

STATE WATER RESOURCES CONTROL BOARD
WORKSHOP SESSION--DIVISION OF WATER QUALITY
JULY 6, 2005

ITEM 8

SUBJECT

INFORMATION ITEM--ANNUAL STATUS REPORT ON THE STATE WATER RESOURCES CONTROL BOARD (STATE WATER BOARD) PROGRAM TO DEVELOP SEDIMENT QUALITY OBJECTIVES

DISCUSSION

The State Water Board is required to conduct annual public workshops to report on the status of the program to develop sediment quality objectives (SQOs) and to provide a description of planned future activities. This public workshop is intended to fulfill that requirement for the period of July 2004 to July 2005. The first Annual Status Report Workshop was held July 7, 2004. Prior to that, the State Water Board held a public workshop and hearing on May 6, 2003 concerning the Workplan to develop SQOs, which was later adopted at the May 21, 2003 Board Meeting under Resolution No. 2003-0034.

In 1989, the California Water Code (CWC) was amended to require the State Water Board to develop SQOs as part of a comprehensive program to protect existing and future beneficial water uses within California's enclosed bays and estuaries. The State Water Board prepared a conceptual approach in 1991 to develop SQOs; however, this conceptual approach was never implemented because available resources were focussed at that time on the identification of hot spots throughout coastal waters, bays, and estuaries and development of cleanup plans. In 1999, a lawsuit was filed against the State Water Board for failing, among other things, to adopt SQOs in accordance with the CWC. The Court agreed with the petitioners, and the State Water Board was mandated to develop SQOs. As required by Court Order, SQOs are to be developed under the following schedule:

- By June 30, 2003, the State Water Board must adopt a scoping document and/or any necessary revisions to the 1991 Workplan.
- By August 5, 2005, the State Water Board must circulate draft proposed objectives to the public.
- By February 28, 2007, the State Water Board must adopt proposed objectives and implementation policy and submit to the Office of Administrative Law.
- Hold public workshops annually to report on the status of the program and future efforts.

State Water Board staff has been working with the Southern California Coastal Water Research Project, the San Francisco Estuary Institute, Moss Landing Marine Laboratories, Marine Pollution Studies Laboratory at Granite Canyon, and scientists from other organizations and agencies to develop the most robust, sensitive and relevant tools, thresholds, and methods possible.

Presented below is a description of tasks and activities conducted during the past year.

Outreach and Coordination Efforts

Scientific Steering Committee (SSC): Members of the SSC are: Ed Long, consultant formerly with National Oceanic and Atmospheric Administration (NOAA); Dr. Peter Landrum; NOAA Great Lakes Research Laboratory; Dr. Todd Bridges; U.S. Army Corps of Engineers, Engineer Research and Development Center; Tom Gries, Washington Department of Ecology Sediment Management Unit; Dr. Robert F. Van Dolah; South Carolina Marine Resources Research Institute; and Dr. Robert Burgess, U.S. Environmental Protection Agency (U.S. EPA's) Office of Research and Development.

The SSC met in August 2004 to review the overall approach proposed by the technical team and again in April 2005 to review specific technical elements associated with target organisms, sediment indicators, and the integration of multiple lines of evidence. Overall the SSC has responded favorably to both the overall approach and the specific technical elements. The greatest concern of the SSC is the limited time available to complete the research and assess all the implementation related issues that arise during this developmental process. The SSC will meet again on July 27, 28, and 29, 2005 to receive preliminary results of ongoing efforts and to assess whether the tools proposed for further evaluation refinement are well supported by the results. The selected indicators will form the basis for threshold development. Preliminary thresholds will be presented at the SSC meeting slated for October 2005.

Sediment Quality Advisory Committee: The Sediment Quality Advisory Committee consists of eleven primary members representing a variety of interests from industry to environmental justice and conservation organizations. The main goal of this committee is to advise State Water Board staff on policy issues and objectives development. Since January 2005 the Sediment Quality Advisory Committee has been meeting every six to eight weeks.

Agency Coordination Committee: This committee was initiated primarily to ensure that the proposed implementation policy does not conflict with other established water quality and resource protection programs. Agencies with staff participating include U.S. EPA, U.S. Fish and Wildlife Service, NOAA, coastal Regional Water Quality Control Boards, Department of Fish and Game, California Coastal Commission, Office of Environmental Health Hazard Assessment, Department of Toxic Substances Control, State Lands Commission, Bay Conservation and Development Commission, and the Department of Pesticide Regulation.

Policy Tasks

The Sediment Quality Advisory Committee and the Agency Coordination Committee members have identified a number of priority concerns that the State Water Board staff is researching for the participants. These issues include:

- Linking biological effects to pollutants
- Environmental justice, selection of risk factors, and consumption rates
- Use of SQOs in regulatory and assessment programs

Technical Accomplishments

- Completion of the sediment quality database. Comparison of the proposed indicators and thresholds to sediment quality assessment data from California will be used to demonstrate that the policy is protective and consistent throughout the state.

- Comparison of current sediment quality guideline approaches. Statistical analyses are being used to select the methods that provide the best reliability and accuracy for determining the impacts from sediment contamination.
- Identification of benthic community habitat groups and candidate indices of condition. The effective use of benthic community analysis information requires the development of interpretive tools that are minimally affected by natural variations in populations due to habitat differences.
- Comparison of sublethal sediment toxicity test reliability. Evaluation of toxicity test sensitivity and reliability is needed to ensure that the proposed methods are protective of beneficial uses and able to provide consistent results.
- Evaluation of sediment-biota accumulation processes. Quantification of the linkage between sediment contamination and accumulation in fish is essential for the selection of sediment chemistry thresholds that are protective of human health and wildlife.

Planning Tasks

- Completion of final technical work plans for project elements. The technical work plans have been reviewed and endorsed by the Scientific Steering Committee, which provides assurance that sound science is being used.
- Development of a multiple line of evidence assessment framework. The framework provides a mechanism to improve accuracy of the assessment and also provides information that can be used to prioritize impacted sites for subsequent management action.
- Identification of data needs for application of SQOs in regulatory programs. Frequent communication with stakeholder groups has identified areas of concern and resulted in suggestions to improve the implementation of the objectives.
- Develop indicator specific thresholds for review by SSC, Sediment Quality Advisory Committee, and Agency Coordination Committee by October 2005.

Schedule

- July 26-28th2005, SSC Meeting at Southern California Coastal Water Research Project (SCCWRP)
- August 5, 2005, Circulate a Staff Policy Summary
- September 30, 2005, California Environmental Quality Act Scoping Meeting
- October 30, 2005, SSC Meeting at SCCWRP
- December 30, 2005, Circulate Draft Functional Equivalent Document