

Delta RMP Governance

This strawman proposal describes governance options for the Delta RMP. Its purpose is to serve as a raw material for work group discussions. It was developed by a planning team that includes staff from the Central Valley and State Water Boards, the Aquatic Science Center (ASC)¹, and Dr. Brock Bernstein. Although specific options are being proposed, different options are not necessarily excluded.

Development of the Delta RMP is expected to proceed in a phased approach. The first phase of the program development will focus on mechanisms for regularly compiling, assessing and reporting data from existing, ongoing monitoring efforts. The goal is to complete Phase I with a visible, tangible product such as a “Pulse of the Delta” type of synthesis report that addresses an initial set of program questions. The second phase is expected to define the long-term structure and goals of a Delta RMP that is fully integrated and coordinated among all programs.

This working draft outlines options for the governance structure of the Delta Regional Monitoring Program (RMP) for consideration by the stakeholder panel. The options are drawn from existing regional monitoring models. Detailed descriptions of four existing models (San Francisco Bay RMP, Southern California Bight Program, Los Angeles & San Gabriel Rivers Watershed Programs, and Lake Tahoe RMP) can be found in Appendix A.

The focus of this working draft is on defining interim governance options for the first phase of the Delta RMP’s development. That is: there may be interim solutions for governance of the new Delta RMP in the development phase, for the main purpose of getting the program off the ground and defining its long-term purpose and goals. The interim governance structure would at some point be replaced or augmented by a long-term RMP governance structure. In the long run, the chosen structure of governance will need to “fit” with the program’s purpose and goals.

Some of the main questions regarding program governance are:

1. Who is involved?
2. How do things currently function?
3. Who will operate the program?
4. Who participates at what level of organizational and/or program management?
5. How will the program be organized?
6. How will decisions be made?
7. How formal will the governance structure be?
8. How will the program review work?

¹ The ASC is a Joint Powers Agency with representation from the State, San Francisco Bay, and Central Valley Water Board, the Bay Area Clean Water Agencies, and the U.S. Environmental Protection Agency. It was created to promote and deliver science support functions and information management for governmental and non-governmental organizations with roles in water quality protection, policy development, and assessment. ASC is staffed and managed by the San Francisco Estuary Institute (SFEI).

Operational Lead

One of the main questions to resolve is: who should be in charge of coordinating and/or operating the Delta RMP? A number of institutional arrangements are possible. The four highlighted RMP models (refer to Appendix A) all involve an independent, non-governmental entity as the organizational lead. But there are also other options for an organizational lead—either interim or long-term—including the Regional Water Board, any of the other major agencies with monitoring programs in the Delta (DWR, USGS, IEP, etc), discharger associations (e.g., CVCWA, ag coalitions), consultants, or universities. The stakeholder workgroup will need to evaluate what type of organization is best suited to operate or coordinate the Delta RMP. Related to that, the stakeholder workgroup will also need to decide whether any existing organization would be suited—either as is or by adapting its mission, and capacities--or if there is a need to form a new entity.

Regardless of what the preferred long-term solution may be, it is likely that an existing entity will need to be appointed as an interim lead for various reasons: 1. it is probably too early in the process for making a decision on what works best in the long run; 2. there may be no immediate agreement on a preferred option; and 3. if a new non-governmental organization (NGO) or joint powers authority (JPA) will be identified as the preferred option, the process of establishing such an organization would most likely require several years of development.

In any scenario, the operational lead of the Delta RMP will need clearly stated objectives to be effective. This may be challenging to achieve considering the existing range of water quality management objectives in the Delta.

Stakeholder Participation

Successful models for regional monitoring programs are generally based on stakeholder participation in governance. Decisions to be made for the Delta RMP governance include: who should be represented? How do different interest groups participate? How should regulators; dischargers; local, State, and federal agencies; and environmental groups work together? Should everybody “have a say” proportional to the amount by which they contribute to a problem or solution? Should the Regional Water Board have the final decision?

Program Organization

One fundamental question is whether the Delta RMP will be operated by a single entity or a coordinated effort of all participants. This fundamental decision may drive the program organization to some extent. The San Francisco Bay RMP, operated by the San Francisco Estuary Institute (SFEI), is an example for the former; the Southern California Bight and the San Gabriel River RMPs are examples for the latter. All models involve at least one steering committee or work group. There could be a single stakeholder group working on all aspects of program development. Or there could be a tiered structure involving, for example, a steering committee guiding institutional and funding structure development, and workgroups to develop various technical aspects of the program.

Formality

Another fundamental question is whether and to what extent stakeholder participation in the development and management of the Delta RMP should be formalized. For example, should steering committee or work group members be selected or can anybody participate on an ad-hoc basis? What should be the selection process? Should there be a vote?

In the following discussion, these questions are addressed with options in terms of what is feasible to recommend for the Delta RMP, taking both potential benefits and concerns into account. Although specific options for the governance structure during Phases I and II are provided below, different options are not necessarily excluded.

PHASE I – DEVELOP MECHANISMS FOR REGULARLY COMPILING, ASSESSING AND REPORTING DATA FROM EXISTING, ONGOING MONITORING EFFORTS

Operational Lead: The Water Boards, assisted by the Aquatic Science Center, would be responsible for coordinating this phase

Focus on coordination and standardization. A program (development) plan is needed that is supported by all affected interest groups. In addition, it will be important to complete Phase I with a visible, tangible product such as a “Pulse of the Delta” type of synthesis report. The transition from Phase I to Phase II would be marked by turning over project coordination to a workgroup for all next steps. The workgroup should be comprised of potential participants and coordinators. The desired outcome could be achieved through a Memorandum of Agreement (MOA), permit requirements, or other binding arrangement that would hold key stakeholders accountable for the development and implementation of the Delta RMP. The Water Boards would be included in the workgroup, but the workgroup would proceed with minimal top-down direction. Similar processes seem to be working well for the San Gabriel and Los Angeles Rivers RMPs.

Program Organization / Stakeholder Participation: Product-oriented participatory process

A product-oriented participatory process will be utilized to help prepare products and encourage participation in the RMP development. The Water Boards and ASC will coordinate with a stakeholder workgroup that involves designated representatives from stakeholders. The workgroup will be charged with shaping a long-term RMP that meets regional monitoring priorities and needs, is technically sound, and can be implemented with existing resources. The overall scope will focus on refining initial goals, objectives and strategy and resolving specific implementation issues. In the process, the Delta RMP planning team² will make drafts of the proposals available for review and comment.

Designees from agencies, dischargers, and other stakeholder volunteer to participate in workgroups. At the kick-off meeting (30 September 2008), it was determined that stakeholder workgroups will be formed to assist the Water Boards.

² Water Boards project staff, Aquatic Science Center, and Dr. Brock Bernstein

Stakeholder workgroup. The stakeholder workgroup(s) will assist the Water Boards in addressing the following initial topics:

- Monitoring Hypotheses/Questions
- Data Integration/Access/Quality Assurance
- Governance
- Cost Savings
- Coordination With Other Programs

These initial topics should be integrated into a broader approach for addressing the overall scope of

- I. Developing the goals, objectives and strategy for the Delta RMP, and
- II. Developing options for the structure and administration of the RMP

The workgroup(s), aided by the Delta RMP planning team, will need to address, at least:

- a. Interim and long-term scope of the program, including priority beneficial uses, parameters and benchmarks for assessing the priority beneficial uses, the geographic and temporal scope;
- b. Viable mechanisms for compiling, assessing, and regular reporting of results; and
- c. Products (e.g., reports, recommendations, program reviews, etc.) and distribution frequency.

There are already dozens of programs monitoring intensively in the Delta³ and some of these efforts are already coordinating with each other. Developing the Phase II RMP may involve a different set of participants than the Phase I workgroup.

Formality: as informal as possible

The proposed structure for Phase I would work on an ad-hoc basis: workgroup participation by key stakeholders is strongly suggested but not mandated. The San Gabriel River RMP provides a good example where a multi-stakeholder group was convened and decided to continue working together on an ad hoc basis to develop the program.

³ Major water quality monitoring efforts in the Delta include IEP, Municipal Water Quality Investigations (MWQI), D-1641 Continuous Recorder Sites, National Pollution Discharge Elimination System (NPDES) Self-Monitoring Program, Irrigated Lands Regulatory Program (ILRP), U.S. Geological Survey (USGS) Basic and Fixed Site Network, DWR Operation & Maintenance, State Water Project, Sacramento Regional Wastewater Treatment Plant Priority Pollutant Prevention Program, and Stockton Stormwater Monitoring.

PHASE II – DEFINE THE LONG-TERM STRUCTURE AND GOALS OF A DELTA RMP THAT IS FULLY INTEGRATED AND COORDINATED AMONG ALL PROGRAMS.

Operational Lead

Proposed option: ASC or new independent NGO or JPA

Independent “third party” to manage Delta RMP. Based on existing models (see Appendix A), an independent entity should be one of the key elements for the planned Delta RMP. It may require the foundation of a new NGO or JPA. Alternatively, it could be done by putting an existing organization in charge. An independent “third party” provides political neutrality, which is critical to establishing the Delta RMP as a source of objective scientific information.

Key stakeholders to govern independent “third party”. The “third party” in charge of managing the RMP would require oversight by an executive stakeholder board composed of high-level management representatives from each participating group. Appointing an executive stakeholder board provides a mechanism for “power sharing” and ensures ownership of the monitoring information by various interests. Reporting monitoring information to the Board then ensures that the questions addressed by the Delta RMP are relevant to the most salient management issues. It also maximizes the likelihood that program results will be incorporated into the decision-making process, since an executive stakeholder board would have the authority to implement management actions in response to the monitoring results.⁴

Founding a new NGO vs. appointing an existing one. The ideal solution may be to found a new NGO or JPA for the purpose of overseeing the Delta RMP. A Watershed Council-style 501(c)(3) California corporation may be a suitable business model. Typically, watershed councils are locally organized, voluntary, non-regulatory groups and have a mission to improve the condition of watersheds in their local area. They are usually required to represent the interests in the basin and be balanced in their makeup. The Los Angeles & San Gabriel Rivers Watershed Council (described in Appendix A under the LA & SG Watershed Programs) is such an organization and may provide an existing model that could be emulated.

⁴ Examples of management actions that SFEI Board members initiated or helped implement based on results from the San Francisco Bay RMP include several listing decisions for the 303(d) list of impaired waters, improvements to loading reduction strategies for TMDLs (mercury and PCBs), fish advisory issuances by the California Environmental Protection Agency’s Office of Environmental Health Hazard Assessment (CalEPA/OEHHA), and State legislature banning polybrominated diphenylethers (PBDEs).

On the other hand, it will require time, money, and staff effort to develop the institutional and legal framework and move the governance proposal through all the bureaucratic hoops. Thus, appointing an existing institution may be a practical solution requiring less bureaucracy and resources. At the current time, the only regional private organization with the capability of governing and, at the same time, operating the Delta RMP is the ASC. The ASC is a JPA that is staffed and managed by SFEI, the NGO in charge of the San Francisco Bay RMP. A major advantage would be that the new Delta RMP would build on an existing institutional framework, resources and facilities, and staff expertise⁵. ASC staff would be available to help coordinate and operate the RMP, including data compilation and synthesis, report preparation, statistical design, database management, sampling, and other activities. This solution would require a review of the existing by-laws and ASC program plan by groups participating in the Delta RMP. Most importantly for this solution to work, the ASC Board would need to be significantly expanded to include adequate Delta-specific representation by program stakeholders. This means that additional representatives for the water agencies, regulated dischargers, and other Delta stakeholder groups would need to be included.

Alternative option: state agency

If stakeholders cannot reach consensus regarding the operational lead, the Central Valley Water Board, supported by the State Water Board, may be required to oversee the Delta RMP. One option might be to operate the Delta RMP under the larger umbrella of the Surface Water Ambient Monitoring Program (SWAMP). Alternatively, a new group could be formed specifically for the purpose of managing the Delta RMP.

The advantage would be that of a clear leadership charge. However, a scenario where the Water Boards are managing the Delta RMP may mean that there is a lack of buy-in or downright resistance to the program by key stakeholder groups. It could also mean that there is buy-in to the concept but too many parties and governance options to agree on. The Regional Board might be the easiest solution in some circumstances. However, the resulting governance would then need to rely heavily on regulatory pressure to make the program work. In addition, the Regional Board's regulatory mandate and its staffing and funding constraints may limit the kinds of options it could pursue.

The Department of Water Resources (DWR) is another potential lead for the Delta RMP. DWR manages more water quality monitoring than any other agency in the Central Valley. DWR programs include the Interagency Ecological Program (IEP)—Environmental Monitoring Program (EMP) and Municipal Water Quality Investigations (MWQI). Although DWR is the biggest player in terms of monitoring and has the institutional and technical

⁵The described option with ASC as the operational lead assumes that there will be no direct institutional role of SFEI (although this would also be an option). There is some overlap between the SFEI and ASC Boards of Directors but they are not identical. The Delta RMP and its steering committee would both be independent of SFEI's Board of Directors. It follows that planning decisions for the Delta RMP, including staffing and budget, could be handled through mechanisms that do not depend on SFEI's existing decision-making body, even though there would be shared resources with SFEI. However, as with the ASC, SFEI's decision-making body could also integrate Central Valley stakeholders—if that is desired—and has done so in the past. Stronger participation by Central Valley stakeholders on the SFEI Board is welcomed but has traditionally been difficult to achieve due to logistic issues (Oakland location) and the limited number of SFEI projects that are of direct interest to stakeholders outside the Bay Area.

capabilities for taking the lead, more likely than not, a Delta RMP run by the agency would lack the buy-in of many non-governmental stakeholders. This also applies to governmental oversight groups such as the Delta Protection Commission or the CALFED Science Program. The latter two also don't have the combination of institutional substance, staff resources, and/or technical capabilities required for managing a Delta RMP.

Alternative option: contractor

Another option would be to hire a contractor for operating the program and/or coordinating the participants. There are a number of research institutions and universities as well as private consulting firms in the region with the required technical and managerial capabilities. However, if a consultant were to be selected to operate or coordinate the program, there would still be a need for an independent oversight group. As an alternative to a formal organization, this could be a Delta Water Quality "Management Group", similar to the San Joaquin River Water Quality Management Group (SJRWQMG). The SJRWQMG was formed per a Memorandum of Understanding (MOU) between the various interests involved in salinity management in the San Joaquin River (SJR), including dischargers, reservoir operators, and water projects operators. The group was formed with a clear objective in mind: to develop an action plan for achieving salinity and boron objectives in the SJR basin. The action plan is being developed as an alternative to the more regulatory approach of implementing Total Maximum Daily Loads (TMDL).

Program Organization / Stakeholder Participation

Proposed option: Delta RMP operated as a coordinated effort of all participants. Program participants are represented on steering committee; other stakeholders have the opportunity to participate in meetings, coordination activities, and review of RMP documents.

Delta RMP operated as a coordinated effort of all participants. This seems to be the most logical option, given the large number and great variety of monitoring efforts in the Delta.

Participatory management structure is essential. Program participants will be directly involved in the steering committee and technical workgroups. The Steering Committee will provide administrative and technical direction to the program. The steering committee members are designated by each participating group. All Steering Committee members will have equal say in decisions and will direct the program through a consensus-building process. Decisions will be made based on consensus.

It will be supported by technical workgroups recommending technical approaches to achieve program objectives. In addition to a Steering Committee (SC), the San Francisco Bay RMP also has a separate Technical Review Committee (TRC) that provides technical direction to the program and the activities of the workgroups. Whether there will be a need to further divide responsibilities and add additional committees will depend on the final program objectives and organization. Although easier to coordinate, a single workgroup would probably mean that individual participants would need to commit more time and progress would be slower (i.e., in series rather than in parallel).

SC/TRC composed of scientifically-trained, mid-level managers from each participating group. The SC/TRC will provide overall direction to the program. It will establish objectives, determine the overall budget, allocate program funds, and track progress. Technical direction will include developing the monitoring and assessment designs and selecting indicators to be measured. The SC/TRC will also provide review for all RMP products.

The Steering Committee will be supported by technical workgroups recommending technical approaches to accomplish the objectives. The members of the technical workgroups will be experts in their specialized field. They will provide technical input into the monitoring plans and prepare detailed plans for all program elements.

All other stakeholders will have the opportunity to weigh in by participating in annual meetings and providing additional project review. Rather than being directly involved in program management, environmental advocacy groups should be adequately represented on the Board (or equivalent oversight group). The Board will also advise on additional project review.

The proposed participatory management structure for this option is illustrated in **Figure 1**.

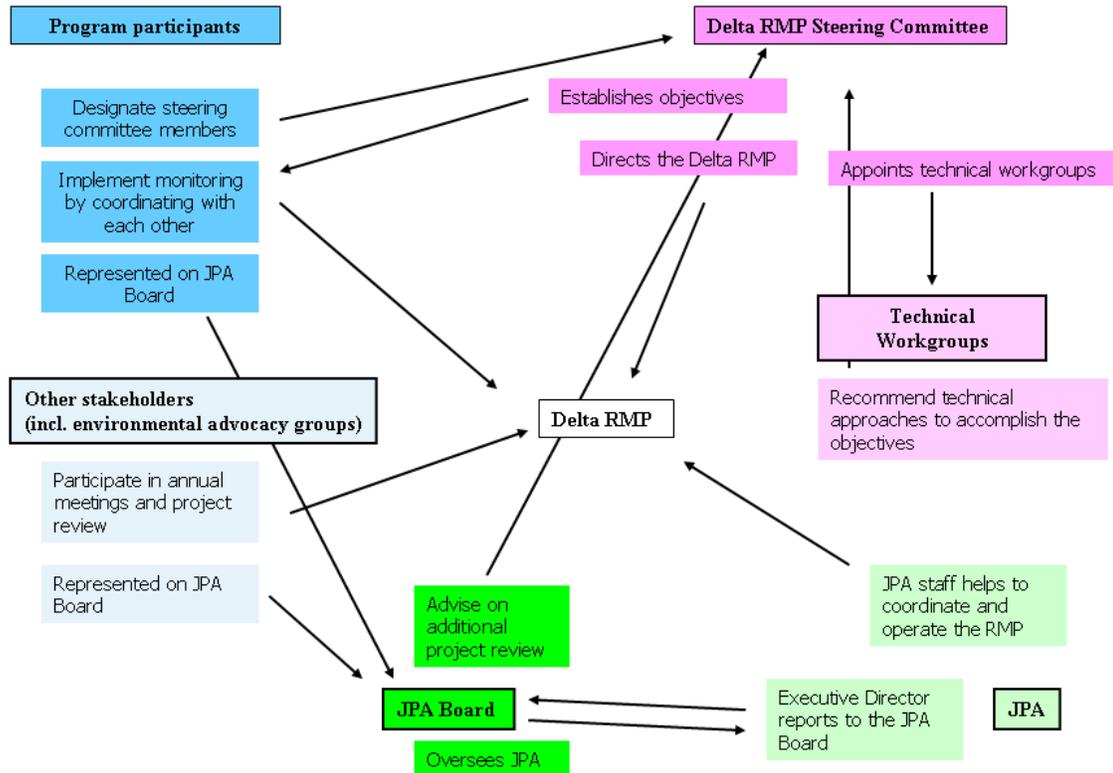


Figure 1. Proposed operational chart for the Delta RMP (Phase II).

Alternative option: Delta RMP is operated by a single entity

Depending on the program objectives, it may be more efficient and cheaper to assign a single entity—directed by a stakeholder steering committee—with operating the entire RMP or specific program elements (an example for this operational model is the San Francisco Bay RMP, described in Appendix A). Existing programs may not have all the capabilities for meeting RMP objectives. Specialized organizations such as SFEI or other contractors with certain types of expertise (e.g., clean techniques for trace analysis sampling) may be able to meet monitoring needs that are outside the scope of routine monitoring efforts. University research groups could be used for an “RMP-on-a-shoestring” effort by monitoring a basic network of regional monitoring sites.

Formality**Proposed option: Participating stakeholder groups have designated seats on Steering Committee**

There should be some reciprocity between investment in the RMP and management participation. Having committees of designated representatives from different participating stakeholder groups (one from each group, see **Table 1** for an example) has proven effective for the San Francisco Bay RMP. A much larger committee with a seat for each individual agency or permitted discharger would probably be less efficient.

Table 1. Straw example of stakeholder grouping for the Delta RMP steering committee

- Regional Water Board
- State Water Board
- IEP
- State Water Contractors (incl. MWQI)
- DWR (non-IEP)
- U.S. Bureau of Reclamation
- U.S. Geological Survey
- large POTWs/CVCWA
- small POTWs/local public works departments
- Agricultural coalitions
- Stormwater agencies

Alternative option: Delta RMP is operated by an open council

Although possible, an open council is unlikely to provide effective management to the Delta RMP. Without any reciprocity between investment in the RMP and ownership, there is no incentive to participate for those who could potentially contribute resources.

Appendix A: Regional Monitoring Models

Here are four examples from RMP models of other regions provided as additional background to the discussion:

1. San Francisco Bay RMP
2. So Cal Bight Program
3. LA & SG Watershed Programs
4. Lake Tahoe RMP

Table 1 provides a comparison of key program elements of these models.

Model 1: San Francisco Bay RMP

The impetus for the program development was a resolution by the San Francisco Bay Regional Water Board to require dischargers in the Bay Area regulated under the National Pollution Discharge Elimination System (NPDES) program to participate in regional monitoring. Contribution to the program constitutes compliance with the requirement to participate. The requirement for continued participation is offset by eliminating certain permit requirements for individual permits.

Operational Lead

Monitoring, assessment, and reporting are coordinated by the San Francisco Estuary Institute, a private (non-governmental), non-profit institute. The arrangement was established through a Memorandum of Understanding (MOU) between SFEI and the San Francisco Bay Regional Water Board⁶.

Program Size

Annual Budget (existing San Francisco Bay RMP) 2008: ~ \$3M for sampling ~75 sites, including data management, assessment, and reporting. The San Francisco Bay RMP samples once a year in the summer for 60+ parameters, including trace metals, organic chemicals, conventional water quality parameters, and toxicity.

Governance Structure

In this model, program governance is independent of existing programs in the San Francisco Estuary, such as the NPDES program or the Long-Term Management Strategy (LTMS) for dredged sediments. However, existing monitoring efforts participate on all levels of governance by appointing representatives to the SFEI Board of Directors.

Program staff and activities are overseen by two designated leads: the program manager provides leadership on the administrative side and the lead scientist on the technical side.

⁶ The ASC is not involved in SFEI decision-making or the San Francisco Bay RMP.

SFEI staff is responsible for selecting the program manager and lead scientist. The selection is made based on senior management consensus. Both report to the SFEI's Executive Director, who in turn reports to an independent Board of Directors that includes Bay Area scientists, environmentalists, local governments, and industries as voting members and representatives from the Water Boards and the U.S. Environmental Protection Agency (USEPA) as non-voting government liaisons. The Board of Directors oversees program budgets and performance and approves annual program plans.

All stakeholders have the opportunity to weigh in by participating in annual meetings and providing project review. Project scopes and results can be reviewed on the SFEI website. Overall, program governance balances funder's views with scientific review. Dischargers are directly involved in program governance, by participating in committees and project design. For controversial project scopes, stakeholders who are not members of the various committees and work groups may be asked to provide comments.

The program is overseen by the Steering Committee, the Technical Review Committee, and designated Workgroups consisting of invited experts (see **Figure 2**). The four current workgroups are: Sources, Pathways and Loadings; Exposure and Effects; Contaminant Fate; and Emerging Contaminants.

The Steering Committee determines the overall budget, allocation of program funds, tracks progress, and provides direction to the program from a manager's perspective. It is comprised of representatives of discharger groups (municipal dischargers, industrial dischargers, dredgers, and stormwater agencies) and the Regional Water Board. The Committee makes decisions by consensus and all members, including the Regional Water Board, have equal say in Committee decisions.

The Technical Review Committee (TRC) provides oversight of the technical content and quality of the program as a whole and the activities of the Workgroups. It consists of technical representatives from the same groups represented, on the Steering Committee, with technical support from SFEI staff.

The Workgroups address the main technical subject areas covered by the program. Workgroups consist of local scientists, regional board members, discharger representatives, and invited scientists recognized as leaders in their field. The Workgroups directly guide planning and implementation of pilot and special studies.

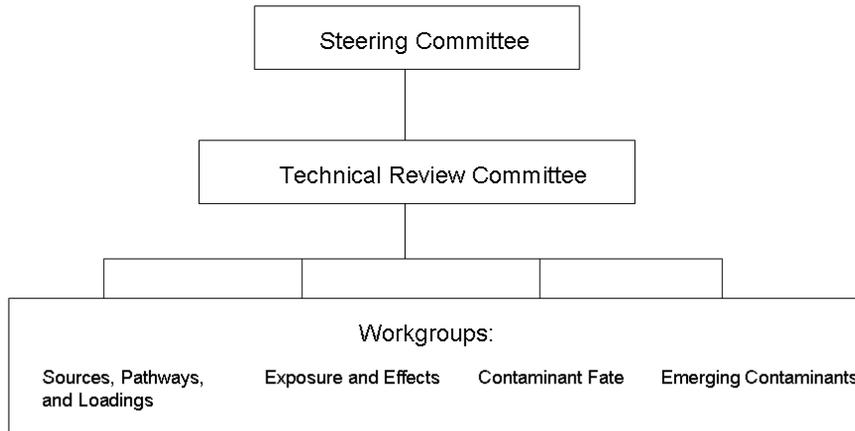


Figure 2. RMP committee organization chart (San Francisco Bay RMP model).

Model 2: Southern California Bight Program

Operational Lead

The program is coordinated by the Southern California Coastal Water Research Project (SCCWRP), a JPA with local, state, and federal government support. SCCWRP is a non-profit, local, marine research agency that is jointly administered by regulating agencies, water agencies, dischargers, and environmental groups.

Program Size

Bight '08: ~ \$8-9M for sampling ~375 sites, including data management, assessment, and reporting.

Governance Structure

The Southern California Bight Program was developed jointly by participating agencies and discharger groups in a collaborative effort. The infrastructure of the collaborative effort has two key elements 1) a participatory management structure, and 2) the presence of a neutral local, scientific organization—the JPA (SCCWRP)--to serve as a facilitator.

SCCWRP staff is available to serve as coordinators for the program and provide the technical expertise and manpower to undertake data compilation and synthesis, report preparation, statistical design, database management, and other pilot program activities that

are outside of what participating agencies can do within their available resources. Since SCCWRP is jointly administered by regulators, dischargers, water agencies, and environmental groups, staff provides non-partisan credibility in project development and interpretation of results.

Participatory management is accomplished with a three-tier management structure; the three tiers have distinct roles and provide the opportunity for participation by different levels of personnel from within each participating organization. The three tiers are: 1) JPA Board of Directors, 2) Steering Committee, and 3) Technical Subcommittees.

Cooperation of the regulators, water agencies, and discharger communities are fostered through mutual participation in the JPA. The JPA Board (Commission) is the formal organizational body to receive, review, and respond to the results of the monitoring program and serve as the primary audience for the products of this program. The JPA Board is composed of highest-level management representatives from each participating agency. The need for regional monitoring was discussed before the JPA Board. As shown in the S Cal Bight example, a major strength of appointing a JPA Board in this role is that the recipients of the monitoring information have the authority to implement management actions in response to the project results. Reporting to the JPA Board ensures that the questions addressed by the Bight Program are relevant to current management issues. It also maximizes the likelihood that the program results will be incorporated into the environmental management decision-making process in Southern California. For example, results of the Bight program have helped participating resource managers focusing on stormwater pollutants and clearly identified hot spots of toxicity, such as revealing the extent of contamination in Newport Bay.

The second tier management level is the Steering Committee, which is composed of scientifically-trained, mid-level managers from each of the participating agencies. The Steering Committee is responsible for overall planning of the program, including establishing program objectives, developing the sampling design, and selecting the indicators to be measured. Steering Committee members are also responsible for defining the resources their organization bring to the project: the “pay to play” arrangement of the program means that the scale of contributions is reciprocated by the scale of access to program resources and data. Another role for the Steering Committee is to ensure that the objectives set forth for the project are consistent with the cumulative set of resources available. The Steering Committee also serves as a point of technical review for all documents that are produced by the project. Participation on the Steering Committee ensures each participating organization the opportunity to direct the program through a consensus-building process.

The Steering Committee is supported by technical subcommittees, which are responsible for recommending technical approaches to accomplish the objectives set forth by the Steering Committee. The members of the technical committees are bench scientists who conduct the day-to-day work in their specialized field. They prepare the detailed plans for all the monitoring elements (including methods manuals, QA plans and database structure), conduct intercalibration exercises, and provide the technical input into the monitoring plans. Both the Steering Committee and the Technical Committees report to the JPA Board, bridging the gap between the scientific experts, technical staff, and management. The

Technical and Steering Committee's collective scientific ideas and plans are brought before the JPA Board for discussion at the senior management level. This structure facilitates management decision-making based on strong technical input and recommendations. This outcome is possible because the RMP was developed through consensus and input by participants at all management levels. Regional Water Board staff participate in all committees. The Committee makes decisions by consensus and all members, including the Regional Water Board, have equal say in Committee decisions⁷.

Model 3: LA & SG Watershed Programs:

- 1. San Gabriel River Regional Monitoring Program (SGRRMP) – implemented**
- 2. Los Angeles River Regional Monitoring Program (LARRMP) – being developed**

Operational Lead

The program is directed by a stakeholder workgroup and managed by a watershed council-type NGO, the Los Angeles and San Gabriel Rivers Watershed Council (LASGRWC). Typically, watershed councils are 501(c)(3) non-profit organizations composed of interested governmental and non-governmental stakeholders that form to collaboratively manage water and other natural resources at the scale of a watershed. Their purpose is to provide a governance structure and forum for community groups, government agencies, business, and academia for working cooperatively to solve problems in the watershed.

Program Size

Year 1 (San Gabriel River Regional Monitoring Program = SGRRMP): ~ \$1.7M for sampling 54 sites.

Governance Structure

The program impetus was a permit requirement by the Los Angeles Regional Water Board to submit a RMP. A stakeholder process was facilitated by an independent facilitator in collaboration with affected dischargers, a local, preexisting JPA (SCCWRP), and the institutional lead of the process (NGO). The stakeholder process brought permittees (either all—SG-- or major players--LA), resource and management agencies, and conservation groups together to brainstorm how to make it happen. For the SGRRMP effort, this broadly representative stakeholder group continued working together on an ad-hoc basis to direct program development in the pilot phase⁸. The work group continues to meet quarterly, still on an ad hoc basis, to review progress. A representative of the Regional Water Board participates in work group meetings of both efforts. Although the Regional Water Board has no formal lead role in the stakeholder workgroup, it may set boundaries to the planning

⁷ The Regional Board may use its authority by writing permit conditions that assure monitoring efforts are consistent with regional monitoring needs.

⁸ The LARRMP work group has recently completed the RMP design and is currently not meeting.

effort and has formal authority in the final program design step, at the point when permittees are requesting regulatory offsets in exchange for RMP participation and also determines how to allocate required contributions.

Model 4: Lake Tahoe RMP

Operational Lead

Conceptual development of the pilot program (Phase I) is led by the Tahoe Science Consortium, a private (non-governmental), non-profit research institute.

Program Size

Budget for Phase 2: ~236K for designing RMP

Governance Structure

Impetus for the program was the need to develop information to respond to basin-wide TMDLs. Planning is being conducted by a core stakeholder working group consisting of affected dischargers, planning agencies, regulators, management agencies, and scientists. A representative of the Regional Water Board participates in working group meetings.

Table 1. Comparison summary of four RMP models.

	San Francisco Bay RMP	S Cal Bight Program	LA & SG Watershed Programs	Lake Tahoe RMP
Operational Lead	NGO	JPA	NGO	NGO
Operational Model	Third-party	Coordinated	Coordinated	Not yet decided
Budget (approximate)	\$3M	\$8-9M	\$1.7M (SGRRMP only)	\$236K
Oversight Group	NGO Board of Directors (SFEI)	JPA Commission (SCCWRP)	NGO Board of Directors (LASGRWC)	Outside Interagency Executive Group
Management Structure	Three-tiered committee organization	Three-tiered committee organization	Stakeholder work group	Core Working Group
Committee selection	Designated seats	Appointees of participating organizations	Ad-hoc	Appointees of participating organizations
Participants				
Oversight Group	<u>Voting members:</u> Dischargers Regulators <u>Non-voting members:</u> Scientists Environmental groups	Regulators Environmental groups Dischargers	Regulators Environmental groups Dischargers	Regulators Resource managers
Committees/Work Groups	<u>Steering Committee,</u> <u>Technical Review</u> <u>Committee:</u> Dischargers	<u>Steering Committee, Technical</u> <u>Subcommittees:</u> Dischargers Regulators Scientists	<u>Stakeholder Workgroup:</u> Dischargers Regulators Environmental groups	<u>Core Working Group:</u> Dischargers Regulators Funding groups Planning agencies

Regulators

Environmental groups

Workgroups (Sources,
Pathways, and Loadings;
Exposure and Effects,
Contaminant Fate,
Emerging Contaminants):

Dischargers

Regulators

Scientists

Environmental groups
