California Bay-Delta Program

Water Quality Program
Multi-Year Program Plan (Years 6-9)

(State FYs 2005-06 to 2008-09; Federal FYs 2006 to 2009)

Implementing Agencies:
California Department of Health Services
U.S. Environmental Protection Agency
State Water Resources Control Board
Regional Water Quality Control Boards

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Goals, Objectives and Targets

CALFED agencies and the Water Quality, Ecosystem Restoration and Watershed Management programs are investing in water quality projects to improve water quality for all beneficial uses, including drinking water, agricultural water, providing clean water for a diverse and healthy aquatic ecosystem, and supporting watershed stewardship. The Water Quality Program is investing in projects to improve water quality from source to tap to benefit the more than 22 million Californians whose drinking water supplies come from the Bay-Delta watershed.

Goals and Objectives:

The goal of the Water Quality Program (WQP) is to advance efforts to provide safe, reliable, and affordable drinking water to the millions of Californians who rely on waters from the Delta watershed through cost-effective continuous improvement to source water quality, water management, and treatment. The WQP is committed to achieving continuous improvement in the quality of the waters of the Bay-Delta system with the goal of minimizing ecological, drinking water and other water quality problems. The CALFED Programmatic Record of Decision (ROD) (August 28, 2000) describes the WQP and identifies the initial program activities in support of its water quality targets, including specific milestones for their achievement. Work is progressing on all Record of Decision (ROD) commitments, while currently emphasizing source water improvement and regional planning.

Since the issuance of the ROD, the Delta Drinking Water Council and its successor, the California Bay-Delta Public Advisory Drinking Water Subcommittee (DWS) has had a strong role in guiding implementation of the Program. In 2002, the DWS developed a framework for drinking water quality management called "The Equivalent Level of Public Health Protection Decision Tree" (ELPH diagram) and Conceptual Framework (a descriptive document). In 2003, the USEPA sponsored a focused workshop to identify and prioritize actions for program implementation and the WQP initiated a process to develop a comprehensive strategic plan for the DWQP. As part of the strategic planning process, program goals, objectives, and strategic actions addressing source water quality, water management, treatment, affordability, cost-effectiveness, coordination and communication, and research were developed. A draft final strategic plan will be completed in early 2005. We anticipate that the development of regional drinking water plans, combined with the technical work being done for the drinking water policy by the Central Valley Regional Water Quality Control Board, will further set the direction of the Program

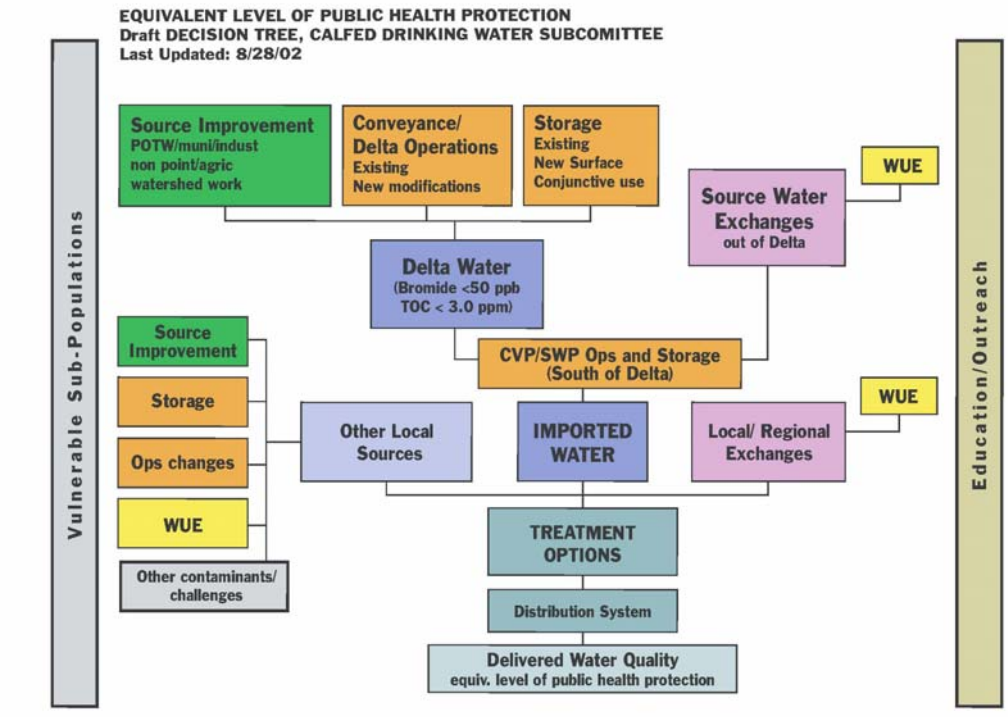
Targets:

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 is "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."

In addition, Appendix D[1] of the Water Quality Program Plan, identified several additional numeric targets listed for drinking water intakes:

Chloride	250 mg/L,150 mg/L (Same as D-1641 and the current Sacramento-San Joaquin Bay Delta Water Quality Control Plan)
Nutrients	10 mg/L, no increase in nitrate levels
Total Dissolved Solids	< 220 mg/L (10-yr avg) (from SWP Water Service Contract, may be changed to a 6-month or 1 year avg target) < 440 mg/L (monthly avg)
Pathogens	No MCL standard; < 1 oocyst/100L for *Giardia* and *Cryptosporidium*
Turbidity	0.5 or 1.0 NTU (in treated water); 50 NTU (target is to reduce current variability)

The strategy of "an equivalent level of public health protection" is to achieve an equivalence of these targets through implementation of activities ranging from source improvement, Delta water management improvements, local and regional infrastructure improvements and additions, regional water quality exchanges, to improved treatment technology and distribution system considerations.



[1] "Water Quality Targets for Parameters of Concern"

Accomplishments

Several notable water quality accomplishments were achieved in Year 5: The Central Valley Regional Water Quality Control Board passed a resolution supporting the development of a drinking water policy for the Sacramento and San Joaquin Delta and upstream tributaries. This drinking water policy is needed because current policies and plans lack water quality objectives for several known drinking water constituents, such as disinfection by-product precursors and pathogens. Another accomplishment was the Central Valley Regional Water Quality 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. Finally, the DWS identified regional planning as a high priority for the WQP. Pilot regional water quality plans were developed with funding from the WQP for Southern California, Northern Sacramento Valley, and the Delta Region. The WQP anticipates that these plans will help to shape future program priorities.

To date, the program has supported its projects through water quality grants, either directly or in partnership with its implementing agencies. These projects were funded from three competitive grant solicitations. They include:

2001 CALFED Drinking Water Quality Program Grants: The DWQP awarded grants for 13 projects totaling $6.7 million. Emphasis in this first Proposal Solicitation Package (PSP) was on monitoring and assessment.

2002 SWRCB Grants: The State Water Resources Control Board (SWRCB), with the DWQP, awarded grants for 13 projects totaling $7.2 million in Prop 13 nonpoint source funds. Seven of these projects are related to agriculture in the San Joaquin Valley.

2003 SWRCB Grants: The SWRCB released $31.5 million for drinking water quality source improvement projects, including development and assessment of best management practices for discharges from Delta islands, irrigated agricultural and urban sources.

Through the above grant solicitations, the WQP has made some progress on its specific ROD milestones and complementary actions, as well as towards achieving its water quality targets. Specific accomplishments are detailed below, organized into five major categories: source improvement, regional planning, treatment options, monitoring/assessment, and program management. As accomplishments include completed actions as well as funding of ongoing actions, they are further arranged according to their current status:

- Completed Milestones & Complementary Actions - Completed projects which were identified in the ROD.
- Funded Milestones & Complementary Actions - Funded projects identified in the ROD.
- Other Completed Actions - Completed projects not identified in the ROD, but which are integral to the WQP.
- Completed Funded Actions: Funded projects not identified in the ROD, but which are integral t to the WQP.

Source Improvement
Completed ROD Milestones & Complementary Actions:
Finalize State Basin Plan Amendment and Total Maximum Daily Load for salinity in the lower San Joaquin River by the end of 2001. BPA was adopted in 2004, implementing a TMDL alternative through the San Joaquin Water Quality Management Program (RWQCB).
Address water quality problems at North Bay Aqueduct. Provide funding to implement BMPs to improve watershed runoff water quality by the end of 2002. Recommended Best Management Practices (BMPs) are being implemented and results monitored. (Prop 204 and WQP).
By the end of 2003, study feasibility of relocating North Bay Aqueduct intake. Completed (WQP).
Initiate regional desalination demonstration project (for agricultural drainage) by the end of 2002. Agricultural drainage water recycling using membrane technology by Panoche Drainage District started in Year 4. (DWQP, ERP, Prop 204)
Establish a Bay Area Blending/Exchange Project. The Bay Area Water Quality and Water Supply Reliability Program evaluated cooperative projects among Bay Area water districts to meet their water quality and reliability objectives through the feasibility phase. This work has now transitioned into a regional group that is developing a Bay Area Integrated Regional Water Management Plan (WQP).
Facilitate water quality exchanges and similar programs. Initiate evaluations and studies of current capabilities and potential infrastructure improvements by December 2000. Complete feasibility studies and identify initial projects, if any, by the end of 2001. These milestones were completed in December 2003 (Prop 13).
Control Runoff into the California Aqueduct and other similar conveyances. Develop and implement watershed programs adjacent to appropriate conveyance channels by the beginning of 2004. Seven projects to perform watershed assessments and implement watershed improvement actions have been awarded in watersheds draining into the California Aqueduct, other SWP conveyances and SWP reservoirs downstream of the Delta (DWQP, Watershed Program, Prop 13), including a project for the South Bay Aqueduct Watershed through the 2003 Consolidated Grants Program.
Funded ROD Milestones & Complementary Actions:
CVRWQCB, with support from the CALFED Agencies and DHS, will establish a comprehensive State drinking water policy for Delta and upstream tributaries by the end of 2004…Evaluate and determine whether additional protective measures (regulatory and/or incentive based) are necessary to protect beneficial uses by the end of 2004. CALFED has funded the following project to achieve this milestone. In July 2004, the CVRWQCB adopted a resolution supporting this project. Drinking Water Policy for the Delta and its Tributaries – Years 6-8 will be devoted to implementation of the policy work plan. The final product of the working group will be a policy recommendation to the Regional Board for their adoption (likely in the form of a Basin Plan Amendment). Schedule: Complete technical work in 2007, basin plan amendment in 2009 Implementing Agencies: SWRCB, USEPA Funding: Technical work funded, basin plan amendment will require additional funding. CBDA Program Lead: Water Quality Program
Facilitate water quality exchanges and similar programs. If agreement is reached by the parties involved, complete environmental review and begin implementation of a long-term program, including necessary infrastructure, by the end of 2004., Friant and Metropolitan Water District (MWD) approved a Phase 2 Workplan. MWD will be amending the existing Kings Workplan to address funding specific projects. Schedule: Completion 2007 Implementing Agencies: DWR Funding: Funding available for planning studies and pilot projects (Prop 13). CBDA Program Lead: Water Quality Program
Reduce agriculture drainage in the Delta (pg. 50): Relocate agricultural drains in Old River and Rock Slough to improve water quality at Contra Costa Water District intakes, prior to installation of permanent barriers. Schedule: December 2006 scheduled completion Implementing Agencies: DWR Funding: Funded up to construction. Potential construction funding: Ch 4(a)(4), Ch 5(a)(5), Ch 8(d) CBDA Program Lead: Water Quality Program

Develop and implement within two years a plan to meet all existing water quality standards and objectives for which the State and Federal water projects have responsibility. Currently scheduled for completion by December 2005.

Other Funded Actions:

Best Management Practices for Agriculture: Twenty-one projects have been awarded to develop and implement agricultural Best Management Practices (BMPs) that reduce loads of drinking water constituents of concern. (WQP/Prop 13/SWRCB)

Regional Planning

Other Completed Actions:

Initiated Regional Planning – The program released a Request for Proposals for regional drinking water quality planning projects in May 2004. Three projects were completed with this funding: pilot regional plans in Southern California, Sacramento Valley, and the Delta.

Treatment Options

Completed ROD Milestones & Complementary Actions:

Initiate UV disinfection plant demonstration project by the end of 2002. MWD initiated studies integrating UV disinfection and other oxidants, but could not complete the studies prior to funding expiration (WQP).

Other Completed Actions:

Ion Exchange for Organic Carbon Removal: The DWQP awarded a grant to Solano County Water Agency to investigate application of innovative ion exchange technology for organic carbon removal.

Funded ROD Milestones & Complementary Actions:

UV Light and Multiple Disinfectants Project (Bay Area Project– Bench-scale, pilot-scale and demonstration-scale testing of UV treatment and multiple disinfectants on Delta waters. (EPA and AWWARF) A consortium of Bay Area water agencies led by Contra Costa Water District has initiated a program investigating combinations of advanced treatment technologies applied to Delta Water. The primary objective is to aid utilities using Delta water in developing compliance strategies through modification of existing facilities, and installation of new treatment processes.
Schedule: Completion of Phase I in 2006
Implementing Agencies: USEPA
Funding: Phase I Funded.

CBDA Program Lead: Water Quality Program

Monitoring and Assessment

Other Completed Actions:

Continuous Analyzers: Continuous organic carbon and anion analyzers have been installed at Hood, Vernalis, and the Banks Pumping Plant. A continuous organic carbon analyzer has been installed at Milepost 3.5 on the Delta Mendota Canal. Data from these analyzers and other sensors are now compiled, analyzed, and reported in Water Quality Weekly Reports by the DWR Office of Water Quality.

Other Funded Actions:

Coordinated Monitoring: The WQP is working with existing monitoring programs and supporting complimentary efforts. 15 monitoring and assessment projects have been awarded for $8 million.

Program Management

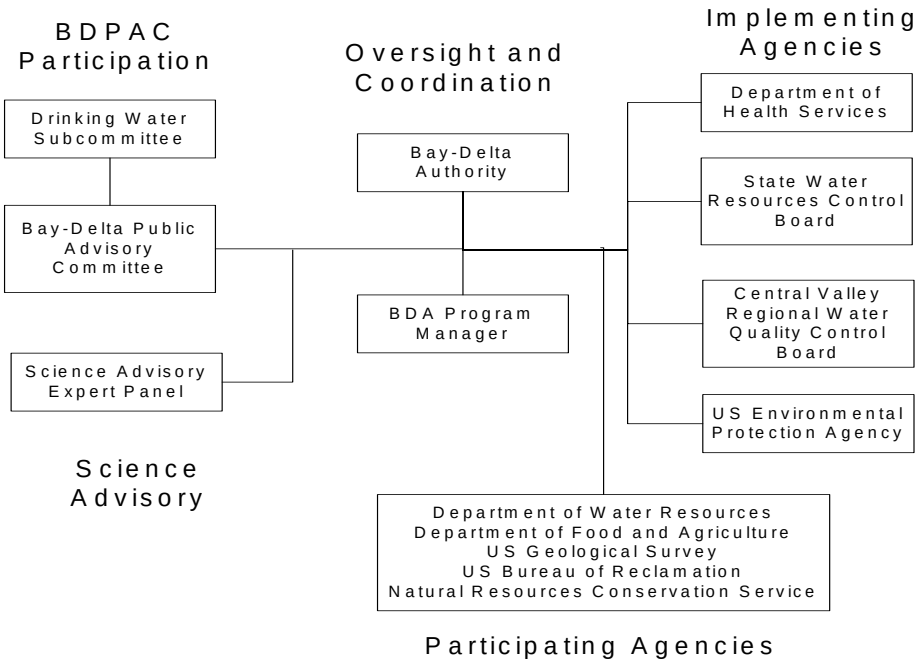
Completed ROD Milestones & Complementary Actions:

DWS will complete initial assessment of progress toward meeting CALFED water quality targets and alternative treatment technologies by the end of 2003. The initial program assessment was completed in May 2005.

Other Completed Actions:

Strategic Plan: WQP staff convened a workgroup to continue the efforts of the Drinking Water Subcommittee to develop a comprehensive strategic plan for the WQP. A final draft of the strategic plan was completed in early 2005.

Program Structure



Agency	Roles and Responsibilities
California Bay-Delta Authority	• Oversight and coordination
Department of Health Services	• State co-lead • Management of treatment technology development, and health effects studies • Grant funds manager
State Water Resources Control Board	• State co-lead, Grant funds manager
Central Valley Regional Water Quality Control Board	• Management of source protection efforts
U.S. Environmental Protection Agency	• Federal lead • Administration of Clean Water Act and Safe Drinking Water Act via state agencies
Department of Water Resources	• Municipal water quality investigations • SWP water quality monitoring • Conveyance program
U.S. Bureau of Reclamation	• San Joaquin Valley agriculture drainage program • CVP water quality monitoring, Recirculation study
Department of Food and Agriculture	• Conservation programs for agriculture
U.S. Geological Survey	• Data and science assessments of water quality • Contract research
Natural Resources Conservation Service	• Resource conservation programs for agriculture

Major Activities

Regional drinking water quality management planning is a high and immediate priority of the WQP in Years 6 and 7. In Year 5, the WQP funded the development of regional plans for Southern California, Northern Sacramento Valley, and the Delta. It is hoped that funding for additional regional planning will be obtained through Chapter 8 of Proposition 50, in order to maintain the program's progress and inform its long-term priorities.

The Delta Improvements Package (DIP) will also remain a high priority for the WQP in Years 6-9. The WQP now incorporates Franks Tract, a project with a primary goal to significantly reduce salinity levels in the South Delta and at the CCWD and SWP/CVP export facilities. The WQP will work closely with the Department of Water Resources to fully understand the potential of this project, to implement pilot tests, and to ensure that water quality gains are maintained through appropriate changes in the Water Quality Control Plan. The WQP will also continue to coordinate with the San Joaquin Water Quality Management Plan, in order to monitor implementation of the Salinity and Boron TMDL, to ensure improvement of agricultural water quality in the Delta, and to explore potential opportunities to improve drinking water quality through focused funding of tools identified within the plan. In general, the WQP will continue to coordinate on DIP implementation and monitor its performance to assure its water quality goal proceeds in balance with its other goals.

Monitoring and assessment gaps are becoming increasingly critical to the WQP. The WQP is currently relying on the technical work being done under the Central Valley Drinking Water Policy development. This project is collecting available water quality monitoring data, drafting conceptual models of the fate and transport of key constituents of concern to drinking water, and identifying additional long-term monitoring needs based on this information. WQP has been working closely with this project to inform its own program performance measure development. Monitoring and assessment conducted in connection with grant funded projects helps but inevitably is localized and short-term, thus leaving significant information gaps. The WQP has made significant progress in establishing real-time monitoring stations in key locations, but consistent long term funding is needed to support this component of the program, especially in the assessment of collected data and in specialized research to refine conceptual models and performance measures.

Meeting funding needs will continue to be a challenge for the WQP. The funding needed to implement many of the actions in Years 6-9 is expected to come from the various Prop 50 grant programs under the jurisdiction of DHS, SWRCB, and DWR. DHS has approximately $430 million through Proposition 50 to fund drinking water quality improvement projects statewide. Although the Prop 50 grant programs address statewide water quality improvement and all proposed projects must compete for funding according to established criteria, it is anticipated that a significant portion of the Prop 50 funds will ultimately support projects directly related to CALFED drinking water quality goals and objectives. The funding will be available over a four-year period, from 2005 – 2009, under the following chapters:

- Chapter 4 supports drinking water treatment and source improvement and is being administered by the Department of Health Services. The WQP is participating in the grant review process;

- Chapter 5 supports source water quality improvements and is being administered by the SWRCB – a portion of this was distributed through the 2003 SWRCB grants and the remainder is being distributed through smaller grant processes, like the Agricultural Water Quality Grants. The WQP is participating in the grant review process;
- Chapter 6 supports drinking water treatment and is being administered jointly by the Department of Health Services and the Department of Water Resources; and
- Chapter 8 supports integrated regional water management planning and implementation and is being administered jointly by the SWRCB and the Department of Water Resources.

The CALFED 10-year finance plan estimates that WQP funding needs, although significantly lower than original ROD estimates, will continue to be under-funded into the future. Although certain projects like those described in the Delta Improvements Package have a higher *potential* to be funded because of their critical importance in short-term balancing of the CALFED Program, there are other high priority actions like regional planning – critical to long-term balance - which are at risk. The Finance Plan estimates a $110.1 million funding gap for the WQP for Year 6 through 9. Furthermore, in Year 6, there will be no directed money for monitoring and science, and only minimal resources for program support, even assuming that Proposition 50 funds support the activities described above.

DHS and SWRCB have long supported water quality improvement projects in the CALFED solution area through their respective State Revolving Fund programs. To date, DHS has provided $185 million to public water systems for infrastructure improvement statewide, with $154 million going to projects in the CALFED solution area (83% of statewide project funding). In addition, $430 million has been committed to specific drinking water quality improvement projects that are still in the planning stages, of which $372 million is committed to projects in the CALFED solution area (92%). The WQP generally focuses on supplementing these activities for improvement in anticipation of future conditions.

The following list identifies the specific major priorities for the WQP for Years 6 - 9.

Source Improvement
ROD Milestones for Years 6-9:
Address drainage problems in the San Joaquin Valley to improve downstream water quality. Begin implementation of appropriate source control measures (e.g., on farm and district actions, development of treatment technology, real-time management and reuse projects such as agroforestry) by the end of 2003. The San Joaquin Water Quality Management Plan has prioritized a collection of activities to meet the Vernalis salinity objective and to assist in improving dissolved oxygen levels in the Stockton Deep Water Ship Channel. The WQP will work with the SJWQMP to identify the focus of this activity.
Consistent with the Drinking Water Policy, CVRWQCB, with support from DWR and DHS, will begin implementation of appropriate source control measures (e.g., advanced wastewater treatment, local drainage management practices) by the end of 2006. This activity will commence upon development of the Drinking Water Policy, in 2009, unless actions identified through conceptual model development which can be implemented prior to 2009 (as early as 2007).
Study Recirculation of export water to reduce salinity and improve dissolved oxygen in the San Joaquin River. This milestone is incorporated into the San Joaquin Water Quality Management Plan. Recirculation was successfully tested in Fall 2004.
Evaluate practicability of and determine timelines for full-scale [regional desalination of agricultural drainage water] implementation by the beginning of 2007. The WQP will work with the SJWQMP to determine if implementation of its plan will fulfill this milestone.
Control runoff into the California Aqueduct and other similar conveyances. Future implementation of this milestone is dependent on DWR or the State Water Contractors completing the initial comprehensive evaluation.

Delta Improvements Package

San Joaquin River Water Quality Management Plan (Salinity and Dissolved Oxygen): This is part of the ROD commitment to address drainage problems in the San Joaquin Valley to improve downstream water quality. ROD milestone date was 12/2001. An alternative approach which incorporates flow and load measures has been identified and requires funding for implementation. The approach focuses on implementing salinity reduction in the West Side/Grasslands area, where the highest salt loads originate, while using recirculation and water purchases to meet Vernalis salinity objectives during the load reduction implementation. The approach also incorporates an element of real-time management, to manage salt loading into the San Joaquin River, while not redirecting impacts to the Delta.
Schedule: Alternative TMDL approach must show progress by 2007.
Implementing Agencies: RWQCB, DWR, USBR
Funding: Currently unfunded.
CBDA Program Lead: Water Quality Program

Franks Tract: Develop a strategy to significantly reduce salinity levels at the Delta drinking water intakes and improve water supply reliability by reconfiguring levees and/or Delta circulation patterns around Franks Tract.
Schedule: Begin pilot projects in 2005. Complete feasibility study and environmental documents for large scale project in 2007.
Implementing Agencies: DWR
Funding: Currently partially funded. Finance plan indicates federal, state, and water user funding allocation.
CBDA Program Lead: Water Quality Program

Vernalis Flow Objectives

Intake Relocation for In-Delta Municipal and Industrial (M&I) Users: If water quality improvements do not result from other DIP actions, it may be necessary to relocate Delta M&I intakes.

Other Actions

Best Management Practices (BMPs) for Nonpoint Sources – This includes projects to identify, develop, and implement management practices to reduce loads of drinking water pollutants of concern to the Delta and its tributaries. These projects are primarily funded through implementing agency grant solicitations. Efforts focus on the major types of nonpoint sources in the Delta watershed including irrigated agriculture, managed wetlands, livestock grazing, and urban runoff. Regional planning results will inform the appropriate level of effort in controlling Nonpoint sources.
Schedule: Ongoing
Implementing Agencies: SWRCB, CDFA, NRCS
Funding: Unfunded.
CBDA Program Lead: Water Quality Program

Regional Planning

Other Actions

Full – Scale Regional Planning – The highest priority for the Water Quality Program is the development of regional water quality plans. Pilot scale efforts will be evaluated for future direction of planning focus. Regional plans inform the prioritization of water quality efforts towards achieving its targets.
Schedule: Develop full scale plans for major regions by 2007.
Implementing Agencies: TBD
Funding: Unfunded.
CBDA Program Lead: Water Quality Program

Treatment Options

ROD Milestones for Years 6-9:

Initiate UV disinfection plant demonstration project by the end of 2002. MWD initiated studies integrating UV disinfection and other oxidants, but could not complete the studies prior to funding expiration (WQP). $305,000 is needed to complete this study.

Other Actions:

UV Light and Multiple Disinfectants Project - Phase II Membrane Demonstration.
Schedule: Completion in 2008
Implementing Agencies: USEPA
Funding: Unfunded. Finance plan identified a 50/50 cost share between state and federal sources.
CBDA Program Lead: Drinking Water Quality Program

Monitoring and Assessment

ROD Milestones for Years 6-9:

As part of the CALFED Science Program, develop a comprehensive monitoring and assessment program by the beginning of 2003. Although progress has been made on establishing monitoring stations at key locations, there has been no progress on developing a comprehensive monitoring and assessment program.

Delta Improvements Package:

Performance Evaluation and Monitoring Program: As part of the DIP, a Program will be developed and implemented to evaluate the water quality and biological resource effects of the activities in the DIP. As necessary, corrective actions will be identified.
Schedule: TBD
Implementing Agencies: TBD
Funding: Unfunded. Finance plan identified a 50/50 cost share between state and federal sources.
CBDA Program Lead: TBD

Other Actions

Performance Measures – A workgroup consisting of implementing agency staff and stakeholders will be reconvened in Year 5, following development of the strategic plan, to develop program performance measures.
Schedule: Ongoing, strong coordination with the Central Valley Drinking Water Policy efforts..
Implementing Agencies: SWRCB, USEPA, DHS, DWR,
Funding: Unfunded. Finance plan identified a 50/50 cost share between state and federal sources.
CBDA Program Lead: Water Quality Program

Program Management

ROD Milestones for Years 6-9:

DWS will complete final assessment and submit final recommendations on progress toward meeting CALFED water quality targets and alternative treatment technologies by the end of 2007.

Other Actions

Water Management Science Board: In Year 5, CBDA appointed Water Management Science Board to provide overarching review and coordination of program strategies, plans and specific issue of strategic importance for program elements that contribute to drinking water quality and water supply reliability. The Board intends to convene a number of standing panels including a panel on water quality, as well as issue-specific task forces such as one on the Delta Improvements Package.
Schedule: Ongoing.
Implementing Agencies: CBDA, SWRCB, USEPA, DHS
Funding: Unfunded.
CBDA Program Lead: No specific program lead.

Public Involvement and Outreach

The major vehicle for public involvement and outreach for the WQP is through the Bay Delta Public Advisory Council's Drinking Water Subcommittee. The mission of the Drinking Water Subcommittee is to provide policy advice and leadership to the Bay Delta Public Advisory Council (BDPAC) on the implementation of the WQP. One of the responsibilities of the DWS is to exchange information between other BDPAC subcommittee and stakeholders. For example, this Program Plan was reviewed by the DWS, who made a recommendation the BDPAC prior to the Plan's approval by the Bay-Delta Authority board.

The WQP is also working on using its recent program assessment to inform ways to improve its web site for better outreach, and for technology transfer – such as creating a treatment technology forum to facilitate sharing of treatment research among Delta water users and enhancing its project database to provide more information over the web and to enable the public to contact projects directly. The WQP is continually seeking ways to improve its outreach, including through requirements for public involvement in grant funding.

(Will update with Program Assessment information)

Schedule

(similar to 2004 Annual Report)

Integrating Science, Environmental Justice and Tribal Relations

NOTE: THIS SECTION HAS NOT BEEN UPDATED, PENDING REVIEW AND SUGGESTIONS FROM SCIENCE, ENVIRONMENTAL JUSTICE AND TRIBAL COORDINATOR

Science:

The WQP will work with the Science Program and the Drinking Water Subcommittee to develop Performance Measures and appropriate management questions for an independent expert review in 2004. The program will seek to address the findings of this effort through the appropriate use of scientific experts, directed studies, grants, workshops, and peer review.

The DWQP will also work with the Science Program to develop a Monitoring and Assessment Program work plan in Year 5.

Performance Measures (Will update with Program Assessment information)

Performance measures translate program goals and objectives into measurable benchmarks of success. Performance measures range from relatively simple metrics to complex cross program assessments. As such, current work on Performance Measures includes counting the simple metrics and laying the technical and scientific groundwork that will allow us to perform more complex assessments later.

The Science Program and the Drinking Water Quality Program have been continuously working to design performance measures for the program. The Science Program has articulated the following three levels of Performance Measures. These will be refined as they are tailored for the unique needs of each program. For Drinking Water Quality, examples of performance measures include:

- Level 1: Simple administrative measures. Site-specific indicators that track direct responses of specific projects or groups of projects (such as number of dollars spent and the number of projects funded).
- Level 2: Quantifiable accomplishments directly related to program actions. Indicators that track the responses of groups of projects on a local or regional level (such as acre feet of conserved or storage water, miles improved levees, or fish counts).
- Level 3: System-wide indicators. Indicators that track broad, often complex, responses of groups of projects (such as water supply reliability or ecosystem health).

Because Level 3 measures gauge the combined effects of several Program Elements, the Program will contribute to the Science Programs ongoing work in this area.

The Program is tracking Level 1 indicators of project expenditure, number and types of projects. The Program has established Level 2 indicators for TOC and bromide in exported water; has drafted a list of candidate indicators; and plans to develop more indicators as resources and data allow.

Environmental Justice:

The DWQP and DWS is committed to working with the Environmental Justice Program and Subcommittee to determine and address environmental justice issues related to drinking water quality. Actions, performance measures and targets will be developed in Year 5.

Tribal Relations:

Drinking water quality issues are important to many tribes and tribal relations are an important part of the DWQP. DWQP grants to other parties may affect tribal interests and tribes may need direct assistance to address water quality problems. Projects funded through the implementing agency grant programs are required to identify potential tribal issues and address them in their projects. The DWQP participates in tribal workshops to help identify drinking water quality issues of concern to tribes.

In addition, the program has identified the following opportunities for expanding tribal participation:

- Consider Tribal Water Programs – The majority of California tribes have developed USEPA Tribal Environmental Programs that have extensive water protection and water quality elements that need to be taken into consideration during drinking water project planning and implementation. Many tribes have their own USEPA approved water quality standards. The upstream and downstream impacts/benefits of theses standards need to be considered. This may include working with Indian Health Services and the BIA Natural Resource Agencies.
- Involve the Bureau of Indian Affairs (BIA) – Although the BIA is not a CALFED member agency, it is the lead federal agency for the protection of Indian Trust Assets (ITAs). The BIA reviews environmental compliance documents for CALFED projects impacting ITAs.
- Notify Tribes of Grant Opportunities – Tribal governments should be notified when there are opportunities for drinking water quality improvement grants.
- Education and Outreach --Tribes should be included in drinking water quality education and outreach programs.

Cross-Program Relationships

Implementation of the Water Quality Program is contingent upon coordination with other CALFED Program Elements. This coordination continues to occur at the working level as well as the management and oversight levels and may vary from project to project. Storage and Conveyance, Ecosystem and Watershed all have distinct roles in the overall scheme to improve drinking water in the Delta, and the WQP is committed to working with the programs and their projects to develop a transparent understanding of the drinking water quality strategy and its components.

Conveyance Program – The WQP will be working closely with the Conveyance Program, specifically through the coordinated work on Franks Tract, the Delta Cross Channel, and the Through-Delta Facility. The WQP will also coordinate with the Conveyance Program on general Delta Improvements Package Implementation and the assessment of balanced progress.

Ecosystem Restoration Program – ERP and WQP water quality problems are frequently associated with the same sources indicating the need for cooperative monitoring and source improvement strategies. The development of conceptual models under the Drinking Water Policy will continue to coordinate with the ERP to assure that those models consider both drinking water and fishery beneficial uses.

Watershed Management – The Watershed Program and WQP work cooperatively on grant funding processes and have overlapping program objectives. Building local capacity for watershed management activities provides the mechanism for identifying, guiding, and implementing drinking water quality improvement projects. The Watershed and Water Quality Programs, working with the SWRCB, have coordinated their grant funding processes.

Water Use Efficiency – An important element of the WUE program is promotion of good water measurement and management by agricultural users. Reducing agricultural water use reduces the loads of drinking water pollutants of concern in drainage, tail water, and runoff. Urban water use efficiency likewise contributes to improved drinking water quality by reducing demand, urban runoff, and wastewater loads, and creating potential opportunities for water quality blending and exchange programs. Water Use Efficiency is identified as an important element in the ELPH diagram.

Levee System Integrity Program – The Delta levee system provides important protection against salinity intrusion, therefore, the WQP recognizes the significant influence the progress and success that the LSIP will have on protecting the quality of Delta water supplies.

Storage Program –WQP is coordinating with the Storage Program since storage projects can have positive or negative effects on Delta Water Quality. The construction of the major dams of both the State and federal water projects greatly reduced seasonal fluctuations in Delta salinity. Additional storage north of the Delta could be operated to provide water quality benefits. On the other hand, feasibility studies of the proposed In-Delta Storage project show that it could increase loadings of some pollutants. Integration with this program is critical to the success of the WQP.

Funding

Only change from Finance Plan tables is recent AWQGP awards, about $5 million in source improvement grants.

Geographical Distribution of Activities