

**Item 5**

**Water Board Information Needs and Positions on Redesign Proposal (12/5/2005)**

At the request of RMP committees Water Board staff have developed this table. We anticipate the RMP redesign process taking several years. In addition, we see refinements and additions to the design of the RMP based on technical or management issues as an ongoing process. Therefore, this is a work in progress.

<b>Program Element/Issue</b>	<b>Information Needs</b>	<b>Positions on redesign proposal/other issues</b>
Water chemistry	<ol style="list-style-type: none"> <li>1. Assessment of WQOs</li> <li>2. Reasonable potential analysis for permitting</li> <li>3. Spatial and temporal trends</li> </ol>	<ol style="list-style-type: none"> <li>1. In favor of eliminating dissolved organics.</li> <li>2. In favor of eliminating the “CTR” winter sampling for 2006. We are evaluating what information we need for reasonable potential analysis and permitting for winter 2007.</li> <li>3. Would like to see an analysis of whether we can cut back on sampling (sites, analytes, frequency) based on * see footnote</li> <li>4. Recommend method comparability study for organics.</li> </ol>
Sediment chemistry	<ol style="list-style-type: none"> <li>1. For use in TMDLs/modeling</li> <li>2. Spatial patterns</li> <li>3. Status of segments</li> <li>4. Track long term system response (attainment of targets) and response to short-term actions (urban runoff)</li> <li>5. Erosive and depositional areas</li> <li>6. Flux from erosive areas</li> <li>7. Recovery/degradation of depositional areas</li> <li>8. Depth of active layer</li> </ol>	<ol style="list-style-type: none"> <li>1. After the collection of 5 years of S&amp;T data with the new design we would like to see an analysis of data by SFEI to determine if we may be able to cut back on the number of sites and frequency or refine the design and still address needs #1-4.</li> <li>2. Need better information for #5-8. (High priority)</li> </ol>

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Bivalve bioaccumulation	Temporal trends, longest term dataset.	<ol style="list-style-type: none"> <li>1. In favor of eliminating the maintenance cruise.</li> <li>2. Not in favor of adding Horseshoe Bay or Yerba Buena Island to the sampling sites</li> </ol>
Sportfish bioaccumulation	<ol style="list-style-type: none"> <li>1. TMDL targets</li> <li>2. Human health exposure</li> <li>3. Potentially fish health – endocrine disruption</li> </ol>	<ol style="list-style-type: none"> <li>1. In favor of conducting sampling in 2006 but eliminating some species (shark) and increasing sample size.</li> <li>2. In favor of decreasing frequency of sampling and enlarging sample size.</li> <li>3. In favor of sampling Oakland Harbor on a less frequent sampling schedule than other sites.</li> <li>4. Would like to see if we could use these fish to evaluate potential endocrine disruption.</li> </ol>
Sediment toxicity	Assessment of potential impairment.	<p>Determining what is causing sediment toxicity is a high priority. Based on data wet weather sampling will be needed. In favor of a special study to determine:</p> <ol style="list-style-type: none"> <li>1. What may be causing sediment toxicity in Bay both contaminants and mechanisms and,</li> <li>2. If there is pyrethroid toxicity in tributaries and, if so, does it extend in to the Bay.</li> </ol>
Aquatic toxicity (Bay)	Assessment of potential impairment	In favor of conducting toxicity tests every 5 years with chronic endpoints.
Episodic toxicity	<ol style="list-style-type: none"> <li>1. Assessment of potential impairment</li> <li>2. Sources and pathways</li> </ol>	Waiting for results of RMP/PRISM study. If there is pyrethroid toxicity in tributaries, need to determine if it extends in to the Bay (see sediment toxicity, possibly merge). Possibly decrease frequency of S&T monitoring.
USGS studies	<ol style="list-style-type: none"> <li>1. Evaluation of loads from Mallard Island</li> <li>2. Useful for sediment transport model</li> <li>3. Basic water quality indicators</li> </ol>	In favor of retaining these components with possible refinements.

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Benthos	Evaluation of SQOs	First, need process including local benthic ecologists, regulators and stakeholders to evaluate benthic indicator to get buy in. Agree with recommendation from EEPS SAC.
Cormorant eggs (in EEPS)	<ol style="list-style-type: none"> <li>1. TMDL target</li> <li>2. Temporal trends</li> <li>3. Detection of emerging contaminants</li> </ol>	In favor of incorporating in to Status and Trends
Bird eggs - near shore foragers (currently in EEPS)	<ol style="list-style-type: none"> <li>1. TMDL target</li> <li>2. Determine impairment</li> </ol>	Eventually incorporate in to S&T for contaminant concentrations. Evaluate effects (USFWS).
Small fish study (currently in EEPS)	<ol style="list-style-type: none"> <li>1. Trends at smaller spatial scales</li> <li>2. Food web modeling</li> </ol>	Need analysis of PCBs and Se as well as Hg. (High priority)
Mallard Island Study (currently in Sources and Loadings)	Evaluation of loadings from Central Valley.	In favor of incorporating in to Status and Trends
PBDEs	Need an effects threshold for PBDEs so that we can evaluate whether PBDEs are causing impairment.	Potentially under EEPS (High priority)
Emerging contaminants/endocrine disruption	Need to determine potential impairments/emerging problems	<ol style="list-style-type: none"> <li>1. Agree with adding PFOS to next round of sampling</li> <li>2. Support establishment of workgroup to determine how best to address this issue.</li> </ol>
Food web study	Need to understand transfer of contaminants through the food web for food web modeling	Proposed special study in coordination with other studies. (High priority)
Ammonium	Need to know if concentrations of ammonium are limiting phytoplankton blooms and to what extent.	Evaluation of data and possible special study.

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\*Revisit power analysis for dissolved copper with site-specific objective. Review list of analytes based on: spatial and temporal trends, proximity to thresholds, need for model support, cost, use of surrogates.