

# Testing Protocols Report

## Technical Work Group Overview and Direction

### **Purpose and Need:**

The Strategy Review Group identified updating and establishing appropriate testing protocols for the characterization of sediments proposed for dredging and disposal as a critical issue for the Delta LTMS program. Existing methods and protocols for the evaluation of dredged material will be reviewed and documented. The Work Group will utilize the Delta Dredging and Reuse Strategy (DDRS) (CVRWQCB 2002) developed for the CALFED Bay-Delta Program as a spring board for establishing their baseline.

The DDRS provided a technical analysis of potential contaminants in dredge material related to impacts on water quality, human health and biological resources. This document provides a foundation with which the Work Group can move forward from. It provides the first step of reviewing the existing information (e.g., chemistry, dredging project, etc) and the analyses of the quality of sediment and water testing protocols within the Delta (2002). The DDRS made recommendations in Chapter 6 for future research and analyses for specific tests and evaluating new contaminants of concerns. The Work Group should review and if appropriate prioritize these recommendations for implementation.

### **Proposed Tasks:**

Utilizing the DDRS as a spring board the Work Group will have a head start on the subtasks identified below:

- 1) *Literature Search* – The Work Group will conduct a review of the current methods and protocols used to characterize sediments proposed for dredging and disposal. As previously stated the DDRS (Volumes I and II) provides a solid foundation for this information. The Work Group will need to update this base summary with current information which will be accessible from the sediment database developed under a separate task as well as from other programs around the nation such as the Northwest Regional Sediment Evaluation Framework (Corp et al. 2006). Once information has been updated, the Work Group can then identify new data gaps in addition to those already identified by the DDRS.
- 2) The Work Group will evaluate regional sediment quality data from LTMS data base
- 3) An initial sediment characterization testing framework to address various project scenarios for dredging and disposal. This framework will identify a list of chemicals of concern, physical parameters; elutriate tests, and biological tests appropriate for characterizing Delta sediments. This framework will use a risk based approach, will be adaptive, and integrate new methods or processes as they are approved by the Work Group, IWG, and DMMO.

- 4) The final report will provide recommendations for testing protocols for dredging, disposal, and beneficial use of dredged sediment in the Delta. It will also include a process for annual reviews to assess the accuracy and predictability of the testing framework. This review process will include implementation of adaptive management, introducing new methods or testing protocols where pertinent.

In order for this Work Group to be successful, staff participation from at least one of the five core Delta LTMS agencies must occur:

- U.S. Army Corps of Engineers (Sacramento and San Francisco Districts)
- U.S. Environmental Protection Agency (USEPA),
- California Department of Water Resources (DWR),
- California Bay-Delta Authority (CBDA),
- Central Valley Regional Water Quality Control Board (Central Valley Water Board).
- Experienced staff participation and technical contributions from other agencies (state or federal) or stakeholders would be beneficial to assist completing the proposed tasks.

**Participation workload:**

It is anticipated that, at a minimum, the Work Group will meet once a month to collaborate on achieving the tasks specified and addressing priority of short and long-term issues pertaining to the permitting process. Work Group participants should also anticipate a minimum of 10 hours a month to review, produce, or discuss documents relevant to the regional disposal and reuse alternative deliverables listed below.

**Deliverables:**

The primary deliverables for this Work Group are expected to include:

- A list of chemicals of concern
- Sediment screening guidelines established using a risk based approach
- Elutriate tests for various disposal options
- Biological tests for various disposal options
- Final Report detailing recommendations for a comprehensive characterization framework and annual review process. Recommendations for additional studies will also be included with this report

These deliverables will focus on developing a strategy for applying the correct test to the right application rather than developing new tests. The draft report will be submitted to the IWG for review and approval. A final report will then be submitted to the Strategic Review Committee for a comment period. If approved, the framework will then be implemented into each of the agencies current dredging project approval process. The Work Group chair will provide monthly updates in the form of progress memos or verbal updates at the IWG and/or SRG meetings.