RMP Sediment WG Meeting

March 19, 2019
San Francisco Estuary Institute
4911 Central Avenue, Richmond, CA

Meeting Summary

<table>
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<tr>
<th>Attendees:</th>
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<tr>
<td><strong>PRESENT</strong></td>
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<tr>
<td>Name</td>
<td>Affiliation</td>
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<tr>
<td>Tawny Tran</td>
<td>USACE</td>
<td>Lester McKee</td>
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<tr>
<td>Dave Halsing</td>
<td>South Bay Salt Pond Restoration Project (SCC)</td>
<td>Carol Foster</td>
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<td>Bruce Jaffe</td>
<td>USGS</td>
<td>Judy Nam</td>
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<td>Brian Ross</td>
<td>EPA</td>
<td>Beth Christian</td>
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<td>Brenda Goeden</td>
<td>BCDC</td>
<td>Roxanne Grillo</td>
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<td>Luisa Valiela</td>
<td>EPA</td>
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<td>Jennifer Siu</td>
<td>EPA</td>
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<td>Jeremy Lowe</td>
<td>SFEI</td>
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<td>Letitia Grenier</td>
<td>SFEI</td>
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<td>Aaron Bever</td>
<td>Anchor QEA</td>
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<td>Daniel Livsey</td>
<td>USGS CA WSC</td>
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<td>Richard Looker</td>
<td>SFRBRWQCB</td>
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<tr>
<td>Jay Davis</td>
<td>SFEI</td>
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<td>Josh Gravenmier</td>
<td>Arcadis</td>
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<td>Melissa Foley</td>
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<td>Scott Dusterhoff</td>
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<td>Tom Mumley</td>
<td>SFRBRWQCB</td>
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<td>Christina Toms</td>
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<td>Jing Wu</td>
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<td>Paul Work</td>
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<td>Steve Hagerty</td>
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The last page of this document has information about the RMP and the purpose of this document.

1. Introductions and Goals for Today’s Meeting

- Melissa Foley (SFEI) welcomed the workgroup and led a round of introductions.
- Scott Dusterhoff (SFEI) gave an overview of the meeting agenda and goals.
- Tom Mumley gave a brief background and history of the RMP.

2. Information: Management Questions and Processes to Develop Proposals for 2019 Special Studies

Scott gave a presentation that covered the overall RMP structure, the origin of the Sediment WG, the WG Mission and Guiding Management Questions, recently completed studies and currently funded studies.

Key points include:

- In 2018, WG developed a list of potential study ideas, tiered by priority. Study proposals were then developed for 2019 funds guided in large part by survey results. Most proposals submitted for 2019 funds were funded.
  - Study ideas that did not get voted on and prioritized included: mudflat mapping, sediment provenance, data collection to fill bathymetric datagaps.

- 2019 funded studies included:
  - Sediment WG funded: Conceptual understanding of sediment dynamics and sediment monitoring strategy (SFEI), Bathymetric Change Analysis-Year 1 (USGS), Develop Recommendations for Updated Beneficial Reuse Thresholds (SFEI), Sediment Bulk Density Study (SFEI).
  - Supplemental Environmental Project (SEP) funded: Dumbarton Bridge (lower South Bay) Sediment Flux Study-Year 2 (USGS), Synthesis of DMMO Data (PCBs) (SFEI)

3. Information: Multi-Year Plan Review

Scott presented an overview of the Sediment WG Multi-Year Plan that includes funded studies and study ideas for 2020-2022. Some key notes include:

- The studies included revolve around Strategy, Screening Values, Impact studies, Data mining, Beneficial reuse, Sediment budgets, and General elements.
- Reasons for study ideas being included in the Multi-Year Plan (2020 and beyond)
  - Ranked as a high priority 2019 study idea but not funded in 2019
  - Year 2 of 2-year study that received 2019 funding
  - Sediment-related study idea from the Exposure & Effects Workgroup (which is currently inactive)
  - Considered important to include based on the conversations during the May 2018 WG meeting and follow-up conversations

Discussion points included:

- Note that years are describing calendar (January to December) rather than fiscal years
- Tom Mumley and others describe/emphasize the finite resources of the RMP, but also the importance of the WG idea bank; tabled ideas can be funded in later years, through SEP funds or via alternate entities.
- Two studies described in more detail by Brenda Goeden:
Essential Fish Habitat (EFH) study: This relates to the programmatic consultation process for dredge effects on EFH and is designed to streamline permitting rather than consulting on every individual project. USGS (Susan De La Cruz & Isa Woo) looked at benthic habitat function for three years after dredging projects of 12 ft or less to understand benthic recovery. Final report should be complete this year.

Synthesis of light attenuation near dredging study: examines how dredging affects light and eelgrass bed health from disturbance of suspended sediment/increase in turbidity. Dredgers either opt for light monitoring or a silk curtain within a certain buffer. More data needed in order to evaluate if current regulations are appropriate.

Additional information on the strategic placement framework: The finalization of the study has been put on hold due to lack of US Army Corps of Engineers funding to complete the document. The first phase of the concept was included in the State Coastal Conservancy proposal for the Water Resources Development Act (2016), Water Infrastructure Improvement for the Nation, Section 1122 Pilot Program. The proposal included direct beneficial reuse of four federal navigation projects at four restoration sites over ten years, and testing the concept of in-bay placement of dredged sediment to feed marshes through tidal action. The proposal was truncated, and awarded $3 million to do a portion of the work. The Coastal Conservancy and BCDC are working with the USACE on the next steps, which include developing a project management plan for submission to USACE Headquarters. Earliest anticipated funds for work is 2020.

4. Discussion: 2020 Special Study Proposals

Melissa gave an overview of the process and timeline for identifying studies to seek funding for 2020, and discussed special study proposals. Some of these key points include:

- WG was prompted with previously-agreed 2020 “Must Do” study ideas for the Multi-Year Plan, which will be developed into proposals for the May meeting.
- WG was told proposals would be ranked before submitting to TRC
- Roughly 70% of the “Must Do” projects will get funded (variable among workgroups and between years of this WG)
- SEP funds:
  - Unfunded or additional ideas can be used for potential SEP funds (each of these will need ½ to full page proposal)
  - SEP list has last year’s ideas; these can be added to or modified based on WG preferences/priorities

Points from discussion include:

- Jay points out that the total RMP special studies pot is $1.3m, while “must-do” proposals are $1.9m. “Must-do” is a terminology that will probably be transitioned to less pointed language, e.g., “high-priority.”
- Tom Mumley emphasizes the State Water Board endorses using SEP funds for RMP studies. Tom also points out that the SEP pot is highly variable, on average likely under $150k.
- New proposals are not emphasized at this time; goal is to focus on existing study ideas.
However, new ideas could be proposed and developed quickly into high priority ranking/proposal development with the blessing of the WG.

- Brief discussion of RMP link to regulatory outcomes or recommendations, including water quality standards, implementation, permit considerations improved efficiency of and confidence in monitoring. Jay will pass along more explicit information. Regular Pulse of Bay reports provide additional information. In context of Sediment WG, Brian Ross points out that dredgers historically contributed ~17% of RMP funding, desire to make studies more relevant to these regulations that more directly affect them.

- Jay and Scott discuss how “must do” items only add up to $220k (rather than the original $260k) because the DMMO study was assumed to be counted (when it actually has been dropped from the “must-do” list), meaning the WG has another potential ~$40k to propose/rank/add to “must-do” list. Tom reminds group that it is unlikely WG will be funded 100% regardless.

Scott gave overview an overview of the of “must do” proposals. These include:

- Sediment Strategy/Workgroup ($10K) - needs to be written (SFEI lead)
- Sediment Modeling Strategy ($40K) - needs to be written (SFEI lead)
- Sediment Bioaccumulation Guidance ($48K) - already written
- Golden Gate Flux Modeling ($45K) - already written
- Bathymetric change study (year 2) ($77K) - does not need to be written

Discussion points included:

- Results from 2017 GG Flux monitoring showing inflow of sediment into the Bay are only part of the picture; desire to look over more than an 18-hour window for monitoring, to calibrate data, and improve the flux model.
- To clarify, the modeling strategy is not actual modeling but rather a plan/approach to identify data gaps, integrate models, etc. This is the only proposal not yet written.
- Beneficial reuse study will probably not get to numbers that can inform regulatory decisions
- Discussion of how RMP may favor proposals that benefit multiple WGs, though the flux modeling is farther along that what could be useful for the nutrients group at this time.
- Napa and Sonoma stream gauges are potentially continued but on non-RMP funds. Lester emphasized the importance of these stream gauges.
- The fates of DMMO, Strategic Placement and additional bathymetric gaps study ideas were debated:
  - DMMO:
    - Brian pointed out that Don Yee’s recent analysis of DMMO data shows that about ½ of the amount of PCBs in sediment encountered during dredging is removed from the Bay.
    - Desire for Don to present at next WG meeting to understand data application to WG.
    - Tom suggests this work may be somewhat outside scope of RMP and issue-specific; unlikely to fund, though open to consideration if prioritized by WG.
    - This particular proposal seems less time sensitive or higher priority that some of the other proposals, such as Strategic Placement.
  - Strategic Placement:
    - USACE funding for Strategic Placement project uncertain (discussed
Desire to be poised to deploy the strategic placement study as soon as funded
Would be good to study criteria for potential sites in advance of pilot.

Bathymetric change:
Some WG members think this should be a 2020 “must do” study
Big gaps in Central Bay, margins of San Pablo Bay and parts of Suisun.
While bathymetric data is better (more certain and consistent) done all at once, it can be done effectively piecemeal. Data collection and analysis of change steps needed to create new DEM.
Bruce Jaffe points out that the desire is to fill gaps where most change is happening.
Special emphasis for mudflat monitoring desired. Brenda Goeden points out that Laura Valoppi (USGS) did a mudflat study that could be of use.
- There is some crossover to mudflats, especially adjacent to restoration sites, but not consistent. Need to integrate with WRMP on this topic.
- Dave Halsing will try to acquire Laura’s proposal on this topic.

Some options for funding these studies include adding to the “must-do” WG list, adding to the SEP list, using the “general fund” category, or combining with/cannibalizing from other proposal budgets.

5. Information: Preparation for the May 7 Meeting

Scott reviewed proposal development timeline:
- Mid-March to April 9 - draft proposal developed
- April 10 to April 22 - draft proposal reviewed by select WG members
- April 23 - April 29 - draft proposals revised
- April 30 - final proposals to all workgroup members in advance of May 7th WG meeting

Scott also reviewed the agenda planned at the May 7 Meeting. Scott introduced workgroup advisors for workgroup meeting: Pat Wiberg (UVA) and Dave Schoellhamer (USGS ret.).

6. Wrap Up: Review Action Items and Decisions

Some follow up items include:
- Miscellaneous:
  - Brenda will provide more information on the sand mining pieces
  - Bruce will provide more information on cores in San Pablo Bay by Brent Tipple (UCSC) and Renee Takesue (USGS)
  - Dave will ask Laura Valoppi for mudflats survey study
- 2020 proposals and SEP ideas:
  - Scott will work with WG members to write modeling strategy proposal and bathymetric mapping SEP study concept
  - Scott will coordinate with Don to get DMMO data synthesis SEP study concept
together
○ Scott will coordinate with selected WG members to review proposals
○ Proposals will be completed and sent in advance of May 7th WG meeting
About the RMP

RMP ORIGIN AND PURPOSE

In 1992 the San Francisco Bay Regional Water Board passed Resolution No. 92-043 directing the Executive Officer to send a letter to regulated dischargers requiring them to implement a regional multi-media pollutant monitoring program for water quality (RMP) in San Francisco Bay. The Water Board’s regulatory authority to require such a program comes from California Water Code Sections 13267, 13383, 13268 and 13385. The Water Board offered to suspend some effluent and local receiving water monitoring requirements for individual discharges to provide cost savings to implement baseline portions of the RMP, although they recognized that additional resources would be necessary. The Resolution also included a provision that the requirement for a RMP be included in discharger permits. The RMP began in 1993, and over ensuing years has been a successful and effective partnership of regulatory agencies and the regulated community.

The goal of the RMP is to collect data and communicate information about water quality in San Francisco Bay in support of management decisions.

This goal is achieved through a cooperative effort of a wide range of regulators, dischargers, scientists, and environmental advocates. This collaboration has fostered the development of a multifaceted, sophisticated, and efficient program that has demonstrated the capacity for considerable adaptation in response to changing management priorities and advances in scientific understanding.

RMP PLANNING

This collaboration and adaptation is achieved through the participation of stakeholders and scientists in frequent committee and workgroup meetings (see Organizational Chart, next page).

The annual planning cycle begins with a workshop in October in which the Steering Committee articulates general priorities among the information needs on water quality topics of concern. In the second quarter of the following year the workgroups and strategy teams forward recommendations for study plans to the Technical Review Committee (TRC). At their June meeting, the TRC combines all of this input into a study plan for the following year that is submitted to the Steering Committee. The Steering Committee then considers this recommendation and makes the final decision on the annual workplan.

In order to fulfill the overarching goal of the RMP, the Program has to be forward-thinking and anticipate what decisions are on the horizon, so that when their time comes, the scientific knowledge needed to inform the decisions is at hand. Consequently, each of the workgroups and teams develops five-year plans for studies to address the highest priority management questions for their subject area. Collectively, the efforts of all these groups represent a substantial body of deliberation and planning.

PURPOSE OF THIS DOCUMENT

The purpose of this document is to summarize the key discussion points and outcomes of a workgroup meeting.