

CALFED Bay-Delta Program

Water Quality Program Program Plan Year 7

(State FY 2006-2007; Federal FY 2007)

Implementing Agencies:

List agencies

California Department of Health Services

U.S. Environmental Protection Agency

State Water Resources Control Board

Regional Water Quality Control Boards

July 31, 2006



CALFED
BAY-DELTA
PROGRAM

Introduction

This Water Quality Program Plan identifies the CALFED Program activities that are scheduled to be completed during State Fiscal Year (FY) 2006-2007 and Federal FY 2007 (July 1, 2006 and September 30, 2007). The Plan also describes the accomplishments made during the previous year.

Readers familiar with past CALFED Program Plans will notice a difference between this plan and those prepared during previous years. The major variations are that the plan focuses on activities that will be undertaken in the upcoming year. Further, the plan does not contain the various sections found in previous plans such as "Performance Measures", "Integration of Science, Environmental Justice and Tribal Relations" and "Public Input and Outreach." However, a comprehensive discussion of the planned activities for the upcoming year can be found in the "Activity" section of this plan.

Priorities

As stated on page 65 of the CALFED ROD, the WQP's general target is "continuously improving Delta water quality for all uses, including in-Delta environmental and agricultural uses" and its specific target for "providing safe, reliable, and affordable drinking water in a cost-effective way, [is] to achieve either: (a) average concentrations at Clifton Court Forebay and other southern and central Delta drinking water intakes of 50 µg/L bromide and 3.0 mg/L total organic carbon, or (b) an equivalent level of public health protection using a cost-effective combination of alternative source waters, source control and treatment technologies."

On October 13, 2005 the California Bay-Delta Authority disapproved the 2006 Water Quality Program Plan because major activities described by the plan were not funded. That situation has not changed and new activities have been added to prepare for CALFED End of Stage I decisions.

This year, the Water Quality Program has divided its priorities into near term (2007) and long term. A new priority is to focus on decisions scheduled to be made at the end of Stage 1 (2007), specifically regarding the role of a Through-Delta Facility in water quality improvement. Last year, the Program intended to use Regional ELPH planning to fill some critical information gaps, but funding difficulties and timing constraints have made this approach impractical. The Program is therefore proposing an activity to gather representative information to inform Stage 1 Decisions, implementation of the activity will require new resources, some of which will come through the United States Bureau of Reclamation (Reclamation). Regional ELPH Planning will continue to be a priority for the development of a long term implementation strategy, along with the implementation of the Central Valley Drinking Water Policy.

Accomplishments

Several notable water quality accomplishments were achieved in Year 6:

- ◆ In February 2006, the Contra Costa Water District completed construction of the Old River and Rock Slough Water Quality Improvement Projects. The purpose of these projects is to minimize elevated salinity and other constituents of concern to drinking water at urban intakes in the South Delta. The projects will now be monitored to determine the

- actual improvements. In accordance with the CALFED ROD, these projects have been completed prior to completion of the installation of permanent barriers in Old River near the San Joaquin River, Grant Line Canal, Old River near Tracy and Middle River and before the SWP pumping increases to its full capacity of 10,300 cfs during periods that are currently restricted. (\$4,420,000, Proposition 13, administered by DWR).
- ◆ The State Water Resources Control Board's approval of a total maximum daily load or TMDL to control salt and boron discharges into the lower San Joaquin River, which will ultimately improve the overall water quality for these important source waters. An interagency group has formed to implement an alternative solution to prescribed load reductions.
 - ◆ The Central Valley Drinking Water Policy Work Group released a conceptual model of organic carbon, and a draft conceptual model of nutrients. Conceptual models of pathogens and salinity are in process. The Work Group is now working on further refinement of the models and on soliciting feedback from a larger audience. These conceptual models also assist CALFED in development of drinking water quality performance measures and program strategy. (\$300,000 from California Urban Water Agencies/Sacramento Regional County Sanitation District, \$178,000 from USEPA, \$970,000 from Proposition 50 administered by the SWRCB, \$35,000 from the Sacramento Regional Watershed Program, \$80,000 from SB23 administered by the DWR)
 - ◆ A pre-feasibility study report for the flooded islands was prepared. The study concluded that modifications to Franks Tract could significantly improve water quality during drier times of the year. It identified several preferred alternatives that may result in improvements in overall salinity conditions in the Delta. The study recommends implementing a pilot project to study the impacts/results before moving to a full-scale project.
 - ◆ The Department of Water Resources and US Bureau of Reclamation (USBR) completed their Plan to Meet Delta Standards and transmitted it to the California State Legislature.
 - ◆ The Bay Area UV Light and Multiple Disinfectants Project has concluded demonstration and bench scale testing and has summarized its results in a draft report. (\$750,000 from USEPA)
 - ◆ In July 2005 the Water Quality Program released a compiled survey of Delta drinking water treatment, confirming its goals and providing some strategic guidance. (SB23, administered by DWR, managed directly by CBDA)
 - ◆ The Water Quality Program has received final reports from all but two of the projects it funded through general funds (SB23), which expired in May 2005. The Water Quality Program is working with DWR and the USGS to obtain the missing reports. (18 projects, approx. \$8,500,000, SB23 administered by DWR). Results from many of these projects will be analyzed and incorporated in the program's Final Assessment.
 - ◆ The Water Quality Program contributed funding to a peer review of the San Joaquin River CALSIM II Model, which was completed in February 2006. (\$20,000 from USEPA)
 - ◆ The California Department of Health Services (CDHS) has funding available from Prop 50 for projects that may have residual benefits or relevance to CALFED program objectives.
 - ◆ The State Water Resources Control Board committed Proposition 50 agricultural and nonpoint source grants to a number of projects that will contribute to the goals and objectives of the Drinking Water Program. CBDA and other partner agencies participated

in the review and selection process to ensure the Proposition 50 projects were consistent with the ROD.

Activities

- ◆ The Water Quality Program's highest priority last year was to fund regional ELPH plans and use those plans to develop information needed to inform end of Stage I decisions. The Program has been unsuccessful in its attempts to use Proposition 50 funding (\$3.4 million) for this purpose. Regional ELPH Planning is still an important activity for both informing long-term strategy and implementing that strategy. The Water Quality Program will work to incorporate its information and strategy into the Integrated Regional Water Management construct and to obtain funding to implement this important activity. The Water Quality Program also reviewed all CALFED-area IRWM proposals and determined that drinking water quality and CALFED water quality goals are currently not well addressed in proposals. The Water Quality Program will continue to coordinate with DWR and SWRCB on regional planning efforts.
- ◆ End of Stage I decisions are the current highest priority for the Water Quality Program. The Program will define and implement a new approach to obtaining the information needed to inform the water quality aspects of a decision on a Through Delta Facility, essentially through production of a Final Assessment. The Final Assessment is a ROD requirement, and the focus of this work will be on developing a synthesis report on our knowledge of the Delta and drinking water. The USBR has approximately \$280,000 of CALFED funds to support this work.
- ◆ Work will continue on the Central Valley Drinking Water Policy, and that work will also help to inform end of Stage I decisions and development of performance measures. Major tasks in Year 7 include refinement of key conceptual models and compilation of economic information. CBDA is providing direct staff support of the development and refinement of key conceptual models. (Funding details in Accomplishments section).
- ◆ The Delta Improvements Package remains an important group of activities. Work on the Franks Tract project will include collection and analysis of flow and salinity data from stations in the Central and North Delta and numerical model refinement in order to study the effect of pilot project alternatives on the hydrodynamics and salinity in the Franks Tract region. Regional fish and water quality studies will also be conducted, including collection of baseline data for fisheries, Egeria, Corbicula, mercury methylation, and dissolved organic carbon. The CEQA/NEPA process will be initiated during the fiscal year. The US Bureau of Reclamation is initiating a feasibility study of Recirculation to help meet Vernalis standards and initiating NEPA/CEQA scoping in 2007. Contra Costa Water District continues work on its Alternative Intake Project. There have been no resources identified to implement a DIP performance measurement program.
- ◆ In cooperation with a multiple-agency team, the Drinking Water Quality Program will continue to work on developing performance measures and putting information on a website (Science Program or Water Quality). CBDA staff is using information from various conceptual models to develop performance measure packages.
- ◆ CDHS has invited 17 CALFED-related projects totaling \$134 million to submit full funding applications under Chapter 4b to reduce demand on the Colorado River. These projects either increase the use of local water supplies, or install treatment on existing water

supplies to meet new requirements, thus allowing greater flexibility in the use of water supplies.

- ◆ CDHS has invited three CALFED-related projects totaling \$0.7 million to submit full funding applications under Chapter 4a5 for treatment or modifications to reduce disinfection byproducts.
- ◆ CDHS and DWR have invited one CALFED-related projects totaling \$0.6 million to submit a full funding application under Chapter 6c for water systems to convert to ultraviolet disinfection, thus reducing disinfection byproducts.
- ◆ CDHS and DWR will invite two CALFED-related projects totaling \$2.1 million to submit full funding applications under Chapter 6b to demonstrate new water treatment technology. Contra Costa Water District has proposed a \$500,000 study of the removal of NDMA, endocrine disrupting compounds, and pharmaceuticals and personal care products in South Delta Water. Solano County Water Agency has proposed a \$1.6 million project for a permanent water treatment research facility for the North Bay Aqueduct.
- ◆ CDHS anticipates inviting one CALFED-related project totaling \$115,000 to submit a full funding application under Chapter 4a4 for drinking water source protection.
- ◆ In addition to the above projects, CDHS is in the process of funding two projects under Chapter 3, Water Security, that are relevant to CALFED. These two projects, one for East Bay Municipal Utility District and another for Contra Costa Water District, will allow these two agencies to intertie their untreated and treated water sources to other water systems in the San Francisco Bay Area, thus enhancing the delivery of water systems in the region.

Coordinated Actions

As a result of the 10 year Action Plan, two Water Quality activities/programs in the ROD were identified as Coordinated Actions for CALFED. This means that these activities are associated with and contribute to CALFED, but would continue even if CALFED were to be discontinued. These activities will continue to be done by implementing agencies, and the agencies will report to CALFED on an annual basis on the status of these activities. The activities will be conducted “in the CALFED way” including an open and transparent public input process, consideration of Environmental Justice, robust science, and evaluation of performance measures.

In Water Quality, the two activities identified as Coordinated Actions are New Treatment Technology Pilots and Drinking Water Source Improvement Grants. The Technology Pilots are being carried out by the Department of Health Services through Proposition 50 grants in Chapters 4a2 and 6b. The Source Improvement Grants are being carried out by the State Water Resources Control Board through grants from Proposition 13 and Proposition 50, and by the Department of Health Services through Source Water Protection Grants from Proposition 50 and Source Water Protection loans from the federally funded Safe Drinking Water State Revolving Fund.

Public Participation Process

The California Department of Health Services (CDHS) uses a public process in the development of criteria and the implementation of funding programs under Proposition 50. After presenting the draft implementation criteria at a series of public workshops around the state, CDHS established a

stakeholder group with representatives from small and large drinking water systems, advocates for environmental justice and disadvantaged communities, and organizations representing water systems. CDHS works with the stakeholder group in finalizing funding priority lists and project invitation lists and in developing changes in the criteria to improve access to funding for water systems serving disadvantaged communities. CDHS continues to hold public workshops annually upon the release of new funding invitations.

Environmental Justice

CDHS has invited 4 CALFED-related projects for \$3.6 million in funding under Proposition 50 that serve areas identified as Disadvantaged Communities. The projects will contribute to improved public health to communities served by the water systems receiving funding. In addition, CDHS has invited 8 projects for \$5.9 million in funding that are not associated with CALFED, but that address the public health issues of drinking water quality in areas identified as Disadvantaged Communities. CDHS continues to seek out projects that serve DCs that are eligible for Proposition 50 funding programs.

Budget

|

Water Quality (\$ in millions)	Yr 7
Federal	\$.28
State*	\$13.3
Water User	\$0.9
Available Funding Total	\$14.48

Water Quality (\$ in millions)	Yr 7
Franks Tract	\$8.4
Contra Costa Canal Lining	\$2.4
Final Assessment	\$.28
Prop 50 funds at SWRCB (NPS)	\$3.4
Available Funding Total	\$14.48

* Does not include Proposition 50 funding at DHS and SWRCB that may support CALFED water quality goals, or SWRCB and DHS funds used to support program management.