

Discharger Interview Findings

Background

Following the initial decision by the Regional Water Board to initiate a regional monitoring program for the Delta (Delta RMP), a series of stakeholder meetings resulted in broad agreement on the need for an increased ability to assess water quality conditions Delta-wide. These meetings also produced agreement on the current impediments to broader scale assessments and the basic approaches to overcoming these impediments. Achieving the Delta RMP's goals will ultimately require new assessment / management questions, more coordination across Water Board programs, and increased collaboration with other agencies' monitoring and assessment programs.

The Delta RMP project team determined that an effective starting point would be to focus initially on NPDES discharge monitoring programs for four reasons:

- These are under the direct control of the Regional Water Board and monitoring requirements can therefore readily be adjusted
- They represent a similar set of programs that can be dealt with as a group
- Improving these programs will provide rapid and tangible evidence of the Delta RMP's ability to effect needed changes to monitoring; this will enhance the program's credibility and stakeholder buy-in
- Working at the scale of all Delta management programs would be unwieldy, time consuming, and beyond the Delta RMP's capacity in its early startup phase

As a first step in this focus on discharge monitoring, the project team conducted interviews with 14 NPDES dischargers to identify their concerns, critiques, and suggestions. These interviews produced a number of specific critiques of existing monitoring and assessment approaches along with equally specific recommendations about opportunities to improve efficiency, coordination, and overall effectiveness. This information is organized below into a number of specific opportunities for pilot projects.

Pilot project opportunities

Interviews with NPDES dischargers identified a number of specific constraints and related opportunities to improve monitoring designs as well to synthesize and analyze data to produce new information. While these opportunities do not completely address all the Delta RMP's goals, they comprise an effective starting point that will directly engage stakeholders and enhance the Regional Board's capabilities, thus providing a solid basis for the program's further development. Next steps setting priorities from among the following opportunities and developing workplans for each pilot project.

Specific constraints and opportunities derived from interviews with dischargers are organized below in terms of the Delta RMP's core goals.

Articulate priority management questions

- Constraint: Permittees are often not sure what the purpose of the monitoring is
- Opportunities:

- Board staff and permittee work together to ensure that permits contain explicit management / monitoring questions
- Identify water quality management decisions, policies, and actions that regional water quality monitoring should inform; shift efforts accordingly from end-of-pipe to regional monitoring

Improve the efficiency of monitoring programs

- Constraint: The level of monitoring effort remains fixed over time and does not adjust to account for past experience, level of risk, or relative priority of the underlying question
- Opportunity: Develop adaptive monitoring approaches that adjust the level of monitoring effort based on past experience; this will produce estimates of the risk of exceedances and allow resources to be shifted to more urgent questions

- Constraint: Requirements to monitor constituents that are unlikely to be in the effluent lead to monitoring effort that is disproportionate to the likelihood of seeing an impact
- Opportunity: Develop more streamlined and risk-based monitoring designs, with savings used to fund regionally important studies; this will also result in summaries of constituent levels over the long term

- Constraint: Inflexible design criteria related to the selection of upstream and downstream sites lead to poor designs, unusable data, and wasted resources
- Opportunity: Empanel a regional workgroup to develop more flexible and appropriate definitions of “upstream” for compliance monitoring

- Constraint: Shifting definitions of background conditions have raised questions about the appropriate dataset to use in assessing discharge impacts
- Opportunity: Empanel a regional workgroup to develop a common definition of background conditions to use for specific questions / assessments

- Constraint: Inflexible monitoring programs limit the ability to apply a variety of study approaches as needed to answer questions
- Opportunity: Redefine required monitoring to include routine compliance monitoring, special studies, and participation in regional monitoring, with options for shifting resources among the three components as needed (analogous to discharger permits in southern CA)

Monitoring coordination

- Constraint: Changing sampling requirements can undermine the ability to track water quality conditions over the long term
- Opportunity: Board staff and permittees work together to ensure consistency and continuity of data sets needed to answer questions at larger scales

- Constraint: Monitoring data from different permittees is not combined to answer questions at larger scales or to manage discharges in relation to each other
- Opportunities:
 - Identify locations where multiple discharges enter a receiving water in close proximity to determine if their monitoring can be coordinated to address questions about localized cumulative impacts
 - Combine data from multiple discharges to estimate overall regional exceedance frequencies for different constituents

- Develop regional loading estimates for the Sacramento River as a basis for managing assimilative capacity and discharge treatment requirements on a broader scale
- Constraint: Compliance monitoring requirements can limit permittees' ability to participate in other studies that address the potential impacts of their discharges
- Opportunity: Identify one or more instances where discharger participation could enhance studies of, for example, nutrient impacts on plankton and delta smelt populations

Data management

- Constraint: The CIWQS data reporting tool has remaining shortcomings and inefficiencies
- Opportunity: Permittees work with Regional and State Board staff to address concerns and improve the ability to enter and retrieve the full range of monitoring data types