

Proposed Sediment Quality Objectives for Enclosed Bays and Estuaries

State Water Resources Control Board
Meeting
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Presentation

- Program Overview
- Draft Plan
- Proposed Changes
- Public Comments
- Peer Review Comments

Program Overview

Water Board Program

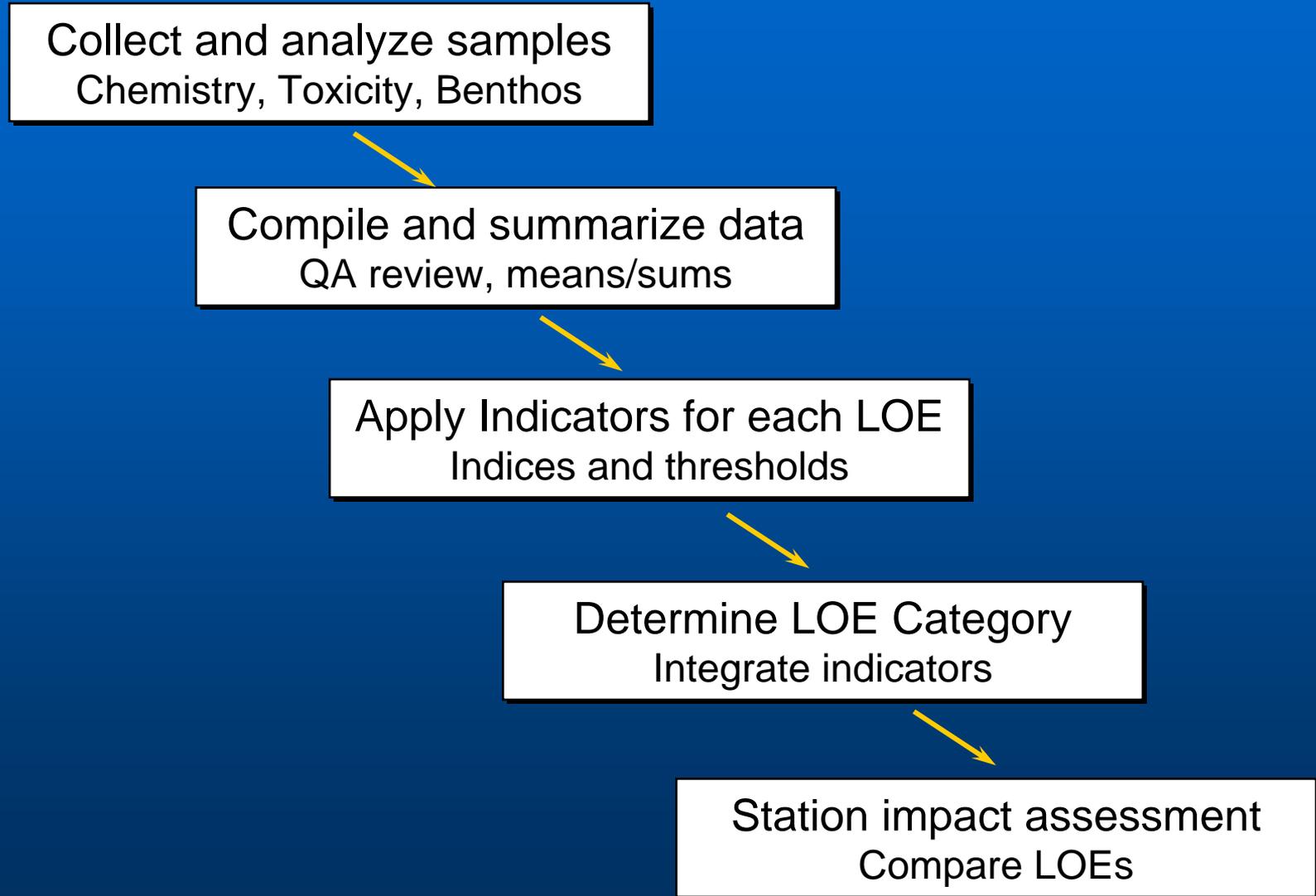
- Develop scientifically defensible tools and indicators
- Develop logical process of implementation
- Program based on iterative approach
 - Phase I benthos-aquatic life for embayments
 - Phase II benthos-aquatic life estuaries and human health
 - Phase III fish and/or birds to be determined and dependent upon resources
- Only **Phase I** will be considered at today's meeting

Draft Part 1

Overview of Part 1

- Narrative SQOs
- Interpreted using specific indicators and thresholds
- Implementation language describing;
 - Application of SQOs within specific programs
 - NPDES Permits
 - 303(d) listings (waterbody impairment)
 - Dredging
 - Exceedence of SQOs
 - Response Actions
 - Stressor Identification
 - Biological based pollutant targets

Draft Plan



Draft Plan

Station Assessment categories

- Unimpacted (U)
- Likely Unimpacted (LU)
- Possibly Impacted (PI)
- Likely Impacted (LI)
- Clearly Impacted (CI)
- Inconclusive

Major Comments: Regulated Community

- Strong support for MLOE and process
- SQO may be overbroad and stress the need for different responses depending upon magnitude of impacts
- Unclear how SQOs will be implemented as receiving water limitations in permits or for 303(d) listing purposes
- Regional Boards are given too much discretion
- Support for requiring stressor ID prior to management action
- Concerns regarding some tools (SQGs), the affects of rounding LOE results and the estuarine tools
- Additional concerns regarding legacy pollutants and sediment management zones, CEQA and EA
- Monitoring frequencies inappropriate

Major Comments: Environmental Community

- Prefer chemical-specific thresholds and/or effluent limits
- Receptors and beneficial uses limited (doesn't address fish, marine mammals, birds or environmental justice issues)
- Process is too complicated; may be time-consuming and inconclusive
- Will result in more study, not action
- Regional Boards are given too much discretion
- Does not move cleanup actions forward faster
- Does not address inadequacy of dredging programs
- Monitoring frequencies inadequate

Peer Review Comments

- Support benthic infauna as an ecologically relevant receptor
- MLOE is necessary because bioavailability, uncertainties in the indicators, variability in sediment properties and pollutants
- The proposed toxicity tests are appropriate
- The integration framework appears logical, transparent and sound
- The authors have recognized the shortcomings of SQGs (1)
- Except for the exclusion of mechanistic criteria, the implementation is based on sound scientific knowledge methods and practices (1)
- Most of the scientific knowledge and methodologies on which the recommendations are based have been around for a decade or more and are well accepted by the scientific community (1)

Peer Review Comments

- Both mechanistic and empirical criteria should be used to judge the extent of toxicity that is likely due to chemicals (1)
- The effort should have been directed at resolving the bioavailability issues (1)

Proposed Changes

1. Page 15 Staff Report. Arcata Bay is a part of Humboldt Bay, not a separate bay.
2. Deleted the use of supplemental toxicity tests
3. Table 6; deleted cadmium from the CSI indicator
4. Clarified that a RB may designate the PI stations as meeting the narrative if toxic pollutants are found to not be the cause based upon stressor identification
5. Added flow charts that describe the monitoring, assessment, stressor identification, and management actions
6. Delete minimum frequency for Phase I/Majors

Proposed Changes

6. Added language to ensure that the regional monitoring coalitions complete the appropriate monitoring and/or studies in a timely manner
7. Revised 303(d) listing language
8. Added language that requires the Regions to focus on the worst sites first
9. Added language to ensures that groups of sites classified as PI are treated differently than groups classified as LI or CI

Proposed Changes

10. Added language describing the applicability of Resolution 92-49
11. Changed the definition of surficial sediments

303(d) Listing Changes

- The listing policy doesn't directly address the narratives interpreted using MLOE with pass/fail results.
- The listing policy still applies and allows the boards to list for toxicity alone or for toxicity and a chemical
- Draft Part 1 says that if a regional board determines that a listing is based on impairment of the SQO standard (i.e. during TMDL development), then the regional board has to reevaluate the listing under the SQO criteria.
- The State Board will revisit the listing policy to incorporate the specific listing criteria for SQOs as well as to address the inconsistency with listing based on only 2 lines of evidence

End of Presentation

Questions?