitoring for Management Action Planning Support.* This task would develop a monitoring study design and summary report in support of Pollutants of Concern (POC) Monitoring Type 3 - Management Action Effectiveness. The monitoring study design will focus on monitoring the effectiveness of specific management actions in reducing or avoiding POCs in MS4 discharges. Monitoring would be conducted by the Programs (as match) and the grant project would prepare a report that synthesizes the data gathered by the programs into a format that is useable for control measure planning and load reduction accounting / RAA purposes.

5. *Model Control Measure Implementation Plan.* This task would support the development of a regional framework and guidance for conducting reasonable assurance analysis for green infrastructure (GI) and Mercury/PCBs Control Measure Implementation Plan load reduction accounting. This task would also develop a Model Implementation Plan and guidance for each Program to use for preparing an Implementation Plan and Schedule to Achieve TMDL Wasteload Allocations (as required by C.12.d). Finally, this task would compile the program-specific Implementation Plans into one MRP-wide document that summarizes the full suite of actions that will be needed to achieve the TMDLs (region-wide) and the costs associated with control measure implementation.

B A S M A A

Preliminary List of Tasks, Match, and Overall Budget:

Major Task	Sub-Task	In-Kind/ Match Budget	Grant Funding	Total Budget	Comments/Notes
Project Management, Oversight, and Coordination	Project Management Team	$50,000		$50,000	Match via Program staff and Permittee participation in mtgs/coordination
	Start-up and Administration	$30,000	$150,000	$180,000	Match via BASMAA ED Participation
	Grant Reporting		$120,000	$120,000	Includes budget for 12 quarterly progress reports and one Final Report
	TAC		$25,000	$25,000	
	QAPP	$25,000		$25,000	New cost to Permittees. Assumes QAPP for all Tasks
	Outreach and Tech Transfer	$25,000		$25,000	Includes updating BASMAA website and presentations at conferences
PCBs Building Material Management Implementation Framework	Model Framework & Protocol	$100,000	$300,000	$400,000	Grant funds anticipated to offset a portion of Permittee costs. Includes nearly all tasks to develop Model Protocol/Framework
	~~Effectiveness Evaluation~~			$0	Possibly incorporate into above task?
	Outreach to Municipal Staff	$50,000	$30,000	$80,000	Task likely would need to occur regardless of grant. Match includes Program and Permittee staff participation in workshops.
	Assistance with Muni Adoption of Protocol/Framework	$50,000		$50,000	Task likely would need to occur regardless of grant. Match includes Program staff assistance in adopting ordinances and implementing protocols.
PCBs in Infrastructure Investigation and Management Guidance	Literature Review	$25,000		$25,000	Task likely would need to occur regardless of grant.
	Monitoring Design	$25,000		$25,000	Task already planned via BASMAA Regional project.
	Field Monitoring & Lab Analysis		$150,000	$150,000	Grant funds anticipated to offset a portion of Permittee costs.
	Data Analysis & Project Report	$50,000		$50,000	

B A S M A A

Major Task	Sub-Task	In-Kind/ Match Budget	Grant Funding	Total Budget	Comments/Notes
POC Monitoring for Management Action Planning Support	Monitoring Study Design		$40,000	$40,000	Grant funds anticipated to offset a portion of Permittee costs.
	Field Monitoring & Lab Analysis	$300,000	-	$300,000	Task already planned via future Program POC Monitoring.
	Data Analysis & Project Report	$40,000	$40,000	$80,000	Offsets anticipated costs to Permittees.
Model Implementation Plan	Bay Area RAA Guidance	$80,000		$80,000	Task likely would need to occur regardless of grant.
	Model Implementation Plan		$50,000	$50,000	Will assist Permittees/Programs and potentially offset costs.
	Bay Area Summary Report	$55,000		$55,000	Will assist with reporting requirements and communication to WB staff and Board Members.
Total Budget		**$905,000**	**$905,000**	**$1,810,000**	

B A S M A A

Project Profile

Project Name: Pesticides Toxicity - Regulatory Modernization

Description: The purpose of this project (in the form of a contribution to CASQA) is to:

- Convince California and Federal pesticide regulators to take additional actions as necessary to end pyrethroid-related toxicity in waters and sediments and to prevent future pesticide-related toxicity from emerging products like fipronil, imidacloprid, and indoxacarb.
- Complete the process of changing the way pesticide regulatory processes are implemented to ensure that pesticide regulators prevent toxicity when pesticides are registered or periodically reviewed.
- Oppose California and Federal water regulatory actions that make permittees rather than pesticide regulators responsible for pesticide-caused water pollution.

The attached "End Goals" document from the Pesticides Subcommittee provides additional detail on the purpose and indicators of success for this project. Activities specific to 2017 are described below.

Background

Pyrethroids and fipronil are present at problem levels in urban waters throughout California. Treating urban runoff to achieve compliance is infeasible and requirements to do so could cost billions of dollars statewide. State law precludes local regulation of pesticide sales or use. Educational efforts, while beneficial for other reasons, have proven ineffective in reducing pesticide levels in urban runoff.

Since 2004, CASQA has pursued a strategy, along with key water board staff, to influence state and federal agencies to improve regulation of pesticides as the long-term solution to mitigate and prevent water quality problems in urban areas. From 2003-2010 most activities were paid for by state grant funds (CASQA funded only CASQA-specific items). Due to changes in State Water Board grants—and after extensive research into other options—the funding of this effort was transitioned to dischargers. Although BASMAA and individual permittees provide significant levels of funding, CASQA's continued support for this effort is crucial, particularly in recognition that the project outcomes have statewide benefit. At this point, maintaining the significant momentum we have obtained in recent years will maximize our chance of achieving our end goals in a couple of years.

Scope

Based on our success with our 2013 & 2014 focus on DPR, the plan for 2017 is to continue to focus more on US EPA Office of Pesticide Program (OPP), where we have actions we need to push forward (OPP/OW common effects assessment methodology, more accurate urban modeling, other process problems), and where we expect actions on our highest priority pesticides. Some of this work will take advantage of DPR tools developed by DPR. A second focus for 2017 is Water Board statewide pesticides planning leading to an envisioned statewide Plan amendment (STORMS Project 6a), which we expect to be completed in 2018.

Key activities are outlined in the bullets below.

- *Continue collaboration with DPR to address near-term regulatory concerns, while seeking US EPA OPP and OW actions to reduce inconsistencies:*
  - Obtain DPR action on fipronil water pollution.
  - Ensure DPR enforces mitigation measures for pyrethroids and adopts additional measures if necessary.
  - Ensure the state conducts surveillance monitoring to evaluate pyrethroids (and fipronil) mitigation effectiveness.
  - Encourage EPA to develop capacity to implement pyrethroids and fipronil mitigation measures, in case necessary mitigation cannot be implemented entirely by DPR.
- *Seek long-term changes in the pesticide regulatory structure:*
  - Seek procedure changes such that EPA and DPR avoid approving new pesticides that cause urban water pollution.
  - Encourage EPA to develop robust urban surface water risk assessment procedures for pesticide reviews.
    - Focus on priority pesticides, particularly the pyrethroid family, fipronil, and imidacloprid, for which there will be public input opportunities.
    - Focus on completing effort to improve OPP urban runoff modeling procedures and renew efforts regarding consistency with OW regarding effects assessment and risk assessment timeframes.
  - Work toward obtaining a statewide management approach for pesticides that is adopted by the State Water Board, and formally recognizes the need to rely on DPR and OPP authority as the primary means to prevent and mitigate water quality impacts by pesticides.
  - Seek restructuring of California's urban surface water pesticides monitoring to increase its effectiveness and improve coordination.

FY: 16-17 One-time_____ multi-FY___X____
MRP reference: C.9.f (MRP 2.0) Compliance date: Ongoing
Committee task ID: Not applicable Profile last updated on: 5/26/16
Overseer 1: Board of Directors Project Officer: Geoff Brosseau
Overseer 2: CASQA Pesticides Subcommittee[1]
Budget: $32,000 (Others – CASQA; San Diego; Sacramento; Riverside; Santa Maria) **Status: BASMAA Board of Directors consideration**
Funding source(s): ACCWP, CCWP, FSURMP, SMCWPPP, SCVURPPP, VSFCD
Contracting Agency(s): CASQA
Contractor(s): TDC Environmental, LLC; Armand Ruby Consulting; Stephanie Hughes

Deliverable(s):	**Due/completed**
Written comment letters	Ongoing
Technical reports	Ongoing
Talking points for letters and meetings	Ongoing
Regulatory updates	Ongoing
Regulatory action plans	Monthly
Annual report	July 2017

[1] The CASQA Pesticides Subcommittee manages BASMAA's and others' contributions to CASQA on a day-to-day basis

Project Concept for Green Infrastructure Facility Sizing Analysis

Background

MRP Provision C.3.j.i.(2)(g) states that Green Infrastructure Plans should include requirements that stormwater treatment facilities "be designed to meet the treatment and hydromodification sizing requirements in Provisions C.3.c. and C.3.d." The Provision further states that for street projects that are not Regulated Projects:

> … Permittees may collectively propose a single approach with their Green Infrastructure Plans for how to proceed should project constraints preclude fully meeting the C.3.d. sizing requirements. The single approach can include different options to address specific issues or scenarios. That is, the approach shall identify the specific constraints that would preclude meeting the sizing requirements and the design approach(es) to take in that situation. The approach should also consider whether a broad effort to incorporate Hydromodification controls into green infrastructure, even where not otherwise required, could significantly improve creek health and whether such implementation may be appropriate, plus all other information, as appropriate (e.g., how to account for load reduction for the PCBs or mercury TMDLs).

MRP Provision C.3.d. contains sizing criteria. These include the option to size facilities to treat at least 80% of the total runoff over the life of the project, using local rainfall data.

Provision C.3.c.i. states that LID treatment measures are harvesting and use, infiltration, evapotranspiration, and biotreatment (bioretention). Bioretention systems shall be designed to have a surface area no smaller than what is required to accommodate a 5 inches/hour stormwater runoff surface loading rate.

Guidance for bioretention design, issued by BASMAA member agencies, incorporates the following values and parameters:

- Minimum 6-inch deep surface reservoir
- Minimum 18-inch depth of specified sand/compost mix
- Minimum 12-inch deep layer of rock or gravel (Class 2 permeable material)
- Perforated pipe underdrain with discharge elevation at top of gravel layer

Project Purpose

This project will use continuous simulation modeling to evaluate relationships of facility size (e.g., area, depth, flow rate) to facility performance. The BASMAA Development Committee, and BASMAA member agencies, intend to use these relationships to develop and justify an approach, to be created by the Development Committee, for implementing Green Infrastructure projects when there are constraints on facility size.

Project Tasks

The project will include the following technical tasks:

1. Adapt existing continuous simulation models that simulate bioretention performance.
2. Compile and update long-term hourly rainfall records at six Bay Area locations.
3. Run continuous simulations and evaluate outputs to address the questions below.
4. Present the outputs in the form of charts and equations for use by the BASMAA Development Committee.

5. Document the work in a brief technical memo.

Questions

1. What is the minimum bioretention sizing factor (facility surface area/tributary impervious area) that meets the criterion of capturing and treating 80% of average annual runoff, as stated in Provision C.3.d.? This will be calculated for each of six rain gauges with long-term hourly data.
2. How does the percent of average annual runoff captured and treated vary as a function of sizing factor? This will be shown graphically and/or by regression equations.
3. Within the overall $30,000 budget, examine the sensitivity of the percent of average annual runoff infiltrated to: (a) facility sizing factor and (b) rate of exfiltration from the facility. Also within the overall $30,000 budget, examine the sensitivity of anticipated pollutant loading reductions to the following variables: average pollutant concentrations in runoff (influent), underdrain discharge pollutant concentration, rate of exfiltration from the facility, and facility sizing factor.

B A S M A A

Project Concept [Revised for BOD Review 2/19/16]

2016 Board of Directors Priorities addressed: Evaluate PCBs in Infrastructure Caulks/Sealants (C.12.e.)

Title: Quality Assurance Project Plan and Sampling and Analysis Plan for Evaluation of PCBs in Public Infrastructure Caulk

Purpose: Comply with MRP 2.0 Provision C.12.e before September 2018 Annual Report.

Background: Provision C.12.e of the reissued Municipal Regional Permit (MRP 2.0) requires Permittees to "Evaluate PCBs Presence in Caulks/Sealants Used in Storm Drain or Roadway Infrastructure in Public Rights-of-Way" by collecting samples of caulk and other sealants used in storm drains and between concrete curbs and street pavement. At least 20 composite samples should be collected throughout the area covered by the MRP 2.0, focusing on structures installed or rehabilitated during the 1970's when PCBs were most likely present in the caulks and sealants.

This project will produce project support documents to translate the minimum requirements of C.12.e.ii into a consistent set of criteria to guide stormwater programs and municipalities in selection of individual sites and sampling and analysis of caulk from these sites. These documents should be drafted in fall 2016 to facilitate planning and site selection for sampling to be initiated by programs in FY 2016-17. Implementation and reporting of the study are not included in the scope of this project. The results of the study must be reported by the 2018 Annual Report per C.12.e.iii.

The BASMAA Monitoring/Pollutants of Concern Committee activities to support planning and coordination for this study will include:

- Clarify study objectives, approaches and extent of regional cooperation, and roles of staff from stormwater programs and participating municipal Permittees.
- Designate a BASMAA Project Manager who will assist the BASMAA Executive Director in contract oversight by serving as primary point of contact for project communications with the Consultant about the project and compiling comments on draft documents.
- Develop the general approach for sampling, determine distribution of sample types among geographic regions and infrastructure types, and work with municipalities to identify potential sampling locations and a prioritization approach to inform final site selection.
- Review working and final draft Quality Assurance Project Plan to ensure that the sample collection and analysis will be SWAMP-comparable and count toward fulfillment of the Pollutants of Concern Monitoring (C.8.f) requirements for efforts aimed at finding PCBs sources.

- Coordinate design of the Sampling and Analysis Plan among the countywide stormwater programs and participating municipalities.
- Review analytical laboratory qualifications and coordinate laboratory contracting as appropriate.
- Coordinate and communicate with other entities such as the MRP 2.0 POC Workgroup, Caltrans, etc.
- Coordinate implementation and reporting of the sampling (which are not included in the scope of this project concept).

Scope: Produce a model Quality Assurance Project Plan (QAPP) and Sampling and Analysis Plan (SAP) to assist programs and Permittees in planning and implementation of the study to evaluate PCBs in infrastructure caulks and sealants. See attached Draft Scope of Work for details.

Products: See table below.

Schedule: See table below.

Task Number	Task Deliverable	Deadline
1	Work Draft SAP and QAPP	August 2016
1	Final Draft SAP and QAPP	January 2017
2	Meetings and communications with MPC	December 31, 2017
2	Other assistance as directed by MPC	December 31, 2017

Monitoring/Pollutants of Concern Committee Coordination: See draft schedule below.

MPC Activity	MPC meeting date(s)
Clarify study objectives, approaches and extent of regional cooperation, roles of program staff and participating municipal Permittees.	April 2016
Review/refine final scope for RFP if needed	April 2016
Develop the general approach for sampling, determine distribution of sample types among geographic regions and infrastructure types, identify criteria for sample site selection	July 2016
Review and comment on Work Draft documents	September 2016
Share information on status of sampling design and identification of potential sites	January-February 2017
Review and approve Final Draft documents	February 2017

Cost (estimate): See table below.

Task Number	Task Description	TOTAL
1	Draft and final QAPP and SAP	TBD
2	Communications and on-call support as directed by MPC	TBD
Not To Exceed Total Estimate:		**$20,000**

Project partners, if any: None.

Implementer(s): Committee(s): MPC Consultant: TBD via selection

[Check/list as appropriate] Member _____ Other _____

Selection Process(es): [[1] If proposed implementer would be a consultant(s) to BASMAA, check method(s) for identifying best candidate(s) to recommend to the Board of Directors (BOD). See Policy and Procedure: *Consultant Selection and Contracting* for more information]

____ Executive Director Discretion ____Sole Source ____ Request for Qualifications

__ X __ Request for Proposal __ X __ Interview (recommended in consideration of small project budget)

Proposed distribution of RFP or invitation to interview: pre-qualified firms from BASMAA list in the category "POCs-Mercury-PCBs" as of October 2015 or latest update if available. The invitee list will be included with the invitation and firms may team up and submit a joint proposal or interview request.

Proposed schedule for Selection Process:

Mar 2016	BoD approve project concept, budget (for at least Task 1, or for all tasks), and process; also authorize/empower a Selection Group as needed.
April	MPC refine draft Scope of Work for RFP or invitation to interview.
May	Issue RFP or invitation to interview early in May with 30 days allowance until deadline for proposal submittals or scheduled interviews.
June	BoD/Selection Group review proposals or conduct interviews and recommend selection of contractor
June	BoD approve recommended selection, contract scope/ budget.
July	Executive Director execute contract and issue Notice to Proceed

Proposer: MPC reps-ACCWP, CCCWP, SMCWPPP Date: 2/19/16 Rev 3/21/16 _____

MEMORANDUM

To: CW4CB Project Management Team (PMT)
From: Lisa Sabin and Jon Konnan, EOA, Inc.
Subject: CW4CB Project Management
Date: November 16, 2015

Per recent discussions of the CW4CB Project Management Team (PMT), the PMT will make recommendations to the BASMAA Board of Directors regarding the project's next steps. The recommendations involve requesting a further extension of the grant project period (through May 2, 2017) and allocation of the remaining grant funds to certain tasks. The PMT will make the recommendations from a technical standpoint only and recognizes that implementing the recommendations would require additional resources for project management and related tasks.

This memorandum summarizes EOA's estimate of the costs associated with these tasks. Table 1 summarizes the basis of the costs and each task is described in more detail below. A summary of recent unanticipated efforts that resulted in extra demands on the current project management budget is also provided below.

1. General project management through end of grant, Nov 2015 - Apr 2017

- Continue to act as central coordinator for all aspects of the project, including communications with PMT, partner municipalities, and EPA.
- Track contractor and overall project budgets, schedules and deliverables.
- Collect, compile and report ongoing match contribution information and track EPA grant fund expenditures.
- Submit an additional extension request and associated project workplan and timeline modifications to EPA.
- Facilitate three new tasks, including working with study design team and PMT to scope, budget for, prepare task orders for, and coordinate and oversee all work:
    1. Study design team to provide technical assistance during the extended monitoring period.
    2. Study design team to provide technical assistance with preparation of the final project report.
    3. Study design team to provide assistance with disseminating the project results ASAP to inform MRP 2 implementation.

2. Oversight and coordination of new monitoring, Nov 2015 - Jun 2016

- For additional monitoring of selected retrofits through January of 2015/16 rainy season, facilitate technical discussions and decision making regarding scope of work by working with study design team and PMT.
- Develop scopes/budgets and prepare work orders for two monitoring contractor teams.
- Coordinate field and lab work, quality control review, data management, and reporting.
- Distribute final data sets to PMT as needed.

3. Assist study design team efforts for early data dissemination

- Work with study design team to disseminate project results ASAP (e.g., via presentations, technical memorandums and web sites).
- Work with study design team to focus on developing information regarding how the BMP effectiveness evaluation results can inform planning for PCBs load reductions required under MRP 2.

4. Facilitate 2 PMT meetings (2016 and 2017)

- Prepare agenda packages.
- Attend and facilitate meetings.
- Prepare meeting summaries.

5. Facilitate TAC

- Per request from a TAC member, facilitate TAC's early input on BMP effectiveness evaluation methods via phone and email communications.
- Facilitate one meeting of the TAC in 2016, including agenda package, attend meeting, and prepare meeting summary.

6. Prepare two semi-annual progress reports

- Prepare April 2016 and Oct 2016 progress reports.

7. Contingency

- Address unforeseen issues.
- Respond to auditors as needed.

Recent unanticipated efforts that resulted in extra demands on the project management budget:

- Working with city and stormwater program staff to address the various issues causing delays with the retrofit projects.
- Unable to complete planned monitoring due to lack of rainfall and delays with retrofit projects, leading to additional analysis and discussions regarding how to use unspent funds in the most beneficial way and whether or not to further extend the grant. This required extra engagement of study design team, monitoring contractors, the Project Management Team (PMT) and EPA staff.
- Adjusting overall project schedules and budgets due to retrofit delays and additional budget requests.
- Worked with PMT to decide upon and then facilitated current grant extension request to EPA (to September 2016) and then further analysis/discussions related to whether or not to further extend grant.
- Project team staff turnover has necessitated bringing new people up to speed.

Additional notes:

- The current level of project management budget was based on a previous analysis of how to best use the remaining match commitments from each participating program that had not yet been contributed at the time of the analysis. This constrained the amount allocated for project management.
- Grant funding reallocation must involve activities that would not trigger or re-open the grant contracting/procurement requirements. For this reason project management tasks by EOA cannot be funded via reallocation of unspent grant funds. However, the proposed expanded duties for the study design team contractors would not do this.
- Activities using reallocated funds must stay within the scope of existing QAPP and SAP documents, which for example could limit any proposed sediment sampling to the five pilot watersheds.

November 16, 2015

Table 1 - CW4CB Project Management and other Related Tasks

TASK		Manager III $241	Senior II $183	Expenses	Total Budget	FY 15/16	FY 16/17
	EOA Hourly Rate:						
1	General proj mgmt through grant end, Nov 2015 - Apr 2017 or 18 months, 4 hrs/mo Jon & 12 hrs/mo Lisa	72	216	$1,000	**$57,880**	**$25,724**	**$32,156**
2	Oversight & coord of new monitoring, Nov 2015 - Jun 2016, or 8 months, 2 hrs/mo Jon and 6 hrs/mo Lisa	32	48	$200	**$16,696**	**$16,696**	**$0**
3	Assist study design team efforts for early data dissemination and outreach to inform MRP 2	20	40	$200	**$12,340**	**$12,340**	**$0**
4	Facilitate 2 PMT meetings (2016 and 2017) including agenda packages and meeting summaries	16	32	$200	**$9,912**	**$4,956**	**$4,956**
5	Faciliate TAC: early input on BMP effectiveness eval methods via phone/email & one meeting in 2016	24	40	$200	**$13,304**	**$6,652**	**$6,652**
6	Prepare two semi-annual progress report (April 2016 and Oct 2016)	8	24	$200	**$6,520**	**$3,260**	**$3,260**
		172	**400**	**$2,000**	**$116,652**	**$69,628**	**$47,024**
	Approximate amount remaining in current EOA contract with BASMAA as of end of October 2015:				**$3,500**	**$3,500**	
	Totals not including contingency:				**$113,152**	**$66,128**	**$47,024**
7	Contingency, including responding as needed to auditors	20	40	$200	**$12,340**	**$6,170**	**$6,170**
	Totals including contingency:				**$125,492**	**$72,298**	**$53,194**

B A S M A A

Project Concept

2016 Board of Directors Priorities addressed: Pollutants of Concern Monitoring (C.8.f)

Title: POC Monitoring for Management Action Planning Support

Purpose: Develop a monitoring study design and summary report in support of Pollutants of Concern (POC) Monitoring Type 3, Management Action Effectiveness. The monitoring study design will focus on monitoring the effectiveness of specific management actions in reducing or avoiding POCs in MS4 discharges.

Background: Provision C.8.f. requires that POC monitoring be directed towards addressing these five priority POC management information needs:

1. Source Identification - identifying which sources or watershed source areas provide the greatest opportunities for reductions of POCs in urban stormwater runoff;
2. Contributions to Bay Impairment - identifying which watershed source areas contribute most to the impairment of San Francisco Bay beneficial uses (due to source intensity and sensitivity of discharge location);
3. Management Action Effectiveness - providing support for planning future management actions or evaluating the effectiveness or impacts of existing management actions;
4. Loads and Status - providing information on POC loads, concentrations, and presence in local tributaries or urban stormwater discharges; and
5. Trends - evaluating trends in POC loading to the Bay and POC concentrations in urban stormwater discharges or local tributaries over time.

The focus of this regional project is Monitoring Type 3, Management Action Effectiveness. Provision C.8.f requires that each Program collect at least eight samples for this monitoring type by Year 4 of the permit (2019). This project would support the development of a region-wide study design that would coordinate and focus this monitoring effort to gather data needed to support C.11/C.12 POC load reduction accounting / Reasonable Assurance Analysis (RAA) needs. Potential data gaps that could be addressed via a coordinated monitoring study design include (but are not limited to):

- POC removal in treatment control measures that were or will be constructed as part of the Clean Watersheds for a Clean Bay (CW4CB) project. Some of the pilot projects that were not constructed in time for monitoring as part of CW4CB include treatment control measures that may be desirable for green infrastructure (GI) retrofit (e.g., permeable pavement over Silva Cells) and POC removal data is needed for these types of treatment measures. In addition, more data could be collected on the projects that were monitored (mostly green street bioretention-type retrofit projects, but also full trash capture

devices) to bolster the POC removal assumptions that will be used for the load reduction accounting / RAA.

- POC load reductions related to the effectiveness of managing PCBs in building materials during demolition and in infrastructure during infrastructure improvement projects.

- POC load reductions associated with managing illegal dumping or other miscellaneous control measures.

These and other data gaps will become more evident as the Interim Accounting Report is finalized; the CW4CB Final Report is drafted, with input from the CW4CB Technical Advisory Committee; and when BASMAA begins to formulate an approach to meeting the MRP requirements for RAA in FY 16-17. This is not a final list of data needs, but would be directed by MPC and the BASMAA Board of Directors (BOD) based on policy decisions. The monitoring study design will be used by the stormwater programs to conduct sampling within their jurisdictions in WY2017.

The regional project would also prepare a report that summarizes the monitoring data collected by the programs and provides analysis results as identified by MPC and BOD needed to inform the C.11/C.12 control measure planning and load reduction accounting / RAA.

Scope: A preliminary scope of work includes:

- Task 1. Prepare a monitoring study design to reflect the overall goals for a coordinated monitoring approach. The monitoring design will describe the general objectives and rationale for sampling design consistent with direction from the MPC and BASMAA BOD. [Note: this task does not include a Sampling and Analysis Plan (SAP) or a Quality Assurance Project Plan (QAPP) under the assumption that existing SAP/QAPPs from CW4CB or other projects could be used. These items may be added if needed or the regional project contractor may peer review of a SAP/QAPP prepared by others for the purposes of this project.]

- Task 2. Prepare a report that synthesizes the data gathered by the programs into a format that is useable for control measure planning and load reduction accounting / RAA purposes.

- Task 3. Other assistance as needed to inform regional coordination of C.3.f monitoring.

Products: See table below.

Schedule: See table below. Note: project schedule is subject to revision if part of a SFBWQIF grant award beginning in late FY16-17.

B A S M A A

Task Number	Task Deliverable	Schedule
1	Draft Monitoring Study Design	October 2016
1	Final Monitoring Study Design	December 2016
2	Draft Summary Report	October 2018
2	Final Summary Report	December 2018

Cost (estimate): See table below. Note: budget details for this project are subject to revision if counted as part of match for a SFBWQIF grant award beginning in late FY16-17.

Task Number	Task Description	Cost Estimate	
		FY 16/17	FY 18/19
1	Draft and Final Monitoring Study Design	$40,000	
2	Draft and Final Summary Report		$50,000
3	As Needed Assistance	$5,000	$5,000
	Total Cost	$45,000	$55,000

Project partners, if any: None.

Implementer(s): Committee(s): MPC Consultant: TBD via selection

[Check/list as appropriate] Member _____ Other _____

Selection Process(es): [[1] If proposed implementer would be a consultant(s) to BASMAA, check method(s) for identifying best candidate(s) to recommend to the Board of Directors. See Policy and Procedure: *Consultant Selection and Contracting* for more information]

____ Executive Director Discretion ____Sole Source ____ Request for Qualifications

__X__ Request for Proposal ____ Interview

Proposer: MPC representatives of ACCWP, CCCWP, SMCWPP; SCVURPPP staff tentative support for concept Task 1

Date: 4/22/2016;
Highlighted Cost Estimate FY breakdown and grant note by Lisa Austin, Geosyntec 5/24/16

B A S M A A

Draft Project Concept for MPC Review

2016 Board of Directors Priorities addressed: Ongoing Maintenance of Regional Monitoring Database

Title: On-call Services for Maintenance of RMC Monitoring Database

Purpose: To provide information management services related to the RMC Monitoring Database on an as needed basis to assist in compliance with several C.8 provisions in MRP 2.0.

Background: In 2010, Regional Project RMC 3e developed the RMC Monitoring Database to store and manage SWAMP-comparable data collected in compliance with Provision C.8.c of MRP 1.0 (now Provision C.8.d of MRP 2.0). Data is entered and exported using Excel Templates that contain standardized nomenclature or look up lists. Periodically, the sampling protocols change and/or the database users desire new reporting products that require changes to the RMC database and Excel Import/Export Templates. Furthermore, RMC database users often have questions about the database and how to use the Excel Templates. Regional Project RMC 3e included budget to provide ongoing, as-needed database management, communications, and technical assistance to the RMC; however, the budget has since been exhausted.

As an ongoing related task (Task RMC 3g), funded outside of BASMAA by SCVURPPP and SMCWPPP at a level comparable to Regional Project RMC 3c ($14,000 annually), EOA conducts several in-kind services. These include: close technical database assistance to RMC programs, annual compilation of RMC program Creek Status data into one database, serving as the link between the RMC and the CEDEN Regional data node (SFEI), and management of the Creek Status Probabilistic Monitoring design and Site Evaluation process.

In FY 15-16, Regional Project RMC Task 6a expanded the database to store POC Monitoring data collected per Provision C.8.e of MRP 1.0 and C.8.f of MRP 2.0. EOA's in-kind contribution during FY15-16 significantly exceeded $14,000 due to an increase in technical database assistance needed by RMC programs and a substantial expansion of the database to include POC monitoring data.

Scope: This project will provide a timely and efficient means of making updates to the RMC Monitoring Database and related Excel Templates and providing technical assistance to RMC database users, on an as-needed basis and as authorized by the BASMAA Project Manager. Work will be conducted by EOA and their subcontractor, Dan Stern Database Systems. Example tasks are listed below and will be determined by the MPC:

- Update the database and Excel Templates to add the two physical habitat parameters that were added to the SWAMP Bioassessment SOP in February 2016. This task includes close supervision of Dan Stern Database Systems.

- Update the database and Excel Import/Export Templates to be consistent with the SWAMP on-line data checker, as needed.
- Respond to questions from RMC database users about the new POC monitoring element added through RMC Task 6a.
- Provide technical programming assistance for RMC database users with the new POC monitoring element.
- Conduct testing concurrent with initial use of the new POC monitoring element and identify future improvements.
- This scope does not include the ongoing Creek Status Monitoring services that are funded by SCVURPPP and SMCWPPP for Task RMC 3g.

Products: Database update and revised Excel Templates to include new Physical Habitat parameters (to be completed by August 2016). As-needed services, within provided budget.

Schedule: July 2016 – June 2017

Cost (estimate): $10,000

Project partners, if any: none

Implementer(s): Committee(s): MPC
Consultant: EOA/Dan Stern Database Systems (MPC will clarify scope and contracting before directing Executive Director to finalize work order(s))

[Check/list as appropriate] Member _____ Other _____

Selection Process(es): [[1] If proposed implementer would be a consultant(s) to BASMAA, check method(s) for identifying best candidate(s) to recommend to the Board of Directors. See Policy and Procedure: *Consultant Selection and Contracting* for more information]

____ Executive Director Discretion __X__Sole Source ____ Request for Qualifications

____ Request for Proposal ____ Interview

The MPC recommends contracting with EOA and, either separately or as EOA subconsultant, Dan Stern Database Systems to perform this work. Database support and updates are needed in the near future so that the RMC programs can enter physical habitat monitoring data during the spring index period. Furthermore, the EOA/Dan Stern Database Systems team provides the unique experience of already having created, updated, and used the RMC Monitoring Database.

Proposer: MPC representatives of ACCWP, CCCWP, SMCWPP; SCVURPPP staff
tentative support for concept _____ Date: 4/22/16

B A S M A A

Project Concept

2016 Board of Directors Priorities addressed: Reasonable Assurance Analysis Approach (C.11.c/C.12.c and C.11.d/C.12.d)

Title: RAA Approach Support

Purpose: Support the development of a regional framework and guidance for conducting reasonable assurance analysis for green infrastructure (GI) and Mercury/PCBs Control Measure Implementation Plan load reduction accounting.

Background: Provisions C.11.c. and C.12.c. require that the Permittees:

- Submit a quantitative relationship between GI implementation and mercury and PCBs load reductions (2018 Annual Report); and
- Submit an estimate of the amount and characteristics of land area that will be treated through GI implementation by 2020, 2030, and 2040 and the results of a peer-reviewed reasonable assurance analysis to demonstrate quantitatively that mercury load reductions of at least 10 kg/yr and PCBs load reductions of at least 3 kg/yr will be realized by 2040 through implementation of GI projects (2020 Annual Report).

Each of these submittals must include all data, a full description of the models, and the model inputs. Additionally, MRP Provisions C.11.d. and C.12.d. require the Permittees to prepare plans and schedules for mercury and PCBs control measure implementation and an RAA demonstrating that sufficient control measures will be implemented to attain the mercury TMDL wasteload allocations by 2028 and the PCBs TMDL wasteload allocations by 2030.

This regional project would provide support for establishing a regional framework and guidance for the conducting the GI and Mercury/PCBs Control Measure Implementation Plan RAA's, including the types of modeling and data inputs that may be used by the Programs and Permittees to conduct each type of RAA.

Scope: A preliminary scope of work includes:

- Task 1. Support the establishment of an RAA Technical Committee that would include representatives from BASMAA, the San Francisco Regional Water Board, the San Francisco Estuary Institute, and other technical experts to help to flush out RAA details. The contractor would schedule meetings, prepare agendas, facilitate the meetings, and send out meeting summaries.
- Task 2. Based on input from the RAA Technical Committee, develop an RAA guidance document specific to the Bay Area and similar in scope to the Los Angeles Regional Water Board's guidance document, which defines the specific models and analysis methods that may be used, required model/analysis methods input data, allowable data

sources, and model calibration criteria. This report would update the Interim Accounting Report, as needed, per MRP Provision C.12.b.iii.(3).

Products: See table below.

Schedule: See table below. Note: project schedule is subject to revision if part of a SFBWQIF grant award beginning in late FY16-17.

Task Number	Task Deliverable	Schedule
1	RAA Technical Committee Facilitation	FY 16/17
2	Draft RAA Guidance Document	April 26, 2017
2	Final RAA Guidance Document	June 30, 2017

Cost (estimate): See table below. Note: budget details for this project are subject to revision if counted as part of match for a SFBWQIF grant award beginning in late FY16-17.

Task Number	Task Description	Cost Estimate FY 16/17
1	RAA Technical Committee Facilitation[1]	$20,000
2	RAA Guidance Document	$60,000
	Total Cost	$80,000

1 Assumes 4 meetings at approximately $5,000/meeting

Project partners, if any: None.

Implementer(s): Committee(s): MPC Consultant: TBD via selection

[Check/list as appropriate] Member _____ Other _____

Selection Process(es): [[1] If proposed implementer would be a consultant(s) to BASMAA, check method(s) for identifying best candidate(s) to recommend to the Board of Directors. See Policy and Procedure: *Consultant Selection and Contracting* for more information]

____ Executive Director Discretion ____Sole Source ____ Request for Qualifications

__X__ Request for Proposal ____ Interview

Proposer: MPC representatives of ACCWP, CCCWP, SMCWPP; SCVURPPP staff tentative support for concept

Date: Original 4/22/2016; Revised 5/24/16 to breakdown budget by FY and add grant note; Revised 6/1/16 to compress schedule and budget to FY 16/17.

B A S M A A

Project Concept

2016 Board of Directors Priorities addressed: PCBs in Building Materials Framework (C.12.f.)

Title: Managing PCBs-Containing Materials and Wastes during Building Demolition - Phase I: Developing an Implementation Framework, Guidance Materials, and Tools for Permittees

Purpose: BASMAA to prepare a framework, guidance materials, and tools to assist permittees to comply with MRP 2.0 Provision C.12.f.

Background: Provision C.12.f of the MRP requires Permittees to develop and implement or cause to be developed and implemented an effective protocol for managing materials with PCBs concentrations of 50 ppm or greater in applicable structures at the time such structures undergo demolition so that PCBs do not enter municipal storm drain systems. Applicable structures include, at a minimum, commercial, public, institutional and industrial structures constructed or remodeled between the years 1950 and 1980 with building materials with PCBs concentrations of 50 ppm or greater. Single-family residential and wood frame structures are exempt. A Permittee is exempt from this requirement if it provides evidence acceptable to the Executive Officer in its 2017 Annual Report that the only structures that existed pre-1980 within its jurisdiction were single-family residential and/or wood-frame structures. Permittees are required to develop a protocol by June 30, 2019 that includes each of the following components, at a minimum:

1. The necessary authority to ensure that PCBs do not enter municipal storm drains from PCBs-containing materials in applicable structures at the time such structures undergo demolition;
2. A method for identifying applicable structures prior to their demolition; and
3. Method(s) for ensuring PCBs are not discharged to the municipal storm drain from demolition of applicable structures.

By July 1, 2019 and thereafter, Permittees are required to:

- Implement or cause to be implemented the PCBs management protocol for ensuring PCBs are not discharged to municipal storm drains from demolition of applicable structures via vehicle track-out, airborne releases, soil erosion, or stormwater runoff.
- Develop an assessment methodology and data collection program to quantify in a technically sound manner PCBs loads reduced through implementation of the protocol for controlling PCBs during demolition of applicable structures. This should be reported on in the 2020 Annual Reports at the regional level on behalf of all Permittees.

  In their 2016, 2017, and 2018 Annual Reports, Permittees are required to summarize the steps they have taken to begin implementing this requirement. In their 2020 Annual Reports and thereafter, Permittees are required to provide documentation of each of the

number of applicable structures that applied for a demolition permit during the reporting year and a running list of the applicable structures that applied for a demolition permit (since the date the PCBs control protocol was implemented) that had material(s) with PCBs at 50 ppm or greater, with the address, demolition date, and brief description of PCBs control method(s) used.

Scope: Implement during FY 2016/17 the first phase of developing an implementation framework, guidance materials, and tools for local agencies to manage PCBs-containing materials and wastes during building demolition. The Phase I work will be consistent with the scope-of-work and budget that is currently under development through a FY 2015/16 BASMAA Regional Project and will be completed by approximately August 2016. A selection process for consultants should then be conducted as soon as possible. The Phase I work will be part of the anticipated multi-year BASMAA regional project to assist Permittees to comply with Provision C.12.f. The BOD may wish to consider this as part of application for grant funding in conjunction with related activities.

Products: TBD after current scoping project is complete: products related to implementation framework, guidance materials, and tools for local agencies to manage PCBs-containing materials and wastes during building demolition.

Schedule: Implement during FY 2016/17 – further details TBD.

Cost (preliminary estimate):$100,000

Project partners, if any: TBD

Implementer(s): Committee: MPC, BOD &/or BASMAA PCB Workgroup_ _ Consultant: TBD

[Check/list as appropriate] Member _____ Other _____

Selection Process(es): [[1] If proposed implementer would be a consultant(s) to BASMAA, check method(s) for identifying best candidate(s) to recommend to the Board of Directors. See Policy and Procedure: *Consultant Selection and Contracting* for more information]

TBD – possible methods include:

____ Executive Director Discretion __ __Sole Source __x__ Request for Qualifications

__x__ Request for Proposal __x__ Interview

Proposer: MPC representatives of ACCWP, CCCWP, SMCWPP; SCVURPPP staff tentative support for concept Date:4/22/16

BASMAA Regional Project Profile

Project Name: IPM Partnership / *Our Water, Our World* Program XVIII

Description: In partnership with the Bay Area Pollution Prevention Group, BASMAA has been conducting the current IPM (Integrated Pest Management) Partnership / *Our Water, Our World* Program annually since FY 99-00. The Regional IPM Partnership is a collaboration among regional and local water pollution prevention agencies in nine San Francisco Bay Area counties and locally owned nurseries and hardware stores. The Partnership encourages less-toxic methods of pest prevention and control by means of a point-of-sale program called the *Our Water, Our World* Program. The Program helps 76 Phase I permittees and 23 Phase II permittees meet their respective permit requirements.

The Municipal Regional Permit requires the following:

C.9.e. Public Outreach

i. Task Description – Permittees shall undertake outreach programs to (a) encourage communities within the Permittee's jurisdiction to reduce their reliance on pesticides that threaten water quality; (b) encourage public and private landscape irrigation management that minimizes pesticide runoff; and (c) promote appropriate disposal of unused pesticides.

ii. Implementation – The Permittees shall conduct each of the following:

(1) **Point of Purchase Outreach**: The Permittees shall:

- Conduct outreach to consumers at the point of purchase;
- Provide targeted information on proper pesticide use and disposal, potential adverse impacts on water quality, and less toxic methods of pest prevention and control; and
- Participate in and provide resources for the "Our Water, Our World" program or a functionally-equivalent pesticide use reduction outreach program.

iii. Reporting – In each Annual Report, Permittees shall describe their actions taken in the three outreach categories above. Outreach conducted at the county or regional level shall be described in Annual Reports prepared at that respective level; reiteration in individual Permittee reports is discouraged. Reports shall include a brief description of outreach conducted in each of the three categories, including level of effort, messages and target audience. (The effectiveness of outreach efforts shall be evaluated only once in the Permit term, as required in Provision C.9.f.).

The Small MS4 Permit requires the following:

E.7.a.(ii)(b) and F.5.b.2.(ii)(b) Implement surveys [at least twice during the permit term] to gauge the level of awareness in target audiences and effectiveness of education tasks;

E.7.a.(ii)(c) and F.5.b.2.(ii)(c) Develop and convey a specific stormwater message that focuses on the following:

1) Local pollutants of concern
2) Target audience
3) Regional water quality issues

E.7.a.(ii)(d) and F.5.b.2.(ii)(d) Develop and disseminate appropriate educational materials to target audiences and translate into applicable languages when appropriate (e.g. the materials can utilize various media such as printed materials, billboard and mass transit advertisements, signage at select locations, stenciling at storm drain inlets, radio advertisements, television advertisements, and websites);

E.7.a.(ii)(f) and F.5.b.2.(ii)(e) Distribute the educational materials, using whichever methods and procedures determined appropriate during development of the public education strategy;

BASMAA Regional Project Profile

E.7.a.(ii)(g) and F.5.b.2.(ii)(f) Convey messages to explain the benefits of water-efficient and storm water-friendly landscaping, using existing information if available;

E.7.a.(ii)(i) and F.5.b.2.(ii)(i) Develop and convey messages specific to proper application of pesticides, herbicides, and fertilizers;

E.15.d Diazinon Total Maximum Daily Load TMDL: Conduct outreach to residents and pest control applicators on less toxic methods of pest control (requirement applies only to cities, towns and counties named in the TMDL and/or in Attachment G of the Phase II Permit);

FY: 16-17
MRP reference: C.9.e.ii.(1)
Committee task ID: Not applicable
Overseer 1: PIP Committee
Overseer 2: Not applicable
Budget: $40,000 ($10,000 from BAPPG)
Funding source(s): BASMAA; BAPPG ($10,000)
Contracting Agency(s): BASMAA
Contractor(s): Ann Joseph; Debi Tidd, Janet Cox, BIRC; Lauren Wohl; Printers

One-time_____ Multi-FY___X____
Compliance date: Annual
Profile last updated on: 5/17/16
Project Officer: Geoff Brosseau
Status: Board consideration – 5/26/16

Deliverable(s):	**Due/completed**
Updated Fact Sheets / Materials[1]	November 2016
Less-toxic products lists / Store shelf label files	December 2016
Updated Website	December 2016
List of participating stores	February 2017
Educational booth at trade shows	Ongoing
Employee trainings / Materials	Ongoing
Ask-the-Expert feature	Ongoing
Coordination – General, IPM Advocates, Chains	Ongoing
Final Report	July 2017

[1] BASMAA pays for printing of inventory and is reimbursed by agencies purchasing materials

Table 1. Key Dates to Meet the Project Timeline

Item	Date
Notice to Proceed	06/2016
Recommendations for stakeholder and peer review input process	07/2016
Meet with BASMAA Trash Committee to refine goals of monitoring program	07/2016
Draft summary of goals and detailed schedule for deliverables	08/2016
Final summary of goals and detailed schedule for deliverables	09/2016
Monitoring tool review summary and recommendations	10/2016
Recommendation for a data management system	10/2016
Draft report on selected receiving water trash monitoring tool/protocol	11/2016
Final report on selected receiving water trash monitoring tool/protocol	12/2016
Draft Plan for review by BASMAA	02/01/2017
Draft Plan for presentation to stakeholders	04/01/2017
Final Report to BASMAA for submittal to Regional Water Board	06/26/2017

Task 1: Refining Goals of Monitoring Program Plan

The objective of this task is to refine the specific goals of the receiving water monitoring program, through a stakeholder engagement process, that per the MRP Requirements, have the ability to cost-effectively answer the four key questions that form the basis of the program. Stakeholders that could be engaged in the process include Permittee representatives, environmental NGOs (who form the BASMAA Trash Committee), and technical advisors, in addition to Regional Water Board and US EPA staff.

Refining goals with respect to answering the monitoring questions may include considerations of the following:

- Prioritization of the monitoring questions in terms of allocation of resources and effort;
- In-stream monitoring versus shoreline surrogate monitoring (and/or potentially outfall monitoring);
- Capturing the representativeness of various receiving water types (small/large, riparian/channelized), watershed characteristics and sources of trash;
- Seasonal, spatial, and temporal trends;
- Statistical sampling design requirements (degree of confidence, power);
- General metrics to be measured (e.g., trash density, mass, volume, items counts and/or classifications);
- Nexus with current on-land monitoring activities; and
- Quality assurance/quality control.

An objective of this task is to evaluate how to quantify sources of trash loading to receiving waters located outside the Permittee's jurisdictions. The LWA Team will meet with the Project Management Team (PMT) and stakeholders to discuss the above considerations and the relationship to existing on-land and receiving water monitoring efforts, such as the receiving water monitoring component of BASMAA's Tracking California's Trash project (TCT). The TCT project is testing monitoring methods that measure trash concentrations and loading in receiving waters focusing on testing specific types of sampling equipment (trawls and streambed samplers) in different types of receiving waters. The project will also provide information about the time and resources needed to perform sample collection and analysis as well as provide insight into inherent challenges associated with in-stream monitoring. Such challenges include: permitting requirements, safety, and logistical challenges of deploying sampling equipment, and the potential for additional pilot studies to resolve unanswered questions.

Based on initial meetings with the PMT and stakeholders to solicit input, the LWA Team will draft a summary of goals. The goals will be presented at a stakeholder meeting and finalized based on comments from stakeholders. The deliverable will also include a detailed schedule for providing the Evaluation of Monitoring Tools, Monitoring Tools and Protocols, Data Management Plan, and Monitoring Program Plan to the stakeholders.

Meeting Assumptions:

- One initial meeting with the PMT to obtain input
- One meeting to present the 1st Draft Monitoring Program Plan Goals to the Regional Water Board and stakeholders
- One meeting to present the final Draft Monitoring Program Plan Goals to the Regional Water Board and stakeholders

Deliverables:

- Summaries of stakeholder meeting notes
- 1st Draft summary of goals of monitoring program plan for PMT and stakeholders
- Final Draft summary of goals of monitoring program plan for stakeholders
- Final summary of goals of monitoring program plan that includes a detailed schedule for deliverables including key milestones for stakeholder input

Task 2: Review & Evaluation of Existing and Potential Tools

Based on the goals developed in conjunction with the PMT under Task 1, the LWA Team will review and evaluate existing and potential tools and protocols that could be employed to meet the goals of the monitoring program and the requirements of the MRP. The review and evaluation will consist of a survey to solicit input and insight on potential tools and a subsequent review of existing and potential monitoring approaches, strategies, and protocols. Finally, the evaluation will include a review of potential tools that could be employed to make monitoring, data collection, assessment, and reporting more efficient.

It appears that the on land and MS4 related trash monitoring requirements in the MRP should be adequate to demonstrate compliance with the discharge prohibitions and receiving water limitations in the MRP. With these monitoring programs as a backstop, the receiving waters monitoring program could be developed to be more flexible and adaptable and potentially could be designed to answer a different set of monitoring questions. Considering the challenges with receiving water monitoring, it will be important to evaluate all options with respect to receiving water monitoring.

The LWA Team will use past experience to research and compile the various approaches to trash monitoring programs currently employed around the State, in addition to survey results. At a minimum, the compilation will include approaches used in San Diego, Orange County, Los Angeles, Ventura County, and the Bay Area. The exercise will include a literature review of monitoring programs developed and implemented in other states and countries. This effort will build on previous literature reviews performed to develop trash generation rates for other agencies in California. The review will consider and weight various factors including, but not necessarily limited to, permit compliance, consistency with the Trash Amendments, peer review, spatial and temporal coverage, cost, and feasibility of implementation.

The evaluation of monitoring approaches will be coupled with an evaluation of potential monitoring tools that could be utilized to ensure that monitoring, data collection, assessment, and reporting are performed as efficient as possible. The LWA Team has demonstrated experience in the development and implementation of many of California's peer-reviewed Trash Monitoring Assessment protocols, and we can leverage our in-the-field experience for the evaluation of existing or new methodologies. The list of potential tools developed through the survey and literature review will be pared down to the most feasible

tools based upon the LWA Team's experience and professional judgement, while still meeting the criteria identified below. The reduced list will then be studied in more depth in Task 3.

One option may be to adapt the currently employed rapid trash assessment protocols to a more state-of-the-art method with the following advantages. The tool(s) would include the following criteria:

- Ease of use, including training time, tools needed for implementation, requirements for technical knowledge/support (e.g., entering data via an application or other tool instead of manually writing down on forms)
- Cost (e.g., reducing the amount of time inputting data as this step would be performed in the field, and relatively low cost of development)
- Applicability to the various discharge and receiving water scenarios, community and drainage characteristics that affect the discharge of trash and its fate and effect in receiving water
- Feasibility
- Location logistics (The tool(s) could allow all data to be linked spatially, cover the entire watershed, and could be used by multiple groups)
- Trash Sources spatial and temporal representativeness for the 76 permittees under the MRP
- The tool(s) would most likely be applied by adapting a vetted trash monitoring protocol into a more tech-savvy methodology
- The tool(s) could be accessed by applications on mobile phones, provide direct input into a database, and have low overhead costs

The LWA Team will provide a complete monitoring tool review and summary. By comparing peer-reviewed Trash Monitoring and Assessment Protocols, considering the need for incorporating visual assessment, and evaluating the use of simple to operate, new technologies, the LWA Team will provide BASMAA with a series of recommendations on how to achieve low-cost, effective, and compliant assessment methodologies and tools that could be used in the many discharge and receiving water scenarios found throughout the San Francisco Bay Region. Task 2 will provide the first cut of monitoring tool options while the in-depth review and recommendations for tools will be developed in Task 3.

Meeting Assumptions:

- One initial meeting with BASMAA PMT
- One meeting with stakeholders to define deliverable
- One meeting, combined with Task 3, to discuss comments from stakeholder technical advisors

Deliverables:

- Summaries of stakeholder meeting notes
- 1st Draft Technical memorandum to PMT and stakeholders, summarizing findings and initial recommendations based on results of survey and literature review
- Final TM

Task 3: Monitoring Tool and Protocol Development

The LWA Team will facilitate a scientific peer review process to refine existing tools and/or develop new tools and protocols, and will summarize in-depth analyses and implementation options based on the outcome of Task 2 and discussions with BASMAA. If not already peer-reviewed, the LWA Team will peer-review the tools and protocols with respect to the accuracy, precision, representativeness, and ease of implementation for answering the key monitoring questions. The LWA Team will also solicit feedback from technical advisors as part of the stakeholder engagement process. During this Task, the LWA Team will develop a conceptual model for choosing the appropriate monitoring tool based on site characteristics. This model will help inform the site selection process.

Meeting Assumptions:

- One meeting, combined with Task 2, with BASMAA PMT
- One meeting with BASMAA and stakeholders to define deliverable, based on Task 2 findings, and discussions for moving forward

Deliverables:

- Summaries of stakeholder meeting notes
- 1st Draft Report to PMT and stakeholders on selected receiving water trash monitoring tools and protocols, documenting the consultant peer-review process. Draft will include a decision tree for selection of tools based on site type.
- Final Draft Report to stakeholders on selected receiving water trash monitoring tool and protocol
- Final Report on selected receiving water trash monitoring tool and protocol documenting the Consultant and technical advisor review process.

Task 4: Data Management Development

The key tenets of the LWA Team approach to successful data management and reporting are program transparency, efficiency, and accessibility for the member agencies of BASMAA. Given that BASMAA is comprised of a large, diverse group of agencies, spanning 85 cities and towns, 8 counties, and 7 special districts located in watersheds throughout the San Francisco Bay Region, the LWA Team's approach will be executed through a high level of organization and attention to detail, clear communication, and a deep understanding of the expectations and interests of all parties. The principles embodied by this approach will be a key factor in the success of not only data management and reporting tasks, but also for the entire project as a whole.

The LWA Team has significant expertise with managing and developing databases and reporting tools for stormwater and TMDL and trash-specific monitoring programs throughout California. The LWA Team has developed integrated databases with front-end protocols ensuring proper data collection and entry, as well as streamlined the incorporation of data into databases with QA/QC evaluation functions on the back end. Through these data management systems, as well as our considerable experience in the annual reporting protocols for several water quality service areas, the LWA Team has expertise in developing customized reports for our clients. Although many different data management systems exist, our experience highlights the LWA Team's unique understanding for the best practices and data management procedures necessary for the tools identified and/or developed throughout Tasks 2 and 3. The LWA Team has the capabilities and technical know-how to evaluate and make recommendations on any existing and new data management systems.

Through clear communication and organization determining the outcomes of Tasks 1-3, the LWA Team will conduct a thorough evaluation of the suitability of existing data management tools and their associated costs, and provide recommendations for their enhancement, if necessary. The LWA Team will also consider the evaluation of alternative data management systems that would fit best with the tools identified and/or developed in Tasks 2 and 3. The LWA Team will prioritize tools and their data management systems that:

- Emphasize spatial visualization
- Incorporate rigorous QA/QC
- Are cost effective
- Can be readily accessed by all member agencies of BASMAA
- Provide the BASMAA agencies and the public with accessible, interactive reports

The LWA Team will work closely with BASMAA, technical advisors, and stakeholders to ensure that the expectations and interests of BASMAA's member agencies are met.

Meeting Assumptions:

- One initial meeting with BASMAA PMT
- One meeting with BASMAA and stakeholders to define deliverable, obtain input and discuss existing data management systems

Deliverables:

- Summaries of stakeholder meeting notes
- 1st Draft Technical Memorandum to PMT on evaluation of data management systems and their suitability, for both existing and alternative systems.
- Final Technical Memorandum, for use in Monitoring Program Plan, on recommended data management systems and their suitability, for both existing and alternative systems.

Task 5: Stakeholder and Peer Review Input Process

As a third party, the LWA Team will be able to effectively coordinate between all stakeholders by acting as a sole point of contact for all questions and comments, mitigate any discrepancies between stakeholders, provide California-wide and region-specific insight and analysis and facilitate timely completion of the required deliverables. The LWA Team has an established record of accomplishment with collaborative team-based and stakeholder projects and working cooperatively with other firms to meet project objectives and goals. Hallmarks of our approach include bringing flexibility to the project plan while managing the project to meet the stated end goals; integrating multi-disciplinary experts into a cohesive working team; and providing an adaptive atmosphere that encourages interaction and communication amongst the Project Team and stakeholders.

Due to the concerns surrounding receiving water trash monitoring requirements, the LWA Team believes it will be important to involve stakeholders and peer reviewers early in the Monitoring Program Plan development process. The LWA Team will obtain the stakeholder list from the BASMAA Trash Committee at the first meeting in July 2016 and engage the group soon after. There are several deliverables proposed and stakeholder involvement as well as peer review of key deliverables will be important. The stakeholder and peer review input process will be prepared early in the project so that they can be involved each step along the way to producing the Final Monitoring Program Plan. The process will include schedules and timelines for meeting and review of documents, guidance for the peer reviewers, conflict resolution techniques, and meeting facilitation strategies.

Deliverables:

- Recommendations for stakeholder and peer review input process, including a schedule for stakeholder and peer review of documents.

Task 6: Draft and Final Monitoring Program Plan

The LWA Team understands the timeline from completing the final report to developing and testing a proposed receiving water monitoring program, as presented in the MRP. All of the above tasks are planned with this timeline in mind, such that the necessary pieces (e.g. tools and protocols, data management plan) will be developed and peer reviewed in time for incorporation into the Draft and Final Monitoring Program Plan. The LWA Team has developed numerous sampling protocols for trash. Trash sampling protocols developed by LWA include those for quantitative sampling (pieces, weight, volume) and qualitative sampling (types of trash, visual assessments). The LWA Team will rely on this experience to develop sampling protocols that strive to answer the questions posed by the MRP, as well as meet the needs of the BASMAA stakeholders.

The LWA Team will develop sampling protocols based on the characteristics of the various site types and will develop the sampling protocols to be straightforward and easy to follow. This will ensure consistency across sampling events and locations while still resulting in substantive and credible evidence for MRP

Section C.10.b.v questions. In addition, the Monitoring Program Plan will discuss the appropriate tools and protocols, as well as how the results will be verified (field logbook, photo documentation, etc.).

The LWA Team will combine the information gained from coordinating with the BASMAA Trash Committee and stakeholders, and from the sampling protocols, to construct a Monitoring Program Plan which meets the nine requirements outlined in the RFP:

1. Project work plan with milestones and schedules.
2. Description of the tools and protocols;
3. Description of discharge and receiving water scenarios, which will be considered, that accounts for the various receiving waters and watershed, community, and drainage characteristics within Permittees' jurisdictions that affect the discharge of trash and its fate and effect in receiving water(s);
4. Description of factors, in addition to those in C.10.b.v.a.(ii), that will be considered and evaluated to determine scenarios and spatial and temporal representativeness;
5. Identification of sites, representative of all the Permittees and discharge and receiving water scenarios, that will be monitored during this permit term;
6. Development of a system to manage and access monitoring results;
7. Opportunity for input and participation by interested parties;
8. Scientific peer review of the tools and protocols and testing results; and
9. Schedule for development and testing; with monitoring at representative sites starting no later than October 30, 2017.

The Plan will contain all the necessary information to conduct the various types of sampling. The LWA Team will develop a Draft Sampling and Analysis Plan for review by the BASMAA Trash Committee and stakeholders, as well as a Final Sampling Analysis Plan incorporating requested changes.

Meeting Assumptions:

- One meeting with stakeholder technical advisors to obtain input and discuss Draft Monitoring Program Plan
- One meeting to discuss comments from stakeholder technical advisors

Deliverables:

- Summaries of stakeholder meeting notes
- 1st Draft Monitoring Program Plan for review by BASMAA (2/1/17)
- 2nd Draft Monitoring Program Plan for presentation to stakeholders (4/1/17)
- Final Monitoring Program Plan

Task 7: Project Management

LWA's overall approach for project management and successfully completing the project is based on:

- Providing the necessary communication mechanisms and check-in points with the client to ensure the project is meeting expectations
- Completing tasks on schedule
- Completing the project within the agreed budget

We have implemented this approach on multiple similar projects, successfully meeting our clients' needs and delivering high-quality products, regardless of the project's size and complexity. ***The LWA Team has available and qualified staff as well as the management efficiency and flexibility to meet the needs of BASMAA and this project.*** The basic components of the LWA Team's approach for managing and completing the project include the following elements:

Project Management. The LWA Project Manager (LWA PM) will provide overall management and coordination for task assignments and work closely with the Task Leads and Strategic Advisor to ensure that the work meets overall project objectives and that it is completed on schedule and within budget. The LWA PM will maintain a master schedule, with the due dates and budgets for all tasks under the project to monitor progress. LWA will promptly notify the BASMAA Project Manager (BASMAA PM) of any changes in project progress.

Coordination & Communication. LWA will maintain communication with the BASMAA PM, the BASMAA Project Management Team, and the consultant team to ensure that all parties have a clear understanding of the project and that work is focused on achieving project objectives. The LWA PM will serve as the primary point of contact with the BASMAA PM and work with BASMAA PM to identify key lines of communication. In coordination with the BASMAA PM, the LWA PM will arrange meetings at critical check-in points to identify progress as well as upcoming tasks. The LWA PM will also coordinate with the BASMAA PM to attend BASMAA Trash Committee and/or BASMAA Board of Directors meetings as needed. The LWA PM will coordinate the consultant team to provide timely summaries and updates to the BASMAA PM and develop briefings for BASMAA Trash Committee and/or BASMAA Board of Directors meetings.

5.0 Cost Proposal

The LWA Team's cost proposal (**Table 3**) for the tasks to include cost per tasks, labor resources, estimated hours, assumptions and contingency amounts is provided below. We have also included a fee schedule (**Table 4**) with hourly rates anticipated for the project duration.

The LWA Team used the following general assumptions to develop the estimate:

- The LWA Team will present work products at BASMAA meetings, respond to questions and comments, and facilitate communication and delivery of effective work products
- The cost estimate is based on our understanding of the work effort necessary for a successful Receiving Water Monitoring Program Plan
- The estimated costs are contingent on stated assumptions, and may need to be adjusted after further discussion with BASMAA to refine the scope
- The overall budget will not exceed any authorized budgets

Table 3. Cost Proposal

Task		Task Lead	LWA									Geosyntec							Task Cost[2]
			Sandy Mathews	Kristine Corneillie	Paul Hartman	Reni Keane-Dengel	Elizabeth Y / Antonia E-O	Michelle Benson	Total Hours	Direct Costs[1]	LWA Sub-Total	Lisa Austin	Donna Bodine	Andy Torkelson	Project Admin	Total Hours	Direct Costs[1]	Geosyntec Sub-Total	
			Project Advisor	Project Manager	Senior Scientist	Project Staff II-B	Project Staff I-A	Contract Admin				Principal	Senior Scientist	Senior Staff Engineer					
			$240	$215	$215	$170	$155	$140				$248	$222	$149	$76				
1	**Refining Goals of Monitoring Program Plan**	**Geosyntec**																	**$ 27,863**
1.1	Meetings (2)		6	8					14	$ 150	**$ 3,310**		16	8		24	$ 300	**$ 5,195**	***$ 9,025***
1.2	1st Draft Goals			2					2		**$ 430**	4	30	16		50		**$ 10,337**	***$ 11,801***
1.4	Draft Final Goals			2					2		**$ 430**	2	8	4		14		**$ 2,954**	***$ 3,679***
1.5	Final Monitoroing Program Plan Goals		1	2					3		**$ 670**		8	4		12		**$ 2,443**	***$ 3,357***
2	**Review & Evaluation of Existing and Potential Tools**	**LWA**																	**$ 15,998**
2.1	Meetings (1)			4	6				10	$ 100	**$ 2,250**		8			8	$ 100	**$ 1,929**	***$ 4,372***
2.2	Evaluation of Current and Potential Monitoring Approaches					8			8		**$ 1,360**					0		**$ -**	***$ 1,360***
2.3	Evaluation of Potential Tools						12		12		**$ 1,860**					0		**$ -**	***$ 1,860***
2.4	1st Draft TM			2	2	12	12		28		**$ 4,760**		2			2		**$ 457**	***$ 5,263***
2.6	Final TM		2	2	2	4	4		14		**$ 2,640**		2			2		**$ 457**	***$ 3,143***
3	**Monitoring Tool and Protocol Development**	**Geosyntec**																	**$ 38,820**
3.1	Meetings (1)			4					4	$ 100	**$ 960**		4	4		8	$ 200	**$ 1,729**	***$ 2,861***
3.2	1st Draft including Consultant Peer Review			2					2		**$ 430**	4	50	50		104		**$ 20,128**	***$ 22,571***
3.4	Final Draft			2					2		**$ 430**	1	20	15		36		**$ 7,131**	***$ 8,274***
3.5	Final Trash Monitoring Tool and Protocol		2	2					4		**$ 910**		10	10		20		**$ 3,821**	***$ 5,113***
4	**Data Management Development**	**LWA**																	**$ 14,193**
4.1	Meetings (1)			4			8		12	$ 150	**$ 2,250**					0		**$ -**	***$ 2,250***
4.2	Evaluation of Data Management Systems				2	8	16		26		**$ 4,270**		1			1		**$ 222**	***$ 4,514***
4.3	1st Draft TM			4	2	6	20		32		**$ 5,410**					0		**$ -**	***$ 5,410***
4.6	Final TM		2	2			4		8		**$ 1,530**		2			2		**$ 444**	***$ 2,018***
5	**Stakeholder and Peer Review Input Process**	**LWA**																	**$ 6,120**
5.1	Development of recommendations for input process		4	24					28		**$ 6,120**					0		**$ -**	***$ 6,120***
6	**Draft and Final Monitoring Program Plan**	**LWA**																	**$ 23,738**
6.1	1st Draft Monitoring Program Plan		4	24		8	28		64		**$ 11,820**		2			2		**$ 444**	***$ 12,308***
6.2	Meetings (1)			4					4	$ 100	**$ 960**					0		**$ -**	***$ 960***
6.3	2nd Draft Monitoring Program Plan		2	8		4	16		30		**$ 5,360**					0		**$ -**	***$ 5,360***
6.4	Final Monitoroing Program Plan		2	8	2		16		28		**$ 5,110**					0		**$ -**	***$ 5,110***
7	**Project Mangement**	**LWA**																	**$ 23,156**
7.1	Communication and Coordination		2	12				18	32		**$ 5,580**	4	12		12	28		**$ 4,705**	***$ 10,756***
7.2	Meetings		2	46	8				56	$ 200	**$ 12,290**					0	$ 100	**$ 100**	***$ 12,400***
	Totals		**29**	**168**	**24**	**50**	**136**	**18**	**425**	**$ 800**	**$ 81,140**	**15**	**175**	**111**	**12**	**313**	**$ 700**	**$ 62,497**	**$ 149,887**

Notes:
1 Direct costs include travel expenses to meetings
2 Task costs include 10% markup for subconsultant

BASMAA Projects – FY 17-18

	BASMAA Project	Project Budget ~	SMCWPPP Share ^
	Board of Directors		
1	Pesticides Toxicity - Regulatory Modernization (C.9.f)	$32,000	$4,014
	Monitoring / POCs Committee		
2	POC Monitoring for Source Identification and Management Action Effectiveness (C.8.f / C.12.e)	$280,000	$66,595
3	On-Call Services for Maintenance of RMC Monitoring Database (C.8.b/h)	$10,000	$1,365
4	Regional Monitoring Coalition (RMC) 5-year Bioassessment Report (C.8.h)	$50,000	$6,825
5	Managing PCBs-Containing Materials and Wastes during Building Demolition - Phase I: Developing an Implementation Framework, Guidance Materials, and Tools for Permittees (C.12.f)	$241,200*	$32,924
	Public Information/Participation Committee		
6	IPM Partnership Program XIX (OWOW) (C.9.e.ii.(1) / E.7.a)	$50,000	$5,018
	Totals	$677,200	$116,742

~ Tentatively adopted project list / budget subject to final approval in April 2017.
^ Tentative amounts subject to relatively small adjustments based on State Department of Finance E.1 Report released May 1 each year and changes in other factors (see ~ and *).
* Pending or Placeholder budget subject to revision based on results of FY 16-17 work.

B A S M A A

Project Profile

Project Name: Pesticides Toxicity - Regulatory Modernization

Description: The purpose of this project (in the form of a contribution to CASQA) is to:

- Convince California and Federal pesticide regulators to take additional actions as necessary to end pyrethroid-related toxicity in waters and sediments and to prevent future pesticide-related toxicity from emerging products like fipronil, imidacloprid, and indoxacarb.
- Complete the process of changing the way pesticide regulatory processes are implemented to ensure that pesticide regulators prevent toxicity when pesticides are registered or periodically reviewed.
- Oppose California and Federal water regulatory actions that make permittees rather than pesticide regulators responsible for pesticide-caused water pollution.

The attached "End Goals" document from the Pesticides Subcommittee provides additional detail on the purpose and indicators of success for this project. Activities specific to 2018 are described below.

Background

Pyrethroids and fipronil are present at problem levels in urban waters throughout California. Treating urban runoff to achieve compliance is infeasible and requirements to do so could cost billions of dollars statewide. State law precludes local regulation of pesticide sales or use. Educational efforts, while beneficial for other reasons, have proven ineffective in reducing pesticide levels in urban runoff.

Since 2004, CASQA has pursued a strategy, along with key water board staff, to influence state and federal agencies to improve regulation of pesticides as the long-term solution to mitigate and prevent water quality problems in urban areas. From 2003-2010 most activities were paid for by state grant funds (CASQA funded only CASQA-specific items). Due to changes in State Water Board grants—and after extensive research into other options—the funding of this effort was transitioned to dischargers. Although BASMAA and individual permittees provide significant levels of funding, CASQA's continued support for this effort is crucial, particularly in recognition that the project outcomes have statewide benefit. At this point, maintaining the significant momentum we have obtained in recent years will maximize our chance of achieving our end goals in a couple of years.

Scope

Based on our success with our 2013 & 2014 focus on DPR, the plan for 2018 is to continue to focus more on US EPA Office of Pesticide Program (OPP), where we have actions we need to push forward (OPP/OW common effects assessment methodology, more accurate urban modeling, other process problems), and where we expect actions on our highest priority pesticides. Some of this work will take advantage of DPR tools developed by DPR. A second focus for 2018 is Water Board statewide pesticides planning leading to an envisioned statewide Plan amendment (STORMS Project 6a), which we expect to be completed in 2018.

Key activities are outlined in the bullets below.

- *Continue collaboration with DPR to address near-term regulatory concerns, while seeking US EPA OPP and OW actions to reduce inconsistencies:*
  - Obtain DPR action on fipronil water pollution.
  - Ensure DPR enforces mitigation measures for pyrethroids and adopts additional measures if necessary.
  - Ensure the state conducts surveillance monitoring to evaluate pyrethroids (and fipronil) mitigation effectiveness.
  - Encourage EPA to develop capacity to implement pyrethroids and fipronil mitigation measures, in case necessary mitigation cannot be implemented entirely by DPR.
- *Seek long-term changes in the pesticide regulatory structure:*
  - Seek procedure changes such that EPA and DPR avoid approving new pesticides that cause urban water pollution.
  - Encourage EPA to develop robust urban surface water risk assessment procedures for pesticide reviews.
    - Focus on priority pesticides, particularly the pyrethroid family, fipronil, and imidacloprid, for which there will be public input opportunities.
    - Focus on completing effort to improve OPP urban runoff modeling procedures and renew efforts regarding consistency with OW regarding effects assessment and risk assessment timeframes.
  - Work toward obtaining a statewide management approach for pesticides that is adopted by the State Water Board, and formally recognizes the need to rely on DPR and OPP authority as the primary means to prevent and mitigate water quality impacts by pesticides.
  - Seek restructuring of California's urban surface water pesticides monitoring to increase its effectiveness and improve coordination.

FY: 17-18 One-time_____ multi-FY___X____
MRP reference: C.9.f (MRP 2.0) Compliance date: Ongoing
Committee task ID: Not applicable Profile last updated on: 9/15/16
Overseer 1: Board of Directors Project Officer: Geoff Brosseau
Overseer 2: CASQA Pesticides Subcommittee[1]
Budget: $32,000 (Others – CASQA; San Diego; Sacramento; Riverside; Santa Maria) **Status: BASMAA Board of Directors consideration**
Funding source(s): ACCWP, CCWP, FSURMP, SMCWPPP, SCVURPPP, VSFCD
Contracting Agency(s): CASQA
Contractor(s): TDC Environmental, LLC; Armand Ruby Consulting; Stephanie Hughes

Deliverable(s):	**Due/completed**
Written comment letters	Ongoing
Technical reports	Ongoing
Talking points for letters and meetings	Ongoing
Regulatory updates	Ongoing
Regulatory action plans	Monthly
Annual report	July 2018

[1] The CASQA Pesticides Subcommittee manages BASMAA's and others' contributions to CASQA on a day-to-day basis

B A S M A A

Project Concept

2016 Board of Directors Priorities addressed:

- Pollutants of Concern (POC) Monitoring for Source Identification and Management Action Effectiveness (C.8.f.)
- Evaluate PCBs Presence in Caulks/Sealants in Storm Drain and Roadway Infrastructure in Public Rights-of-Way (C.12.e.)

Title: POC Monitoring for Source Identification and Management Action Effectiveness in Accordance with MRP Provisions C.8.f. and C.12.e.

Purpose: The purpose of this regional project is to address two priority needs as follows:

Development and implementation of a monitoring design and study addressing: 1) Pollutants of Concern (POC) Monitoring Priority #1 "Source Identification" focused on evaluating PCBs presence in caulks/sealants used in storm drain or roadway infrastructure in public rights-of-way consistent with Provision C.12.e.; and, 2) POC Monitoring Priority #3 "Management Action Effectiveness" focused on monitoring the effectiveness of specific management actions in reducing or avoiding mercury and PCBs in MS4 discharges.

Background:

Provision C.8.f. requires that POC monitoring be directed towards addressing the following five priority management information needs:

1. Source Identification - identifying which sources or watershed source areas provide the greatest opportunities for reductions of POCs in urban stormwater runoff;
2. Contributions to Bay Impairment - identifying which watershed source areas contribute most to the impairment of San Francisco Bay beneficial uses (due to source intensity and sensitivity of discharge location);
3. Management Action Effectiveness - providing support for planning future management actions or evaluating the effectiveness or impacts of existing management actions;
4. Loads and Status - providing information on POC loads, concentrations, and presence in local tributaries or urban stormwater discharges; and
5. Trends - evaluating trends in POC loading to the Bay and POC concentrations in urban stormwater discharges or local tributaries over time.

The focus of this regional project is on development and implementation of a monitoring design and study addressing monitoring priorities #1 and #3 above as outlined below:

Monitoring Priority #1 "Source Identification"

Provision C.8.f outlines the following monitoring methods to identify watershed sources of POCs:

- Collection and analysis of POCs on sediments in urban stormwater runoff that are transported through MS4s or receiving waters during stormwater runoff events;
- Collection and analysis of POCs on bedded sediments deposited in MS4s or receiving waters;
- Collection and analysis of POCs in stormwater runoff or bedded sediments on source area properties (e.g. private property); or,
- Other monitoring methods designed to identify specific sources or uses of POCs (e.g., caulk in roadways or building materials) or watershed source areas.

Consistent with monitoring priority #1, Provision C.12.e. requires Permittees to "Evaluate PCBs Presence in Caulks/Sealants Used in Storm Drain or Roadway Infrastructure in Public Rights-of-Way" by collecting samples of caulk and other sealants used in storm drains and between concrete curbs and street pavement. At least 20 composite samples should be collected throughout the area covered by the MRP 2.0, focusing on structures installed or rehabilitated during the 1970's when PCBs were most likely present in the caulks and sealants.

This evaluation of PCBs presence in caulk/sealants in the storm drain and roadway infrastructure consistent with Provision C.12.e.ii partially addresses monitoring priority #1. The monitoring design for this work would be coordinated and included in the monitoring design addressing monitoring priority #3 (discussed below). The monitoring design documents should be finalized by April 2017 to instruct field sampling to be initiated in Fiscal Year 2017/18. Permittees must report on the results of the sampling in the 2018 Annual Report.

Monitoring Priority #3 "Management Action Effectiveness"

Monitoring priority #3 is intended to provide support for future or existing management actions. Monitoring methods include those described for monitoring priority #1 above with a focus on monitoring the effectiveness of specific management actions in reducing or avoiding POCs in MS4 discharges. Specifically, Provision C.8.f requires each Program to collect at least eight (8) samples for monitoring priority #3 by Year 4 of the permit (2019). This regional project would support the development and implementation of a regional monitoring design and study that would coordinate and focus this monitoring effort to gather data needed to support Provisions C.11 (mercury) and C.12 (PCBs) load reduction accounting / Reasonable Assurance Analysis (RAA) needs. Potential data gaps that could be addressed via a coordinated monitoring study design may include:

- Mercury/PCBs removal in treatment control measures that were or will be constructed as part of the Clean Watersheds for a Clean Bay (CW4CB) grant project. Some of the pilot projects that were not constructed in time for monitoring as part of CW4CB grant include treatment control measures that may be desirable for green infrastructure (GI)

retrofit (e.g., permeable pavement over Silva Cells) and mercury and PCBs removal data is needed for these types of treatment measures. In addition, more data could be collected on the projects that were monitored (mostly green street bioretention-type retrofit projects, but also full trash capture devices) to bolster the mercury and PCBs removal assumptions that will be used for the load reduction accounting / RAA.

- Mercury and PCBs load reductions associated with managing illegal dumping or other miscellaneous control measures.

These and other data gaps will become more evident as the Interim Accounting Report is finalized; the CW4CB Final Report is drafted, with input from the CW4CB Technical Advisory Committee; and, when BASMAA begins to formulate an approach to meeting the MRP requirements for the RAA in FY 16-17. This is not a final list of data needs and the monitoring study design will be directed by the BASMAA Monitoring and Pollutants of Concern Committee (MPC) and Board of Directors (BOD) based on technical considerations and policy decisions. The monitoring study design will be used to conduct sampling in WY 2018.

Scope of Work:

A preliminary scope of work follows. Consultant would provide drafts of all major project documents to BASMAA for review and comment and then address the comments.

Phase I – Development of Monitoring Study Design, and Cost Estimate for Associated Field Monitoring and Laboratory Analysis

- **Task 1.** Consultant would prepare a draft and final monitoring study design addressing the monitoring needs and goals outlined above for monitoring priorities #1 and #3. The monitoring study design would describe the general objectives and rationale for sampling design consistent with direction from the BASMAA MPC and BOD. The consultant should review readily available relevant reports and other information (e.g., regarding types of materials and locations where PCBs have been found historically in infrastructure) to inform the portion of the study design addressing PCBs in caulks/sealants.

- **Task 2.** Consultant would develop a draft and final Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP) that reflect the overall goals and objectives of the monitoring study design and are consistent with the following:

  SAP will describe the general objectives and a rationale for sampling design consistent with direction from the MPC and BASMAA Project Manager. Categories of sampling locations will be identified along with a set of criteria or parameters. The MPC and Project Manager will provide example SAPs from other PCB projects to illustrate desired document format and organization. Sample collection methods will be described, based to those in the Taking Action for Clean Water - PCBs in Caulk Project Report:

"Estimated Stock in Currently Standing Buildings and Releases to Stormwater during Renovation and Demolition"(available at http://www.sfestuary.org/wp-content/uploads/2013/01/1_FinalPCBcaulkreport.pdf) and in the CW4CB SAP

QAPP contents and format should be prepared to provide data comparability with the Surface Water Ambient Monitoring Program (SWAMP). Minimum data quality shall be consistent with the latest version of the SWAMP Quality Assurance Project Plan (QAPP) for applicable parameters, including data quality objectives, field and laboratory blanks, field duplicates, laboratory spikes, and clean techniques, using the most recent SWAMP Standard Operating Procedures. The QAPP should, as much as practicable, be consistent with applicable language or methods from other relevant PCB and caulk sampling projects such as the Taking Action for Clean Water - PCBs in Caulk Project (managed by San Francisco Estuary Partnership) and from other relevant BMP effectiveness monitoring projects such as CW4CB. The QAPPs from these projects will be provided by the BASMAA Project Manager.

- **Task 3.** Consultant would prepare a cost estimate for implementation of field sampling activities, and laboratory analysis. The cost estimate would include, but would not be limited to, costs associated with the specific monitoring projects and locations. This information would be reviewed and used to determine the final monitoring design, SAP and QAPP.

Phase II – Field Monitoring and Laboratory Analysis

- **Task 4.** Consultant would review and coordinate field sampling procedures with participating Permittees, and the BASMAA's Project Manager. This would include, but would not be limited to, confirming field monitoring locations and access, schedules, and planned traffic and safety precautions.

- **Task 5.** Consultant would collect and transport samples to the laboratory in accordance with the monitoring design and SAP/QAPP.

Phase III - Data Analysis and Preparation of Summary Reports

- **Task 6.** Consultant would analyze monitoring data and prepare draft and final study summary report evaluating PCBs presence in caulks/sealants used in storm drain or roadway infrastructure in public rights-of-way would be prepared for approval by BASMAA MPC, Permittees and then the BASMAA BOD, and submitted to the Water Board with the 2018 Annual Report. [Report would also be referenced in the October 2018 POC Monitoring Reports and March 2019 Urban Creeks Monitoring Report.]

- **Task 7.** Consultant would analyze monitoring data and prepare draft and final study summary report, which would be in a format that is useable for control measure planning and load reduction accounting / RAA, on monitoring the effectiveness of specific

management actions in reducing or avoiding mercury and PCBs discharges in MS4 discharges. The report would be prepared for approval by the BASMAA MPC, Permittees, and then the BASMAA BOD, and submitted to the Water Board with the March 2019 Urban Creeks Monitoring Report. [This report would be used to inform preparation of the RAA due to the Water Board with the 2020 Annual Report.]

Project Deliverables and Deadlines and Cost Estimates:

Task Number	Deliverables	Deadlines
1, 2, & 3	Draft Monitoring Study Design, SAP/QAPP, and Cost Estimates	March 2017
1, 2, & 3	Final Monitoring Study Design, SAP/QAPP and Cost Estimates	May 2017
4 & 5	Field Monitoring & Laboratory Analysis	March 2018
6	Draft Summary Report (Monitoring Priority #1)	May 2018
6	Final Summary Report (Monitoring Priority #1)	July 2018
7	Draft Summary Report (Monitoring Priority #3)	October 2018
7	Final Summary Report (Monitoring Priority #3)	December 2018

Task Number	Deliverables	Cost Estimate		
		FY 16/17	FY 17/18	FY 18/19
1, 2 & 3	Draft and Final Monitoring Study Design, SAP/QAPP, and Cost Estimate	$65,000		
4 & 5	Field Monitoring & Laboratory Analysis		$250,000	
6	Draft & Final Summary Report (PCBs in infrastructure)		$30,000	
7	Draft & Final Summary Report (BMP effectiveness)			$40,000
	Total	$65,000	$280,000	$40,000

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Project partners, if any: None.

Implementer(s): Committee(s): MPC Consultant: TBD via selection

[Check/list as appropriate] Member _____ Other _____

Selection Process(es): [[1] If proposed implementer would be a consultant(s) to BASMAA, check method(s) for identifying best candidate(s) to recommend to the Board of Directors. See Policy and Procedure: *Consultant Selection and Contracting* for more information]

____ Executive Director Discretion ____Sole Source ____ Request for Qualifications

__X__ Request for Proposal ____ Interview

Proposer: MPC representatives

Date: 9/15/2016

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Project Concept for BOD Review

2016 Board of Directors Priorities addressed: Ongoing Maintenance of Regional Monitoring Database

Title: On-call Services for Maintenance of RMC Monitoring Database

Purpose: To provide ongoing information management services related to the RMC Monitoring Database on an as needed basis to assist in compliance with several C.8 provisions in MRP 2.0.

Background: In 2010, Regional Project RMC 3e developed the RMC Monitoring Database to store and manage SWAMP-comparable data collected in compliance with Provision C.8.c of MRP 1.0 (now Provision C.8.d of MRP 2.0). Data is entered and exported using Excel Templates that contain standardized nomenclature or look up lists. Periodically, the sampling protocols change and/or the database users desire new reporting products that require changes to the RMC database and Excel Import/Export Templates. Furthermore, RMC database users often have questions about the database and how to use the Excel Templates. Regional Project RMC 3e included budget to provide ongoing, as-needed database management, communications, and technical assistance to the RMC; however, the budget has since been exhausted.

As an ongoing related task (Task RMC 3g), funded outside of BASMAA by SCVURPPP and SMCWPPP at a level comparable to Regional Project RMC 3c ($14,000 annually), EOA conducts several in-kind services. These include: close technical database assistance to RMC programs, annual compilation of RMC program Creek Status data into one database, serving as the link between the RMC and the CEDEN Regional data node (SFEI), and management of the Creek Status Probabilistic Monitoring design and Site Evaluation process.

In FY 15-16, Regional Project RMC Task 6a expanded the database to store POC Monitoring data collected per Provision C.8.e of MRP 1.0 and C.8.f of MRP 2.0. EOA's in-kind contribution during FY15-16 significantly exceeded $14,000 due to an increase in technical database assistance needed by RMC programs and a substantial expansion of the database to include POC monitoring data.

This ongoing project was funded at the same level in FY 2016/17.

Scope: This project will provide a timely and efficient means of making updates to the RMC Monitoring Database and related Excel Templates and providing technical assistance to RMC database users, on an ongoing as-needed basis and as authorized by the BASMAA Project Manager. Work will be conducted by EOA and Dan Stern Database Systems. Example tasks are listed below and will be determined by the MPC:

- Update the database and Excel Import/Export Templates to be consistent with the SWAMP on-line data checker, as needed.

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- Respond to questions from RMC database users about the new POC monitoring element added through RMC Task 6a.
- Provide ongoing technical programming assistance for RMC database users, as needed. This task includes technical work by Dan Stern Database Systems and oversight by EOA.
- Conduct ongoing testing of the RMC database and identify future improvements.
- This scope does not include the ongoing Creek Status Monitoring services that performed by EOA and are funded by SCVURPPP and SMCWPPP for Task RMC 3g.

Products: Ongoing as-needed services, within provided budget.

Schedule: July 2017 – June 2018 (ongoing)

Cost (estimate): $10,000

Project partners, if any: none

Implementer(s): Committee(s): MPC Consultants: EOA ($5,000) and Dan Stern Database Systems ($5,000)

[Check/list as appropriate] Member _____ Other _____

Selection Process(es): [[1] If proposed implementer would be a consultant(s) to BASMAA, check method(s) for identifying best candidate(s) to recommend to the Board of Directors. See Policy and Procedure: *Consultant Selection and Contracting* for more information]

____ Executive Director Discretion __X__Sole Source ____ Request for Qualifications

____ Request for Proposal ____ Interview

The MPC recommends continuing to contract with EOA and Dan Stern Database Systems to perform this work. The EOA/Dan Stern Database Systems team provides the unique experience of already having performed this project in FY 2016/17 and of having created, updated, and managed the RMC Monitoring Database.

Proposer: MPC _____ **Date: 9/9/16**

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Draft Project Concept for MPC Review

FY 2017-18 Board of Directors Priorities addressed:

- Reporting of Creek Status Monitoring (Bioassessment) Results and Conclusions drawn from the first 5 years of bioassessment monitoring under the Regional Monitoring Coalition.
- Recommendations for the redesign and optimization the RMC creek status monitoring program for the remaining term of the MRP 2.0 and in preparation of MRP 3.0.

Title: Regional Monitoring Coalition (RMC) 5-year Report

Purpose: To analyze and report on the results and conclusions drawn from the first 5 years of bioassessment monitoring under the Regional Monitoring Coalition, and develop a set of recommendations to refine and optimize the bioassessment program.

Background:

Scope: This regional project will prepare a report that analyzes bioassessment monitoring data collected during five years (2012 – 2016) by the Programs and recommends potential changes to the monitoring program. The project will also develop a Fact Sheet that presents the report findings in a format accessible to a broad audience. The project schedule will provide deliverables that can be included in the 2018 Annual Report and facilitate:

- Reduction of interpretation and reporting effort that would otherwise be needed for the Integrated Monitoring Report (IMR) due by March 2020.
- Recommendations for modifying the sampling design per provision C.8.d.i(6), which can be evaluated and refined before the IMR.

The preliminary scope of work includes:

Task 1. Compile Data. Bioassessment monitoring data collected by the Programs during Water Year (WY) 2012 through WY 2016 will be compiled. These data include benthic macroinvertebrate (BMI) results and station/watershed information used to calculate California Stream Condition Index (CSCI) scores. These data also include benthic algae results, biomass, chlorophyll a, general water quality parameters, nutrient chemistry results, and Physical Habitat (PHab) parameters collected synoptically during bioassessments. This task also includes compiling results of the site evaluations conducted by each Program, an important parameter in establishing the statistical significance of the data set.

Task 2. Calculate CSCI Scores. In 2015, SCCWRP developed the CSCI, a statewide bioassessment tool for perennial wadeable streams based on benthic macroinvertebrates. The CSCI also appears to be useful a useful tool in assessing stream condition in non-perennial streams in the Bay Area. Because the CSCI is a statewide tool, it allows for direct comparisons

among creeks located in Bay Area, which were formerly assessed using several indices (e.g., SoCal Index, NorCal Index, Contra Costa Index). Task 2 will calculate CSCI scores for all stations monitored by the Programs during WY 2012 – WY 2016 using instructions developed by SWAMP (SWAMP-SOP-2015-0004, Revision August 5, 2016). Two types of data are required to calculate the CSCI: BMI results collected in accordance with standard SWAMP protocols and environmental data generated using GIS protocols.

Task 3. Analyze and Map Data. CSCI scores and other bioassessment data will be analyzed using statistical and geographical tools. Ambient stream condition will be assessed for the entire region and on a countywide basis. Relationships between CSCI scores and other factors such as land use, PHab metrics, and water chemistry (e.g., urban/non-urban, imperviousness within 1-km radius, percent fines in stream bed, nutrient concentrations) will be explored to identify potential stressors. Tables and graphs will be developed to illustrate the relationships. Maps will be developed to show geographic relationships between CSCI scores.

Task 4. Evaluate Creek Status Monitoring Design. The current Creek Status Monitoring Program is based on a probabilistic sample design that was developed during MPR 1.0. The design includes a master list of potential sampling stations and an established protocol for evaluating whether individual stations can be sampled. Based on power analysis, approximately 30 samples is considered a statistically representative data set. By the end of WY 2016, each of the four larger RMC partners will have a statistically representative data set that could serve as a baseline for detecting trends over time. Recommendations for changes to the monitoring design and/or recommendations for a redesign process will be proposed. Recent changes to Southern California Stormwater Monitoring Coalition (SMC) Regional Watershed Monitoring Program will be evaluated and considered in Task 4.

Task 5. Prepare 5-Year Bioassessment Report. A 5-Year Bioassessment Report will be developed. The report will describe the results and findings of Tasks 1 through 3 as well as the methods and approaches used in the analyses. The report will include the recommendations for potential redesign of the monitoring program developed through Task 4. A Draft Report will be submitted for review by the RMC. After RMC edits and comments are addressed, a Final Report will be submitted to the BASMAA BOD.

Task 6. Prepare Fact Sheet. A two- to four-page Fact Sheet will be developed. The Fact Sheet will present an overview of the Creek Status Monitoring program and the results of the 5-Year Bioassessment Report. The Fact Sheet will include tables, figures, photos, maps, and narratives that present the findings in a manner that is accessible and understandable to a broad audience. A Draft Fact Sheet will be submitted for review by the RMC. After RMC edits and comments are addressed, a Final Fact Sheet will be submitted to the BASMAA BOD.

Products: This project will result in two Final deliverables that will be developed according to the anticipated schedule in the table below.

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Task Deliverable	Anticipated Deadline
Draft 5-Year Bioassessment Report	April 2018
Final 5-Year Bioassessment Report	June 2018
Draft Fact Sheet	April 2018
Final Fact Sheet	June 2018

Schedule: July 2017 – June 2018

Cost (estimate): $50,000

Project partners, if any: Water Board

Implementer(s):

- Committee(s): MPC
- Consultant: TBD

[Check/list as appropriate] Member _____ Other _____

Selection Process(es): [If proposed implementer would be a consultant(s) to BASMAA, check method(s) for identifying best candidate(s) to recommend to the Board of Directors. See Policy and Procedure: *Consultant Selection and Contracting* for more information]

____ Executive Director Discretion ___Sole Source ____ Request for Qualifications

__X_ Request for Proposal _X__ Interview

Proposed distribution of RFP or invitation to interview: At minimum, to pre-qualified firms from BASMAA list in the category "Environmental Monitoring" as of October 2015 or latest update if available. The invitee list will be included with the invitation and firms may team up and submit a joint proposal or interview request.

Proposer: MPC representatives of ACCWP, CCCWP, FSURMP, SCVURPPP and SMCWPPP tentative support for concept (non-budget commitment)

Date: 10/24/16

PCBs Material Management during Building Demolition: Outreach, Protocol, Tools, and Training

Scope of Work and Preliminary Planning Cost Estimate

PURPOSE AND NEED

With the adoption of reissued San Francisco Bay Area stormwater Municipal Regional Permit (MRP 2.0) by the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) in November 2015, the implementation of stormwater control programs for PCBs has become a high priority compliance issue for Permittees throughout the Bay Area. Management of building materials during demolition of certain buildings is an important aspect of the overall PCBs program. MRP 2.0 Provision C.12.f. requires that by July 1, 2019 Permittees develop and implement or cause to be developed and implemented an effective protocol for managing materials with PCBs concentrations of 50 ppm or greater in applicable structures at the time such structures undergo demolition, so that PCBs do not enter municipal storm drain systems.

On behalf of MRP 2.0 Permittees, the Bay Area Stormwater Management Agencies Association (BASMAA) plans to request professional consulting services for the development of a PCBs in building materials control program including necessary outreach, guidance and tools, and training. This document provides a general scope of work and preliminary planning-level cost estimate for the project. Work on the project is assumed to be spread over three fiscal years (FY). Work will start during the remainder of FY 2016-17 (assumed to be March – June 2017), the majority of the work will be conducted in FY 2017-18, and wrap-up and training will be conducted in FY 2018-19.

This project will build on extensive existing resources, which are summarized below. The most important of these are a set of materials developed in 2010-2011 by the San Francisco Estuary Partnership (SFEP) with State Water Board grant funding, called the "PCBs in Caulk Project." Current activities by BASMAA, including a PCBs in public roadway infrastructure sampling project, may provide additional materials useful for this project.

Available materials include:

- United States Environmental Protection Agency (USEPA) PCBs in Building Materials web pages, which provide background information, testing, remediation, and regulatory guidance (https://www.epa.gov/pcbs/polychlorinated-biphenyls-pcbs-building-materials)
- A preliminary model implementation process (MIP), including:
    - Proposed municipal implementation process
    - Model ordinance
    - Model staff report
    - Forms & flow charts
    - Frequently Asked Questions
    - List of obstacles, challenges and future needs identified in 2011 as needing to be addressed prior to implementation of any such process
    - Training strategy

- Summaries of existing regulatory requirements, including Task 2.3 Research Results Final Technical Memorandum, September 2010," Table 1 in the MIP report, and information on the USEPA website
- Methods to prevent PCBs release into urban runoff: Best Management Practices for Reducing PCBs in Runoff Associated with Demolition and Remodeling Projects (November 2011) and remediation guidance (USEPA website)
- PCBs in caulk sampling and analysis plans: SFEP (2010), SFEI (2011) (see http://www.sfestuary.org/taking-action-for-clean-water-pcbs-in-caulk-project/) and BASMAA (in development)

SCOPE OF WORK

The scope of work in includes efforts necessary to comply with the MRP 2.0 and to assist municipalities with the adoption and implementation of a PCBs in building materials control program. Work is divided into eight tasks, listed below, with details to describe the goals, work effort, and anticipated deliverables.

Task 1. Assemble and Review Existing Information and Update Regulatory Drivers and Requirements

Task 2. Communication and Coordination to Support Project Development

Task 3. Assessment Protocol for Prioritized PCBs-Containing Building Materials

Task 5. Update Supplemental Demolition Permit Application Materials and Process Flow Charts

Task 4. Model Ordinance Language and CEQA Document

Task 6. Outreach and Training to Support Implementation

Task 7. Tracking and Assessment

Task 8. Project Management, Communication, and Client Meetings

Task 1. Assemble and Review Existing Information and Update Regulatory Drivers and Requirements

Under this task the consultant will review the existing available project-related materials supplied by BASMAA and readily available from other reliable sources and identify changes and new information that need to be factored in to the current project, including additional materials understood to contain PCBs (materials in addition to caulk, such as mastics, paint, and coatings), and USEPA and USEPA Region 9's efforts to address PCBs in building materials.[1] Summarize new information in a brief technical memorandum that identifies any decisions needed by BASMAA prior to proceeding with the remainder of the project.

- Review project-related materials.
- Identify building materials commonly understood to contain PCBs at ≥50 ppm.

[1] For example http://www.smmusd.org/PublicNotices/Malibu.html, http://media.wix.com/ugd/561311_de09e627be9e48648494a2dccc026db2.pdf

- Contact USEPA and state and local agencies for updated information on PCBs-containing materials testing, assessment, and regulatory processes.

Deliverables:

1. Summary of new information.
2. Draft list of building materials understood to contain PCBs at ≥50 ppm and prioritized by likelihood to be exposed and released to the storm drainage system during or after the demolition process.
3. Final list of up to three PCBs-containing building materials to be addressed by the project.
4. Annotated table of regulatory drivers and relevant requirements.

Task 2. Communication and Coordination to Support Project Development

Communication and coordination with BASMAA, Permittees, and stakeholders is essential to the success of this project. Under this task the consultant will develop coordination and outreach strategy to communicate with BASMAA and stakeholders at a variety of levels during the project. The consultant will provide a single point of contact to respond to inquiries from BASMAA, Permittees, and stakeholders.

Subtask 2.1 Coordination and Engagement Strategy

The consultant will develop a written coordination and engagement strategy that lays out the approach to keeping BASMAA decision makers informed, gaining permittee support, input from the affected community, and regulatory engagement in a transparent process. **Table 1** identifies key groups should be incorporated into the strategy. The strategy should incorporate the Task 2 subtasks identified in the scope of work.

The engagement strategy will include a proposed schedule for engaging the key groups throughout the project, holding focused round table discussions, and will identify the initial outreach efforts need to identify, contact, and engage key stakeholders. The strategy will include convening a Regulatory Round Table and Industry Round Table (focus groups to meet once and provide specific feedback at the start of the project) and establishing a Technical Advisory Group (TAG) to provide technical and regulatory input to the project.

After development of the draft strategy, meet with the BASMAA Steering Committee to discuss approach. Finalize strategy based on BASMAA comments and implement the strategy.

Deliverables:

1. Written coordination and engagement strategy and schedule, draft and final.

Table 1. Summary of Key Groups in the PCBs in Building Materials Project and Assumed Communication Frequency

Group	Role	Frequency Assumed for Budget
BASMAA Board of Directors	Approves all final work products in accordance with BASMAA policies and procedures.	• 6 briefings • 2 in FY1, 3 in FY2, 1 in FY3 • see Task 8
BASMAA Steering Committee	Members selected by BASMAA Board to provide strategic direction based on BASMAA and Permittee goals and needs. Approves all draft work products prior to release to stakeholders or the public. Ideally includes higher-level Permittee representatives and as many BASMAA Board members as possible.	• 6 briefings • 2 in FY1, 3 in FY2, 1 in FY3 • see Task 8
Stakeholder Group	Larger group with members drawn from municipalities, industry[2], waste management entities, interested public, regulatory agencies (e.g., RWQCB, USEPA, DTSC, and BAAQMD), and consultants to keep informed about the project and from whom to seek feedback and information.	• 2 focused round tables (FY1) • 2 stakeholder meetings (FY2) • see Task 2.3
Technical Advisory Group	A small balanced advisory group to be formed from industry, regulatory, and Permittee representatives to provide specific review and input on project work products as they are developed, but not ultimate approval.	• 6 meetings (1 in FY1 and 5 in FY2) • see Task 2.3

Subtask 2.2 Initial Industry Stakeholder Outreach and Engagement

Engagement of industry stakeholders that do not typically engage with BASMAA or stormwater programs is important to the success of the project and will help to mitigate potential delays later in the process of ordinance adoption. To engage industry stakeholders requires an active outreach effort and sustained communication to develop relationships with key representatives.

The consultant will develop a project initiation presentation to explain MRP 2.0 requirements, summarize the project and schedule, obtain an initial understanding of stakeholder interests and questions, and invite stakeholder input via the project. The consultant will develop a list of potential groups for project initiation presentations. BASMAA will prioritize the groups for the consultant to contact to offer presentations.

Deliverables:

2. Project initiation presentation and outreach materials (flyers, email blasts).
3. List of potential groups for project initiation presentations.
4. List of key contacts and presentations made (name, organization, phone, email).

[2] In this context industry means individuals, contractors, developers, property owners, financiers, attorneys, realtors their representatives and consultants engaged or responsible for the assessment of PCBs in building materials. This list is intended to be descriptive, not exclusive.

5. Project initiation presentations to be conducted at up to eight industry meetings, workshops, or seminars.

Subtask 2.3 Implement Stakeholder and Technical Advisory Group Outreach and Engagement

Under this task the consultant will facilitate meetings with stakeholders, conduct round tables discussions, and will establish the small Technical Advisory Group (TAG) to provide input to the project. The budget provided below assumes two round table meetings at the outset of the project (one with each group), up to two stakeholder meetings, and up to six meetings of the TAG. Throughout the project the consultant will provide a single point of contact for all inquiries about the project. The consultant shall maintain a record of their key contacts.

- Conduct stakeholder outreach meetings to obtain input on draft project materials toward the goal informing the stakeholders and considering their feedback to the extent as practical while maintaining BASMAA's goals including cost-effective and timely fulfillment of its permit requirements.
- Convene and facilitate a round-table of interagency representative to discuss regulatory requirements, interests, overlapping jurisdiction, and barriers to successful program implementation.
- Convene and facilitate a round-table discussion of industry representatives to discuss current practices, industry drivers, and barriers to assessment and abatement.
- Convene and facilitate meetings of the TAG to review the prioritized list of PCBs-containing building materials developed under Task 1, the protocol for assessing prioritized PCBs-containing materials in buildings developed under Task 3, and the demolition permit materials developed under Task 5.
- Track inquiries to the point of contact.

Deliverables:

6. Table of local, state, and federal regulatory agency interested parties, with contact information.
7. Table of industry representatives with contact information.
8. Round Table agendas, materials, and meeting notes (two meetings).
9. List of TAG members and contact information.
10. TAG meetings agendas, materials, and meeting notes (up to six meetings).
11. Stakeholder outreach meetings agendas, materials, and meeting notes (up to two meetings).
12. Table of inquiries to the point of contact and responses.

Task 3. Assessment Protocol for Prioritized PCBs-Containing Building Materials

Under this task the consultant will develop a protocol for the assessment of prioritized PCBs-containing building materials prior to demolition. Current PCBs-containing material assessment practices by proactive demolition firms and property owners will be identified, reviewed, and

considered in the development of this task. Development of the protocol is to be conducted by consultant team experts, with input from the TAG under Task 2.

The consultant will draft a comprehensive protocol for the assessment of PCBs in the prioritized building materials. Development of the protocol should be informed by existing ASTM standards (e.g., ASTM E2356-14 Standard Practice for Comprehensive Building Asbestos Surveys), but would not be developed through the ASTM process. Key components of the assessment protocol include procedures for conducting a comprehensive assessment to locate, identify, sample, and perform chemical analyses to measure PCBs concentrations in building materials. The TAG (Task 2) will provide input and peer review the draft protocol.

Deliverables:

1. Summary of information describing the current state of the practice for identification of the prioritized categories of PCBs-containing building materials.
2. Present materials and obtain feedback at TAG meetings.
3. TAG subgroup agendas, materials, and meeting notes related to this task.
4. Protocol for the assessment of prioritized PCBs-containing building materials prior to demolition, draft, and final.
5. Table of TAG comments identifying any areas where consensus was not reached.

Task 4. Model Ordinance Language and CEQA Document

Under this task the consultant will develop a model municipal ordinance language, CEQA document and supporting staff reports and resolutions.

Subtask 4.1 Model Ordinance Language

Develop and model ordinance language, staff report and resolution. The starting point will be the model ordinance and staff report developed for the PCBs in Caulk Project and they will be updated based on input from BASMAA, the protocol developed in Task 3, and other new information identified in Task 1. The model ordinance language should reflect that some municipalities may choose to update an existing ordinance (e.g., stormwater, demolition) and other may choose to adopt a new ordinance.

Deliverables:

1. Model municipal ordinance language, draft and final.
2. Staff report and resolution, draft and final.

Subtask 4.2 Model CEQA Document

Develop a model CEQA document and supporting information that each jurisdiction can adapt for its use. Under this task the consultant will research and present an approach for CEQA compliance. The budget and level of effort for the CEQA document is assumed to be a Categorical Exemption or Negative Declaration. The approach will identify the level of documentation (substantial evidence) that is needed to support use of a categorical exemption or Negative Declaration

Deliverables:

3. CEQA approach strategy and justification.
4. Model CEQA document, staff report, and resolution draft and final.

Task 5. Update Supplemental Demolition Permit Application Materials and Process Flow Charts

Under this task the consultant will develop an updated template for a municipal PCBs building materials process to accompany a demolition permit application. The starting point will be the model flowcharts and forms developed for the PCBs in Caulk Project to incorporate the PCBs in building materials control program requirements that municipalities will need to verify to issue a demolition permit. The model will incorporate the steps developed in the protocol for assessing prioritized PCBs-containing materials in buildings prior to demolition (Task 3), transforming those steps into appropriate application questions and submittals. The model will also incorporate tracking and assessment information (Task 7) required by MRP 2.0.

The consultant will develop the analysis required for the establishment of a permit fee schedule by municipalities for the costs and work associated with reviewing demolition permits projects involving PCBs in building materials. Development to be coordinated with TAG under Task 2.

Deliverables:

1. Updated PCBs supplemental demolition permit application forms and applicant instructions, and updated flow charts that illustrate the process draft and final
2. Cost analysis and justification for municipalities to use to modify their existing demolition permit fee schedules.

Task 6. Outreach and Training to Support Implementation

Under this task the consultant will develop training and outreach materials. The objective of this task is to provide project information and guidance to municipal staff and outreach information to industry stakeholders on the adoption and implementation of the PCBs in building materials control program.

Subtask 6.1 Municipal Staff Informational Outreach – Ordinance and Demolition Permit

The consultant will develop outreach materials and a standard presentation to inform municipal staff following the completion of Tasks 4 and 5. The goal of this subtask is to provide municipal staff with the information and outreach tools they will need to brief other staff and managers on the ordinance and program requirements.

Deliverables:

1. Municipal outreach materials on the model ordinance and demolition permit, draft and final.

Subtask 6.2 Municipal Staff Training – Program Implementation

The consultant will develop a training strategy and schedule that identifies the municipal staff target audience and the specific knowledge, skills, and abilities to implement the program. The

starting point will be the training strategy and materials developed for the PCBs in Caulk Project and it will be updated based on input from BASMAA and the work products of Tasks 3-5.

The consultant will develop municipal staff training materials to provide the necessary Knowledge, Skills, and Abilities (KSAs) for the target audience. The training materials shall be sufficiently detailed and annotated with speaker notes such that it can be used by municipalities to train staff in the future.

The consultant will develop and present a pilot training workshop after which the training materials will be revised based on feedback and finalized. The consultant will conduct one train the trainer session for municipal staff so they may conduct the training in-house or through countywide programs. Logistics for the pilot training and train the trainer session (advertising, registration, venue, refreshments) will be managed by BASMAA.

Deliverables:

2. Municipal staff training materials, draft and final.
3. One pilot training workshop (or other appropriate training format) for municipal staff.
4. One "Train the Trainer" session for key municipal staff.

Subtask 6.3 Industry Stakeholder Outreach – Program Implementation

The consultant will develop outreach materials and a standard presentation to inform industry stakeholders including developers, planning firms, urban planning NGOs, demolition firms, property owners, property managers, and realtors regarding the PCBs in building materials control program. Materials will address the protocol for the assessment of prioritized PCBs in building materials, Demolition Permit requirements, and BMPs. The standard presentation will be developed in PowerPoint and designed to be delivered in 20 minutes with detailed speaker notes. The consultant will develop a list of regionally appropriate outreach opportunities for the 6 month period following the completion of the project. Outreach presentations will be arranged and provided by municipal and/or program staff.

Deliverables:

5. Industry outreach materials, draft and final.
6. List of outreach opportunities including contact information and dates.

Task 7. Tracking and Assessment

Under this task the consultant will develop an approach and tools for use by the municipalities individually and/or regionally to collect and assess implementation of the PCBs in building materials control program consistent with MRP 2.0. Information from this task will be incorporated into the information collection requirements in Tasks 3 and 5, and will be used to enhance field assessments of BMP implementation at demolition sites involving PCBs in building materials. The approach will be informed by parallel BASMAA projects developing RAA guidance and identification of data gaps.

The consultant will propose a long term method of managing the data collected and submitted by project proponent to facility with the goal of facilitating local and/or regional assessments of loads avoided.

Deliverables:

1. Tracking and assessment approach strategy.
2. Tracking spreadsheet to document and collate information on the number and location of buildings addressed by the PCBs in building materials control program. Data fields shall include the information required to include in GIS.
3. Standardized electronic format for submittal of data collected by project proponents.
    a. Building materials characterization data (e.g., analytic data, quantity of material disposed).
    b. Clean up characterization data (if required, analytic data).
4. List of recommended information to collect during routine construction inspections.

Task 8. Project Management, Communication, and Client Meetings

Under this task the consultant will communicate and meet with the Steering Committee, communicate with BASMAA's Project Officer, Committees, Permittees, and attend meetings with BASMAA's Board of Directors to provide status updates on the project and take input on the project. At this time the number of meetings cannot be predicted. The budget will assume up to six meetings with the BASMAA Board of Directors and six with the Steering Committee. Some meetings can be conducted via conference call. Additional meetings will be charged on a time and materials basis.

- Attend and provide briefings to BASMAA Board of Directors
- Attend and participate in Steering Committee meetings/calls
- Provide as need briefings to the BASMAA Project Officer and other communications as needed, mainly via email and telephone

Deliverables:

1. Briefings at BASMAA meeting on project status (up to six meetings).
2. Steering Committee meetings agendas, materials, and meeting notes (up to six meetings).

BUDGET

Table 2 provides a preliminary planning cost estimate that was developed to assist BASMAA in budgeting the project. The estimate was developed using a supporting budget spreadsheet that contains further details, including the estimated break down of hours and hourly rates and notes on assumptions.

Table 2. Preliminary Planning Cost Estimate

Budget Category	Fiscal Year 2016-17				Fiscal Year 2017-18				Fiscal Year 2018-19				Project Grand Total
	# of Hours	Total Labor	Direct Costs	TOTALS	# of Hours	Total Labor	Direct Costs	TOTALS	# of Hours	Total Labor	Direct Costs	TOTALS	
Task 1. Assemble and Review Existing Information and Update Regulatory Drivers and Requirements	**40**	**$8,000**	**$0**	**$8,000**	**0**	**$0**	**$0**	**$0**	**0**	**$0**	**$0**	**$0**	**$8,000**
Task 2. Communication and Coordination	**270**	**$55,000**	**$1,100**	**$56,100**	**250**	**$54,000**	**$700**	**$54,700**	**0**	**$0**	**$0**	**$0**	**$110,800**
Subtask 2.1 Coordination and Engagement Strategy	30	$7,000	$0	$7,000	0	$0	$0	$0	0	$0	$0	$0	$7,000
Subtask 2.2 Initial Industry Stakeholder Outreach and Engagement	100	$19,000	$800	$19,800	0	$0	$0	$0	0	$0	$0	$0	$19,800
Subtask 2.3 Implement Stakeholder and TAG Outreach and Engagement	140	$29,000	$300	$29,300	250	$54,000	$700	$54,700	0	$0	$0	$0	$84,000
Task 3. Assessment Protocol for Prioritized PCBs-Containing Building Materials	**170**	**$33,000**	**$100**	**$33,100**	**350**	**$64,000**	**$100**	**$64,100**	**0**	**$0**	**$0**	**$0**	**$97,200**
Task 4. Model Ordinance Language & CEQA Document	**0**	**$0**	**$0**	**$0**	**260**	**$49,000**	**$400**	**$49,400**	**0**	**$0**	**$0**	**$0**	**$49,400**
Subtask 4.1 Model Ordinance Language	0	$0	$0	$0	30	$7,000	$0	$7,000	0	$0	$0	$0	$7,000
Subtask 4.2 Model CEQA Document	0	$0	$0	$0	230	$42,000	$400	$42,400	0	$0	$0	$0	$42,400
Task 5. Update Supplemental Demolition Permit Application Materials and Flowcharts	**0**	**$0**	**$0**	**$0**	**70**	**$14,000**	**$0**	**$14,000**	**0**	**$0**	**$0**	**$0**	**$14,000**
Task 6. Outreach and Training to Support Implementation	**0**	**$0**	**$0**	**$0**	**0**	**$0**	**$0**	**$0**	**100**	**$19,000**	**$200**	**$19,200**	**$19,200**
Subtask 6.1 Municpal Staff Informational Outreach – Ordinance and Demolition Permit	0	$0	$0	$0	0	$0	$0	$0	30	$6,000	$0	$6,000	$6,000
Subtask 6.2 Municipal Staff Training – Program Implementation	0	$0	$0	$0	0	$0	$0	$0	30	$6,000	$200	$6,200	$6,200
Subtask 6.3 Industry Stakeholder Outreach Development – Program Implementation	0	$0	$0	$0	0	$0	$0	$0	40	$7,000	$0	$7,000	$7,000
Task 7. Tracking and Assessment	**0**	**$0**	**$0**	**$0**	**90**	**$18,000**	**$0**	**$18,000**	**0**	**$0**	**$0**	**$0**	**$18,000**
Task 8. Project Management, Communication, and Client Meetings	**100**	**$22,000**	**$300**	**$22,300**	**180**	**$40,000**	**$1,000**	**$41,000**	**60**	**$14,000**	**$300**	**$14,300**	**$77,600**
Grand Total:	**580**	**$118,000**	**$1,500**	**$119,500**	**1200**	**$239,000**	**$2,200**	**$241,200**	**160**	**$33,000**	**$500**	**$33,500**	**$394,200**

BASMAA Regional Project Profile

Project Name: IPM Partnership / *Our Water, Our World* Program XIX

Description: In partnership with the Bay Area Pollution Prevention Group, BASMAA has been conducting the current IPM (Integrated Pest Management) Partnership / *Our Water, Our World* Program annually since FY 99-00. The Regional IPM Partnership is a collaboration among regional and local water pollution prevention agencies in nine San Francisco Bay Area counties and locally owned nurseries and hardware stores. The Partnership encourages less-toxic methods of pest prevention and control by means of a point-of-sale program called the *Our Water, Our World* Program. The Program helps 76 Phase I permittees and 23 Phase II permittees meet their respective permit requirements.

The Municipal Regional Permit requires the following:

C.9.e. Public Outreach

i. Task Description – Permittees shall undertake outreach programs to (a) encourage communities within the Permittee's jurisdiction to reduce their reliance on pesticides that threaten water quality; (b) encourage public and private landscape irrigation management that minimizes pesticide runoff; and (c) promote appropriate disposal of unused pesticides.

ii. Implementation – The Permittees shall conduct each of the following:

(1) **Point of Purchase Outreach**: The Permittees shall:

- Conduct outreach to consumers at the point of purchase;
- Provide targeted information on proper pesticide use and disposal, potential adverse impacts on water quality, and less toxic methods of pest prevention and control; and
- Participate in and provide resources for the "Our Water, Our World" program or a functionally-equivalent pesticide use reduction outreach program.

iii. Reporting – In each Annual Report, Permittees shall describe their actions taken in the three outreach categories above. Outreach conducted at the county or regional level shall be described in Annual Reports prepared at that respective level; reiteration in individual Permittee reports is discouraged. Reports shall include a brief description of outreach conducted in each of the three categories, including level of effort, messages and target audience. (The effectiveness of outreach efforts shall be evaluated only once in the Permit term, as required in Provision C.9.f.).

The Small MS4 Permit requires the following:

E.7.a.(ii)(b) and F.5.b.2.(ii)(b) Implement surveys [at least twice during the permit term] to gauge the level of awareness in target audiences and effectiveness of education tasks;

E.7.a.(ii)(c) and F.5.b.2.(ii)(c) Develop and convey a specific stormwater message that focuses on the following:

1) Local pollutants of concern
2) Target audience
3) Regional water quality issues

E.7.a.(ii)(d) and F.5.b.2.(ii)(d) Develop and disseminate appropriate educational materials to target audiences and translate into applicable languages when appropriate (e.g. the materials can utilize various media such as printed materials, billboard and mass transit advertisements, signage at select locations, stenciling at storm drain inlets, radio advertisements, television advertisements, and websites);

E.7.a.(ii)(f) and F.5.b.2.(ii)(e) Distribute the educational materials, using whichever methods and procedures determined appropriate during development of the public education strategy;

BASMAA Regional Project Profile

E.7.a.(ii)(g) and F.5.b.2.(ii)(f) Convey messages to explain the benefits of water-efficient and storm water-friendly landscaping, using existing information if available;

E.7.a.(ii)(i) and F.5.b.2.(ii)(i) Develop and convey messages specific to proper application of pesticides, herbicides, and fertilizers;

E.15.d Diazinon Total Maximum Daily Load TMDL: Conduct outreach to residents and pest control applicators on less toxic methods of pest control (requirement applies only to cities, towns and counties named in the TMDL and/or in Attachment G of the Phase II Permit);

FY: 17-18
MRP reference: C.9.e.ii.(1)
Committee task ID: Not applicable
Overseer 1: PIP Committee
Overseer 2: Not applicable
Budget: $50,000 ($10,000 from BAPPG)
Funding source(s): BASMAA; BAPPG ($10,000)
Contracting Agency(s): BASMAA
Contractor(s): Ann Joseph; Debi Tidd, Janet Cox, BIRC; Lauren Wohl; Printers

One-time_____ Multi-FY___X____
Compliance date: Annual
Profile last updated on: 11/28/16
Project Officer: Geoff Brosseau
Status: Board consideration – 12/2/16

Deliverable(s):	**Due/completed**
Recruited / Trained IPM Advocates	Fall 2017
Updated Fact Sheets / Materials[1]	November 2017
Less-toxic products lists / Store shelf label files	December 2017
Updated Website	December 2017
List of participating stores	February 2018
Educational booth at trade shows	Ongoing
Employee trainings / Materials	Ongoing
Ask-the-Expert feature	Ongoing
Coordination – General, IPM Advocates, Chains	Ongoing
Final Report	July 2018

[1] BASMAA pays for printing of inventory and is reimbursed by agencies purchasing materials