

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

June 15, 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 is essentially compounded by the need to do work to inform the Stage 1 decision process.

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 an impractical approach. The Program is therefore proposing an activity to gather representative information to inform Stage 1 Decisions, although implementation of the activity will require new resources. 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. **Add information on SJ WQMG implementation?**
 - ◆ The Central Valley Drinking Water Policy Work Group released drafts of three conceptual models: organic carbon, nutrients, and pathogens. A fourth conceptual model (salinity) is 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, \$150,000 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 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 **and what we've done with results**).
 - ◆ 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.

Other potential items:

DWR/USBR plan to meet water quality standards

Public outreach – a number of projects have made presentations of results at various conferences in 2005-2006, we are attempting to compile and make a report.

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 finalize its Regional Planning framework, to incorporate its ideas 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, to identify which plans and programs incorporated drinking water quality. 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. The Water Quality Program estimates this will require approximately \$500,000 in funds the program does not currently have. (Note: there is also some coordination potential with DRMS).
- ◆ 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. **San Joaquin WQM ??** 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 has been no activity to implement a DIP performance measurement program, and no resources have been identified to do so.**
- ◆ 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 \$2.1million 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.

Schedule

(in progress)

Prepare a schedule that sets out the activities anticipated over the next 3 years (State FY 06-07 to 09-10 and Federal FY 07-10). The schedules in the current program plan should serve as a template.

Central Valley Drinking Water Policy (12/07 complete technical work, 12/09 adopt BPA)

Frank Tracts over the next five years:

- Testing of fish monitoring equipment: Fall 2006
- Flow and salinity data collection/analysis: 7/2005 thru 12/2009
- Numerical modeling to study impacts of pilot project on Delta hydrodynamics: Spring/2007
- Regional fish study and water quality study: Fall 2007
- Collect baseline data for fisheries, Egeria, Corbicula, mercury methylation, dissolved organic carbon: 1/2007 thru 12/2007
- CEQA/NEPA process: 1/2007 thru 12/2009
- Final design of pilot project: 1/2009 thru 12/2009
- Construction of pilot project: 7/2010 thru 6/2011

San Joaquin Recirculation (long term evaluation done in 2008)

CCWD Canal Lining Phase I (Construction complete June 2009)

Regional ELPH Planning

Water Quality Exchanges (same schedule as last program plan)

Treatment Demonstrations (same schedule as last program plan)

Should we add in a line for source improvement grants??

Budget

(in progress)

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The Franks tract budget includes: \$3 million in proposition 13 funds, \$4.5 million in proposition 50 funds, and \$0.9 million in state water project funds collected from state water contractors.

\$3.4 million at SWRCB – legislation needed to allow funding of planning activities (for use to fund regional plans). Also some Prop 13 funds remaining. Approximately \$2.4 million remaining in Prop 13 for Delta agricultural drainage mitigation.

Water Quality (\$ in millions)	Yr 7
State	\$
Water User	\$
Available Funding Total	\$

Water Quality (\$ in millions)	Yr 7
Source Improvement	\$
Regional ELPH Planning	\$
Treatment Technology Demonstrations	\$
Monitoring, and Assessment	\$
Program Management	\$
Available Funding Total	\$