

RMP 2013 Special Studies



2013 Special Study Budget



TOTAL AVAILABLE FOR SPECIAL STUDIES 2013	\$1,093,540
Total Proposed Studies	\$1,189,000
Remaining Balance	-\$95,460
PROPOSED PILOT AND SPECIAL STUDIES - 2013	
1. EC: PBDE Summary Report	\$35,000
2. EC: Updating RMP Emerging Contaminants Strategy	\$20,000
3. EC: Current Use Pesticide Focus Meeting	\$15,000
4. EC/EE: Linkage of In Vitro Assay Results With In Vivo End Points	\$70,000
5. EE: Developing Benthic Community Condition Indices for Mesohaline Environments	\$76,000
6. EE: Follow up to Moderate Toxicity Workshop (proposal TBD Fall 2012 after workshop - no study included in this package)	\$50,000
7. CF: Shared Modeling Proposal	\$100,000
8. STLS: Stormwater Loads Monitoring in Representative Watersheds	\$343,000
9. STLS: Develop and Update Spreadsheet Model - Year 4	\$25,000
10. STLS: Landuse/ Source Area Specific EMC Development	\$80,000
11. STLS: Management Support for Spreadsheet Model Outreach and "Land Use" Based Monitoring	\$20,000
12.1 Nutrients: Project Management	\$20,000
12.2 Nutrients: Moored Sensor Monitoring Program Development	\$200,000
12.3 Nutrients: Algal Biotoxin Monitoring	\$65,000
12.4 Nutrients: Stormwater Nutrient Measurements	\$40,000
12.5 Nutrients: Nutrient Loads and Data Gaps	\$30,000

PBDE Summary Report



- \$35,000
- ECWG reviewed and approved
- Objective: Summarize PBDE data (2002 – 2012, sediment, water, bivalve, eggs) and provide context (comparison to OEHHA and tern thresholds)
 - Work needs to be completed by March 2013

Update EC Strategy



- \$20,000
- ECWG reviewed and approved
- Objective: track new EC information and revise/update EC strategy
 - Strategy based on existing information, effects (bioassays) and occurrence (NIST work, fate modeling)
 - Gray literature (Env. Canada, Great Lakes, Baltic, etc.)
 - Journals (ES&T, SETAC, etc.)
 - Update tiered risk-management table
 - Add/remove chemicals from “unmonitored CEC list”

Current Use Pesticides



- \$15,000
- ECWG reviewed and approved
- Objective: Evaluate existing information on CUPs and organize a focus meeting with key individuals (Kuivila, Moran, Kegley, Weston, labs)
 - Number of CUPs are not being monitored
 - Recommendation from State CEC panel to monitor (bifenthrin and permethrin in surface water)

Bioassays



- Year 1 (2013) \$70,000. Year 2 (2014) pending acceptable progress in Year 1 - \$56,000
- ECWG/EEWG reviewed – concerns about timeline/research orientation
- Objective: to develop a tool to identify CECs through common modes of action
 - Recommendation of State CEC Panel report
 - Linking in vitro (cellular) to in vivo response (organism)
 - No research to date on estuarine organisms
 - ✦ Will evaluate Silversides
 - ✦ Evaluate endocrine disruptors (estrone, BPA, 4NP, and galaxolide)

Development of a Mesohaline Index



- \$75,800 (2013); \$50,000 already allocated in 2012
- EEWG reviewed and approved
- Objective: Develop and calibrate a mesohaline index for San Francisco Bay
 - Polyhaline (Central Bay) has been developed
 - No index for low salinity (mesohaline) and freshwater

Stormwater Monitoring



- 343,000
- SPLWG/ STLS: reviewed and approved
- Monitoring in 2 watersheds
 - Will monitor 6 watersheds in 2013 – Sunnyvale, Guadalupe, Lower Marsh Creek, San Leandro, Pulgas, and Richmond)

Update SS Model – Year 4



- \$25,000
- SPLWG/STLS reviewed and approved
- Objective: to develop and refine mass emissions of Hg and PCBs using single watersheds for calibration and verification
 - Inexpensive tool for estimating regional loads
 - Building upon prior tool development
 - ✦ Yr 1 – Hydrology
 - ✦ Yr 2 – Additional watersheds and preliminary Hg/PCB developed
 - ✦ Yr 3 – Cu test case for model

Land Use/ Source Specific EMC



- \$80,000
- SPLWG/STLS approved
- Objective: to generate even mean concentration data for the regional watershed spreadsheet model

Management Support for STLS



- \$20,000
- SPLWG/STLS
- Objective: Coordination and meetings regarding monitoring, EMC development and input on RWSM

Nutrients



- \$355,000
- Approved by Nutrient SAG
- Objective:
 - Install moored sensors
 - Develop Solid Phase Adsorption Tracking as a tool for monitoring HABs
 - Stormwater monitoring in 6 catchments
 - Continuing to develop storm water loads for Central and North Bay (South Bay completed in 2011)

Modeling



- \$100,000 (2013) / \$100,000 (2012)
- Endorsed by Nutrient SAG; in accordance with CFWG direction
- Objective:
 - Develop tactical plan
 - Establish model team
 - Check in with TRC/SC
 - Develop hydrodynamic/sediment transport model
 - Develop basic phytoplankton water quality model for Suisun and South Bay