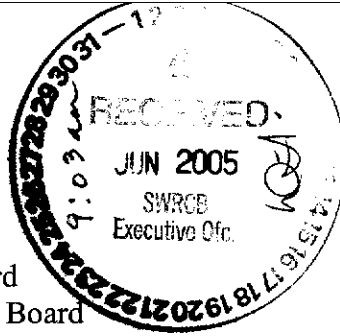


BDP-EXH-03



June 3, 2005

Debbie Irvin, Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

RE: Bay-Delta Plan Periodic Review

Dear Members of the Board:

The California Bay-Delta Public Advisory Committee's (BDPAC) Drinking Water Subcommittee (DWS) appreciates this opportunity to provide input to the State Water Resources Control Board (State Board) on the Periodic Review of the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (1995 Plan). The Periodic Review process is an important opportunity for the SWRCB to review the increasing challenges urban water agencies face in providing drinking water that meets all treatment regulations and fully protects public health. The Drinking Water Subcommittee is specifically charged with reviewing and advising the BDPAC and the Bay Delta Authority on the CALFED Water Quality Program (WQP). The State Board was one of the original signatories to the Memorandum of Understanding for implementation of the WQP.

This letter follows up on a letter dated January 10 from the BDPAC DWS (attached), which the DWS hereby reaffirms. At the January 10 workshop, Members of the Board requested more detailed information on the CALFED WQP and the Central Valley Drinking Water Policy project (CVDWP). Detailed information on the program is attached, currently funded and completed activities are described and evaluated in the "Initial Assessment of Progress" and future activities are described in one section of the CALFED WQP Multi-Year Program Plan Years 6-9 (still in draft form). A work plan, schedule, constituent prioritization memorandum, metadata report and fact sheet from the CVDWP provides the accomplishments and status of this effort, which is focused on developing conceptual models for drinking water constituents of concern.

The BDPAC DWS looks forward to working with the State Board on this important review of the 1995 Plan.

Sincerely,

Greg Gartrell, Chair
Drinking Water Subcommittee
Bay-Delta Public Advisory Committee

cc: Gary Hunt, Chair, Bay-Delta Public Advisory Committee

Attachments

Regional drinking water quality management planning is a high priority for 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 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. For example, a number of water quality projects were authorized in the Federal Water Supply, Reliability, Environmental Improvement Act (P.L. 108-361), including Frank's Tract (Feasibility Studies and Actions), relocating M&I intakes in the Delta (design and construction on a schedule coordinated consistent with the South Delta Barriers Improvement Project) and San Joaquin River salinity improvements. The WQP now incorporates Franks Tract, a project with a primary goal to improve operations of the State Water Project (SWP) and the Central Valley Project (CVP) while significantly reducing salinity levels in the South Delta and at the Contra Costa Water District (CCWD) intakes 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 or project operations agreements. The current available funding and the total estimated cost for the DIP activities and other WQP priorities are identified in the table of actions at the end of this section.

The WQP will also continue to coordinate with the implementing agencies and stakeholders on the San Joaquin Water Quality Management Plan¹, 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. For example, the WQP will monitor CCWD progress on environmental studies related to relocating their intake to improve their water quality. While the DIP has the immediate attention in the sequencing of CBDA projects, regional ELPH plans are being developed and their outcomes will be the focus of the next sequence of water quality activities. In this respect, Years 8 and 9 are more speculative in this program plan.

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 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.

¹ This effort is also assisting in the implementation of the Stockton Dissolved Oxygen TMDL.

Attachment: Current and future activities of the CALFED Water Quality Program (excerpt from the May 12, 2005 Draft Multi-Year Program Plan Years 6-9)

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 Proposition 50 (Prop 50) grant programs under the jurisdiction of California Department of Health Services (DHS), State Water Resources Control Board (SWRCB), and California Department of Water Resources (DWR). DHS has approximately \$430 million through Proposition 50 to fund drinking water quality improvement projects statewide, including such projects as the DIP. 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 has \$3.4 million remaining in these funds to support regional planning and implementation projects;
- ◆ Chapter 6 supports drinking water treatment and is being administered jointly by the Department of Health Services and the Department of Water Resources;
- ◆ Chapter 7 supports water quality improvement in the lower San Joaquin and Delta, including the Franks Tract project, and watershed management plans, which often address drinking water quality, and is administered by CALFED implementing agencies, 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.

Local matching funds for WQP projects will provide a significant source of funding. For example, over \$100 million is anticipated in local matches for San Joaquin River salinity improvements and for the CCWD intake relocation.

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.

The following list identifies the specific major activities for the WQP for Years 6 – 9, dependent on the level of funding achieved. They are organized by category, with notations where accomplishments are ROD-directed actions.

Source Improvement

Central Valley Drinking Water Policy: "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" (ROD). CALFED, the USEPA, California Urban Water Agencies, Sacramento Regional County Sanitation District, and the Sacramento Watershed Monitoring Program have funded the following project to achieve this milestone. 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

Total Cost: \$2,690,000

Funding Status: Technical work funded with a grant from Prop 50 in the amount of \$970,000, with EPA and local cost shares of \$1,160,000. The actual basin plan amendment will require additional funding (\$560,000).

Project Lead: RWQCB and Stakeholder Work Group

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" (ROD). This project was moved into the WQP following the development of the CALFED 10-Year Finance Plan, due to its initial studies finding that there is a significant potential for the reduction of Delta salinity. The WQP will work with the implementing agencies to develop information of the expected level of water quality improvement at the Delta drinking water intakes that will result from Franks Tract project alternatives.

Schedule: Complete feasibility study and environmental documentation in June 2006. Begin construction of pilot project in FY 2006-07.

Total Cost: \$13,400,000 for Feasibility Study. \$19,100,000 estimated for Phase I Pilot Testing.

Funding: \$4,800,000 funded in Year 5 through Proposition 50 Chapter 7, State Water Contractors, and Proposition 13. Feasibility study authorized under federal legislation (P.L. 108-361).

Project Lead: DWR

San Joaquin Drainage: The San Joaquin River Water Quality Management Group is developing an alternative solution to meet the objectives of the Salinity and Boron TMDL in the Lower San Joaquin River and assist in implementing the Dissolved Oxygen TMDL in the Stockton Deep Water Ship Channel. 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. Specific details are still being identified.

Schedule: Alternative TMDL approach must show progress by 2007.

Total Cost: Estimated costs of \$100,000,000 to implement the remaining phases of the West Side drainage reduction, \$1,500,000 per year for water purchase, \$5,000,000 in capital improvements for recirculation have been identified to date.

Funding: To date, over \$36,000,000 has been invested in implementing West Side drainage reduction actions (state, federal, and local funds). This activity is authorized under P.L. 108-361 and contributes to meeting a number of federal regulatory obligations on the San Joaquin River. A feasibility study of the use of Recirculation is also authorized by P.L. 108-361. Currently, there is no state/federal funding dedicated to this effort, but the region has developed an IRWMP and parties are encouraged to apply for Proposition 50 Chapter 8 funds.

Project Lead: San Joaquin River Water Quality Management Group (stakeholders, DWR, USBR)

Vernalis Flow Objectives: "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" (ROD).

Schedule: Currently scheduled for completion by December 2005.

Total Cost: No cost estimate is available.

Funding: Authorized under federal legislation (P.L. 108-361), SB113 and PL requires a plan to meet these standards by the fall of 2005.

Project Lead: DWR and US Bureau of Reclamation

Attachment: Current and future activities of the CALFED Water Quality Program (excerpt from the May 12, 2005 Draft Multi-Year Program Plan Years 6-9)

Old River and Rock Slough Water Quality Improvement Projects: (ROD): 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. Investigate local watershed sources of water quality degradation.

Schedule: Construction started in Fall 2004 and will be complete by December 2006.

Total Cost: \$4,420,000 for the drain relocations, \$9,150,000 for Phase I of the Contra Costa Canal lining.

Funding: Drainage relocations and Phase I of Contra Costa Canal lining are funded through construction. (Prop 13 and local funds)

Project Lead: CCWD

Control Runoff into Conveyances: "Initiate comprehensive evaluation of necessary physical modifications (e.g., modifications to berms, bypasses, and storm drains to divert storm water away from and prevent its discharge into the Aqueduct and other similar conveyance channels) by the end of 2001" (ROD). Future implementation of this milestone is dependent on DWR or the State Water Contractors completing the initial comprehensive evaluation for the State Water Project facilities. This evaluation could be combined with the Sanitary Survey.

Schedule: Not identified.

Total Cost: \$2,000,000 for the initial comprehensive evaluation.

Funding: Funding of improvements to the California Aqueduct will be dependent on a locally funded evaluation.

Project Lead: DWR or State Water Contractors

Water Quality Exchanges: "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" (ROD). The Friant Water Users Authority (Friant) and Metropolitan Water District of Southern California (MWD) continue to implement the Phase 2 Workplan for the Water Quality Exchange Partnership. A key Workplan activity is identifying pilot projects that can be implemented to improve both water supply reliability for Friant and water quality for MWD. Several Friant member districts have identified pilot projects which meet these objectives and these pilot projects are currently being investigated for future implementation. MWD's second Water Quality Exchange Partnership with the Kings River Water Association (Kings) is currently on hold pending King's decision on whether to proceed with additional Partnership activities.

Schedule: This project is scheduled to complete this milestone by the end of 2005.

Total Cost: \$20,000,000

Funding: Funded for planning studies and pilot projects (Prop 13).

Project Lead: MWDSC

CCWD Alternative Intake Project: Relocation of drinking water intakes for in-Delta water users is federally authorized for design and construction under P.L. 108-361. Actions are to be coordinated on a schedule consistent with the installation of permanent operable barriers.

Schedule: Planning and environmental compliance activities and documents are scheduled to be completed in 2006/7.

Total Cost: \$70,400,000

Funding: Currently funded by CCWD. Authorized for design and construction if consistent with P.L. 108-361.

Project Lead: CCWD, lead CEQA agency; USBR, lead NEPA agency

Nonpoint Source Grants: 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

Total Cost: TBD, Regional Plans will inform the targeted investment in Nonpoint source water improvement.

Funding: Proposition 50 Chapters 4 and 5 (and potentially 8).

Project Lead: Grant recipients.

Regional ELPH Planning

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 identify and inform the prioritization of water quality efforts needed to achieve its targets.

Schedule: Develop full scale plans for major regions by 2007.

Total Cost: An initial estimate is \$11.6 million to develop five regional plans.

Funding: Potential funding through Proposition 50 Chapters 5, 7 and 8

Project Lead: CBDA, Grant recipient (local and regional entities)

Treatment

UV Light and Multiple Disinfectants Project: This is a Bay Area Project– Bench-scale, pilot-scale and demonstration-scale testing of UV treatment and multiple disinfectants on Delta waters. 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. Phase I is focused on UV treatment and multiple disinfectants. Phase II will focus on membranes.

Schedule: Completion of Phase I in 2006. Completion of Phase II in 2008.

Total Cost: \$4,220,000

Funding: Phase I is funded by the USEPA (\$750,000), American Water Works Association Research Foundation, local agencies, contractor and academic institution contributions (\$760,000). Advanced treatment technology funding is available through Proposition 50, Chapter 6.

Project Lead: CCWD

Monitoring and Assessment

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, as well as implementation of projects to improve water quality.

Schedule: TBD (Similar to other DIP activities)

Total Cost: An early estimate is \$1,000,000 per year.

Funding: Unfunded.

Project Lead: Potentially DWR, DFG, USGS (through IEP), in coordination with CBDA

Performance Measures: See description of activities under the subsection "Performance Measures" in Section One of this program plan.

Schedule: Ongoing, strong coordination with the Central Valley Drinking Water Policy efforts.

Total Cost: \$300,000 per year for consultant assistance, plus current staffing levels (\$200,000 per year).

Funding: CV Drinking Water Policy is funded. WQP has staff resources only for this effort. No other funding is available.

Project Lead: CBDA

Coordinated Monitoring: "As part of the CALFED Science Program, develop a comprehensive monitoring and assessment program by the beginning of 2003" (ROD). The WQP focus has been on establishing comprehensive monitoring stations at key locations, and on supporting complementary monitoring efforts. 15 monitoring and assessment projects have been awarded for \$8 million, a number of these support the monitoring related to the Conditional Waiver of Agricultural Drainage. The WQP does not have the resources to develop a new "comprehensive monitoring and assessment program" so it is working with the Central Valley Drinking Water Policy to determine current data availability, and with implementing agency programs to determine where supplemental actions would help develop a comprehensive monitoring program. The CV Drinking Water Policy is also tasked to develop conceptual models, which the WQP could use to focus assessment efforts when resources become available.

Schedule: None, currently awaiting progress on other efforts.

Total Cost: TBD

Funding: None

Project Lead: CBDA, Implementing Agencies

Program Management

Final Program Assessment: "The BDPAC 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" (ROD).

Schedule: Begin scoping this effort by the end of 2006.

Total Cost: \$700,000

Funding: TBD (None currently identified)

Project Lead: CBDA

Water Management Science Board: In Year 5, CBDA established a 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.

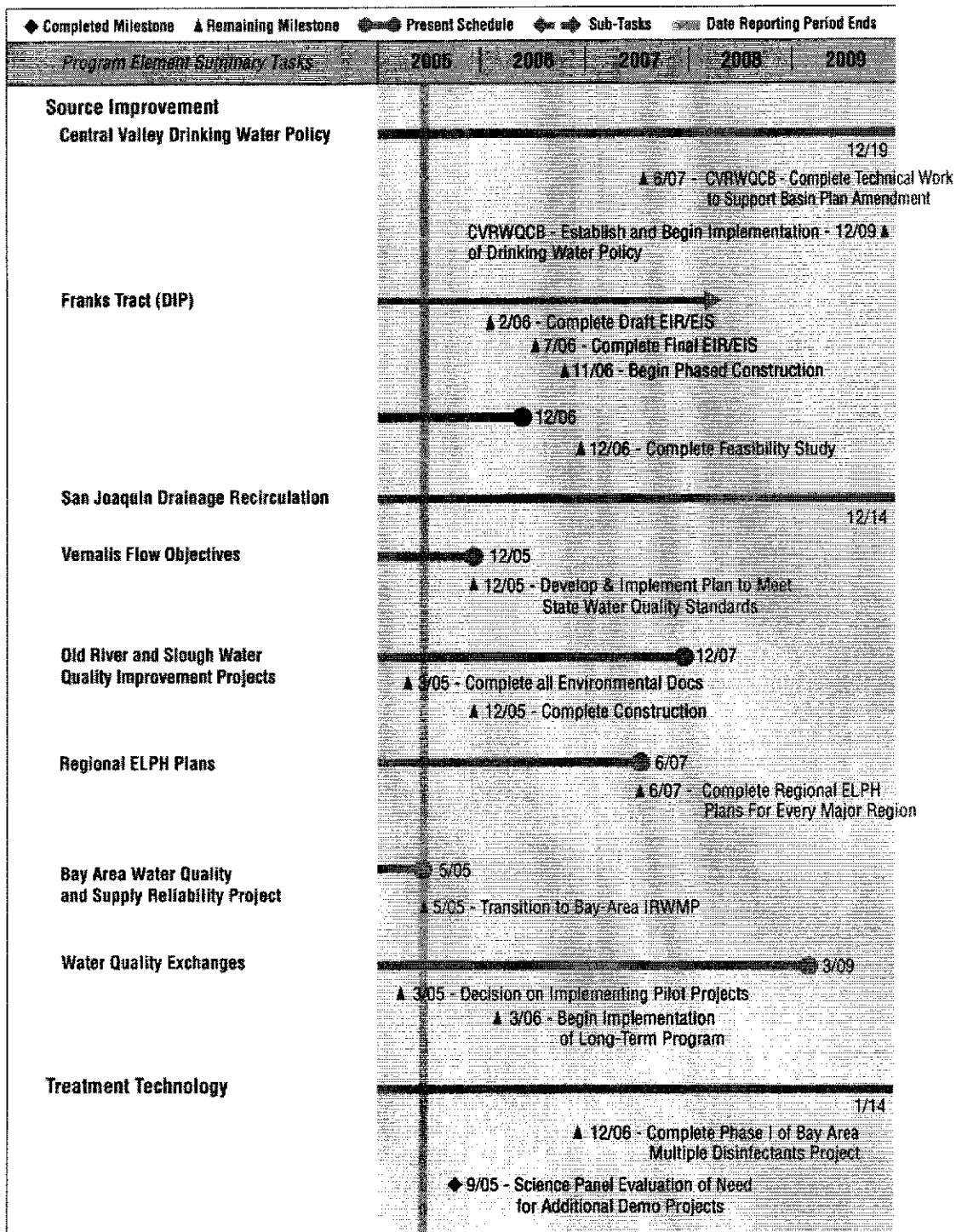
Schedule: Ongoing.

Total Cost: The WQP share of WMSB support is \$100,000 per year, plus \$50,000 per year to support the Water Quality Subcommittee of the WMSB.

Funding: EPA funding is potentially available for WQP support of WMSB Subcommittee in Year 6. Years 7-9 TBD.

Project Lead: CBDA

WATER QUALITY PROGRAM ACTIVITIES



January 7, 2005

Ms. Debbie Irvin, Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812

RE: Support for CALFED Drinking Water Quality Program

Dear Ms. Irvin:

The California Bay-Delta Public Advisory Committee's (BDPAC) Drinking Water Subcommittee (DWS) appreciates this opportunity to provide input to the State Water Resources Control Board (SWRCB) on the Periodic Review of the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (1995 Plan). The Periodic Review process is an important opportunity for the SWRCB to review the increasing challenges urban water agencies face in providing drinking water that meets all treatment regulations and fully protects public health. The Drinking Water Subcommittee is specifically charged with reviewing and advising the BDPAC and the Bay Delta Authority on the CALFED Drinking Water Quality Program (DWQP). The SWRCB was one of the original signatories to the Memorandum of Understanding for implementation of the DWQP.

The CALFED Record of Decision adopted "continuously improving Delta water quality for all uses" as a general target for Delta water quality. With respect to drinking water quality, the CALFED target for providing safe, reliable, and affordable drinking water in a cost-effective way is described in the August 28, 2000 Record of Decision (ROD, page 65):

.... 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.

Management of disinfection byproduct (DBP) precursors in source water and control of DBPs in treated water are key issues that California drinking water providers are addressing. The specific bromide and organic carbon targets were based on the findings of an expert panel convened in 1998 by the California Urban Water Agencies¹. The expert panel determined the source water quality needed to ensure urban agencies treating Delta water with conventional drinking water treatment technology could meet reasonably foreseeable future drinking water regulations.

Since 2001, the DWS has worked to define an "Equivalent Level of Public Health Protection" (ELPH), and how it can be achieved. A major component of this strategy is development of

¹ Owen, D.M., P.A. Daniel, and R.S. Summers. June 1998. Bay-Delta Water Quality Evaluation Draft Final Report. California Urban Water Agencies
<http://www.cuwa.org/publications.html#drinkingwaterquality>

Ms. Debbie Irvin, Clerk to the Board
Support for CALFED Drinking Water Quality Program
January 7, 2005
Page 2

Regional ELPH Plans, in which local agencies work at a regional level to determine the suite of local, regional, state and federal actions needed to achieve an equivalent level of public health protection as would be provided with attainment of 50 µg/L bromide and 3.0 mg/L total organic carbon in Delta source waters in combination with conventional treatment processes. The ELPH also recognizes that water quality in source waters and water quality regulations protecting consumers are dynamic, and that the CALFED ROD drinking water quality target is best met with flexible plans that look at all points in a drinking water system, from source to tap.

The 1991 Water Quality Control Plan for Salinity (1991 Plan) recognized this same strategy with the following conclusion (page 5-5):

Due to concerns with DBPs in treated water from the Delta and in keeping with the goal (not objective) of obtaining the best available drinking water, the Board finds that, wherever feasible, municipal water supply agencies should strive to obtain bromide levels of 0.15 mg/l [0.15 mg/l is equal to 150 µg/l] or less (about 50 mg/L chloride in the Delta). Appropriate actions by these supply agencies include encouraging DWR and USBR to work with the SWRCB to ensure development of facilities to make maximum use of uncontrolled flows through off-stream storage, encouraging those agencies to move water supply intakes to better locations, working with the State and Regional Boards to eliminate problem discharges within the Delta, and continuing the development of alternative water treatment technologies.

This conclusion was based on the findings of the Delta M&I workgroup, convened by the SWRCB as part of the development of the 1991 Plan². The focus in 1991 was on the U.S. Environmental Protection Agency (USEPA) drinking water regulations for total trihalomethanes (THMs, a class of DBP). The SWRCB's 1991 Plan noted: "while THMs are the DBP of current concern, further studies may indicate that other DBPs are of greater concern." This has proven to be the case, as concern over THM formation motivated utilities treating Delta water to convert to ozone-based disinfection in the years following the 1991 Plan. As a result, bromate formation in water treated by ozone has become a major concern. In 1998, the USEPA Stage 1 Disinfectants/Disinfection Byproduct Rule established new Maximum Contaminant Levels (MCLs) for bromate, haloacetic acids and chlorite (other DBPs) and reduced the allowable THM concentrations. The USEPA Stage 2 Disinfectant-DBP rule, which is expected to be finalized in 2005, will continue the current bromate and other MCL requirements for DBPs, and will require more stringent compliance based on specific locations throughout the distribution system.

The United States Environmental Protection Agency did not approve a number of the 1991 Plan objectives for fish and wildlife and, consequently, the primary emphasis in the changes incorporated in the 1995 Plan was fishery protection. The 1995 Plan did not alter the 1991 Plan's M&I standards or expand on its underlying concern and conclusions regarding DBPs. The SWRCB's review of the 1995 Plan offers the opportunity to update and reiterate this important area of concern.

² Report from the Delta Municipal and Industrial Water Quality Workgroup to the California State Water Resources Control Board, October 17, 1989

The Subcommittee encourages the SWRCB to support a drinking water quality update to the 1995 Plan through a discussion based on the CALFED ROD drinking water quality target and ELPH actions to improve drinking water quality, and text from the 1991 Plan. For example, the discussion could state:

Due to concerns with disinfection by-products in treated water from the Delta and in keeping with the target of obtaining the best available drinking water, the Board finds that, wherever feasible, municipal water supply agencies should strive to achieve either: (a) average concentrations at Clifton Court Forebay and other southern and central Delta drinking water intakes of 50 $\mu\text{g/l}$ 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, consistent with the CALFED Bay-Delta Program's target for providing safe, reliable, and affordable drinking water in a cost effective way. Consistent with this approach, appropriate actions to improve Delta water quality and treated drinking water quality may include some or all of the following: making maximum use of high-quality uncontrolled flows through off-stream storage, elimination of agricultural drainage in the vicinity of drinking water intakes, relocation of urban drinking water intakes, modification of Franks Tract to reduce intrusion of saltier water into the Delta, source control of wastewater discharges, projects to improve water quality on the San Joaquin River, advanced treatment technology studies, implementation of additional or advanced treatment, and water quality exchanges.

Recognition of the need for these actions continues the State Water Board's acknowledgement of the importance of protecting and improving source water quality in the Delta.

A second area that merits recognition in the Water Quality Control Plan is the effort of the Central Valley Regional Water Quality Control Board to develop a Central Valley Drinking Water Policy (Policy). Development of the Policy is a multi-year effort that is currently underway to address drinking water constituents of concern from a variety of urban, industrial, agricultural, and natural sources as the water flows out of the foothills and into the Central Valley, leading to drinking water treatment challenges and potential public health concerns.

The objective of the Central Valley Drinking Water Policy Project is to develop the technical studies needed to amend the Basin Plan to protect the municipal beneficial use, if such protection is warranted by the underlying science. The Central Valley Regional Water Quality Control Board manages this Project through a broadly representative stakeholder group that regularly reports on progress through the DWS meetings. The first accomplishment was Regional Board Resolution (R5-2004-0091) in support of the project.

Future study-topics include pollutant load evaluations, the range of water quality goals and policy options, and potential control alternatives. These studies are currently focused on providing the technical support for a Basin Plan Amendment. The work is currently funded through a joint agreement of the California Urban Water Agencies, the Sacramento Regional County Sanitation District (who both financially support the CVRWQCB staff), and through a

Ms. Debbie Irvin, Clerk to the Board
Support for CALFED Drinking Water Quality Program
January 7, 2005
Page 4

DWQP Prop 50 grant administered by SWRCB and through the USEPA and the Sacramento River Watershed Program. The technical studies are scheduled to conclude in 2007.

The CALFED Drinking Water Quality Program (DWQP) supports scientific studies of the relationship between source water, its conveyance, treatment and treated water disinfection by-products. These scientific investments will result in a better understanding of the chemistry of the Delta and inform water quality objectives that are the most relevant to public health, while also assuring that such objectives do not conflict with aquatic ecosystem protections.

The DWQP considers a wide range of projects, due to its ELPH (or multiple barrier) approach, and its performance-based focus. The final achievement of an equivalent level of public health protection may result in the need for more stringent water quality objectives, or it may not. There are numerous opportunities to improve drinking water quality throughout the system, from source waters to the tap. It is anticipated that regional planning will yield a clearer picture on these opportunities and their economics, and inform all levels of government as to the best portfolio of drinking water quality protection and improvement. There are a number of studies and programs looking at potential Delta water quality improvements, such as Delta Cross Channel Re-operation Studies, Through Delta Facility Studies, Franks Tract Studies, and the San Joaquin River Water Quality Management Plan. These are being coordinated through the CALFED Delta Improvements Package³, along with a monitoring and assessment effort to track implementation effects. Implementation of these projects, as well as the large-scale water supply and ecosystem restoration projects being studied, could significantly change current water quality conditions and drinking water quality considerations.

The subcommittee looks forward to working with the SWRCB on this important review of the 1995 Plan.

Sincerely,



Greg Gartrell
Chair
Drinking Water Subcommittee
Bay-Delta Public Advisory Committee

cc: Gary Hunt, Chair, BDPAC
Attachment

³ <http://www.calwater.ca.gov/DeltaImprovements/DIP/DeltaImprovementPackage.shtml>

Attachment

Supplemental Materials Regarding CALFED Drinking Water Quality Program and the Central Valley Drinking Water Policy

1. CALFED Bay-Delta Program Final Environmental Impact Statement/Environmental Impact Report Technical Appendix: Water Quality Program Plan, July 2000.
(<http://calwater.ca.gov/Programs/DrinkingWater/DrinkingWaterQualityProgramPlan.shtml>)
2. CALFED Bay-Delta Program Programmatic Record of Decision, August 28, 2000. (<http://calwater.ca.gov/Archives/GeneralArchive/rod/ROD8-28-00.pdf>)
3. Equivalent Level of Public Health Protection Decision Tree, August 28, 2002
(http://calwater.ca.gov/BDPAC/Subcommittees/DrinkingWater/ELPH_Decision_Tree_8-28-02.pdf)
4. CALFED Drinking Water Quality Conceptual Framework, Drinking Water Subcommittee, Bay-Delta Public Advisory Committee, revised December 12, 2002
(http://calwater.ca.gov/BDPAC/Subcommittees/DrinkingWater/DWQP_Meeting_Notes_1-31-03/ELPHStrategy_Revised_12-18-02.pdf)

Central Valley Drinking Water Policy:

1. Fact Sheet (http://www.swrcb.ca.gov/rwqcb5/available_documents/dw-policy/dwp-fact-sheet.pdf)
2. Technical Work Plan, December 2003.
(http://www.swrcb.ca.gov/rwqcb5/available_documents/dw-policy/DWP-Work-Plan.pdf)
3. CVRWQCB Resolution R5-2004-0091 in Support of Developing a Drinking Water Policy for the Sacramento-San Joaquin Delta and Upstream Tributaries (http://www.swrcb.ca.gov/rwqcb5/available_documents/dw-policy/R5-2004-0091.pdf) and Staff Report
(http://www.swrcb.ca.gov/rwqcb5/available_documents/dw-policy/DWP_Staff_Rpt_Jul04.pdf)
4. Identification of Existing Data and Planned Monitoring, August 10, 2004
(http://www.swrcb.ca.gov/rwqcb5/available_documents/dw-policy/CUWA-FINAL-AUG-04.pdf)