



2006 & BEYOND

CALFED
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STATE

- The Resources Agency
 - California Bay-Delta Authority
 - California State Parks
 - Delta Protection Commission
 - Department of Conservation
 - Department of Fish and Game
 - Department of Water Resources
 - Reclamation Board
 - San Francisco Bay Conservation and Development Commission
- Environmental Protection Agency
 - Water Resources Control Board
- Department of Health Services
- Department of Food and Agriculture

FEDERAL

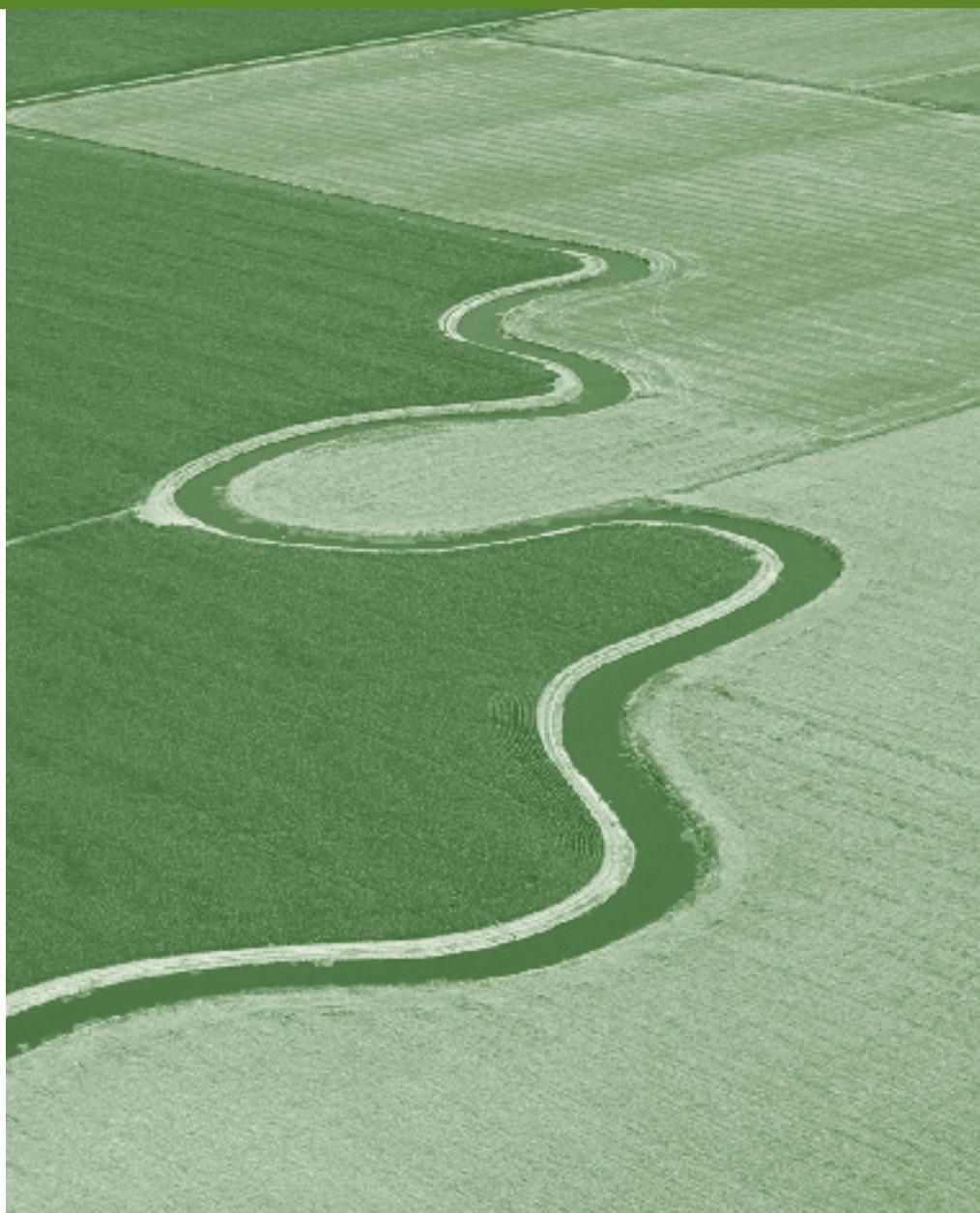
- Department of the Interior
 - Bureau of Reclamation
 - Fish and Wildlife Service
 - Geological Survey
 - Bureau of Land Management
- Environmental Protection Agency
- Army Corps of Engineers
- Department of Agriculture
 - Natural Resources Conservation Service
 - Forest Service
- Department of Commerce
 - National Marine Fisheries Service
- Western Area Power Administration

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*CALFED's 2006 Annual Report is also published online,
downloadable from a PDF at www.calwater.ca.gov.*





Farm lands cover more than 300,000 acres of the Delta.

DIRECTOR'S MESSAGE

The Delta is without a doubt California's richest water resource. It provides the vast majority of water for all uses in California – for drinking, growing crops, commercial and industrial purposes, and is the center of a unique ecosystem.

In this year's Annual Report, we take a look back at what was accomplished by the CALFED agencies from 2000 to 2006, and we look ahead to the final year of Stage 1 of the CALFED Record of Decision (CALFED ROD). At the end of 2007, the first quarter of the 30 years laid out in the CALFED ROD will be history.

This document describes accomplishments and shortcomings, both cumulatively and for the past year. The story is one of determination to stay true to the goals described in the CALFED ROD while incorporating new and evolving science information. The past year also was a time for bringing together partners with a diversity of missions and priorities. And, it was a time to further define quantifiable objectives and performance measures that will bring accountability and transparency to program performance.

There also is another "story line" for 2006 that falls outside the CALFED ROD milestones. This story is how CALFED as an organization moved forward in various ways, based on a refocusing effort during 2005-06. As a result of a broad CALFED Program review sought by the Governor, the Program took steps to move CALFED and its coordinating staff forward in some key ways, such as:

- Streamlining reporting by assigning CALFED's coordinating staff directly to the Resources Secretary and its implementing staff to implementing agencies;
- Creating a Blue Ribbon Task Force to help develop a "Delta Vision";



Joe Grindstaff

Director,
CALFED Bay-Delta
Program



- Beginning development of a Bay-Delta Conservation Plan (BDCP);
- Developing performance measures; and
- Creating a strategic planning function for CALFED.

These changes are discussed in detail in the 2006 Program Overview that follows.

The first six years of CALFED were challenging. By the end of 2007, the CALFED agencies must be ready and able to make key decisions facing California water:

- What are our state's priorities for surface storage? For groundwater? For water quality? For levees? For managing the aquatic ecosystem?
- Is the current through-Delta conveyance the right option for conveying Delta water?

The gravity of these decisions continues to grow as we hear more and more about the fragility of the Sacramento-San Joaquin Delta and the numerous current and future factors that will impact it. The continued decline of pelagic (open water) organisms demonstrates that the actions taken to date have failed in some major ways to accomplish the objective of a robust ecosystem that supports native fish. Recent findings described several factors that may control what happens in the Delta: increasing numbers of invasive species that threaten the natural ecology, island subsidence, sea level rise, regional climate change, earthquakes and rapid urban development.

*Looking west across the
Delta to Mount Diablo.*



Evaluation of these critical decisions is already underway because the time to respond to them is now. Implementing decisions that are made will be costly and making the wrong decisions could affect Californians for generations. However, delay is in itself a decision that may have the greatest cost.

It is obvious that much work needs to be done in the next year to ensure that the decisions reached make sense for California. Through a CALFED that has benefited from a newly-defined focus, we will ensure that the research and leadership are there to make the right decisions.



P. Joseph Grindstaff

Director

CALFED Bay-Delta Program





2006 PROGRAM OVERVIEW

CALFED's Annual Report is designed to tell the story of progress toward 30 years of milestones set forth in the CALFED ROD.

In the following pages, we will contrast actions taken with actions planned to determine annual status of CALFED's objectives: Levee System Integrity, Water Quality, Water Supply Reliability and Ecosystem Restoration.

This form of reporting, however, does not tell the whole story of CALFED's year. As it is every year, there were other "story lines" for 2006 that fall outside CALFED ROD milestones. For 2006, it was the story of how CALFED as an organization moved forward on a number of fronts, based on guidance from a refocusing effort that took place in 2005. The CALFED agencies and staff were asked to take some difficult and important steps, including:

- Developing a 10-Year Action Plan to serve as a guidebook to achieving balance and implementation of its program objectives;
- Formulating a strategic planning function to ensure that factors outside the CALFED ROD are considered in providing guidance for CALFED's future and that these factors are coordinated and shared among its implementing agencies;
- Creating organizational expertise in the area of performance measures and developing tools for coordinating and implementing staff to use in measuring and tracking CALFED performance; and
- Strengthening CALFED's premiere role of guiding and analyzing science in the Delta by appointing a Lead Scientist with international prominence.

The CALFED Solution Area





The 10-Year Action Plan

The framers of the CALFED ROD signed in 2000 were familiar with the concept of adaptive management and anticipated that forces not obvious at the time could become more urgent in the future, requiring revised schedules, funding projections and other CALFED Program adjustments. Indeed, such forces have become apparent in recent years, including the decline of pelagic organisms, the proliferation of invasive species and the vulnerability of levees to seismic events and flooding. In fact, over the past year, the Delta with its unresolved issues has often been referred to as the next Katrina-like disaster waiting to happen.

The 10-Year Action Plan offers a framework for addressing issues that demand immediate action, such as the Delta's aging levee system and the decline of pelagic organisms. Further, it recognizes the plethora of studies currently underway that may define future CALFED Program activities and provides for their synthesis into decisions that the CALFED ROD requires by the end of the first seven of its 30 years of milestones – the end of Stage 1.

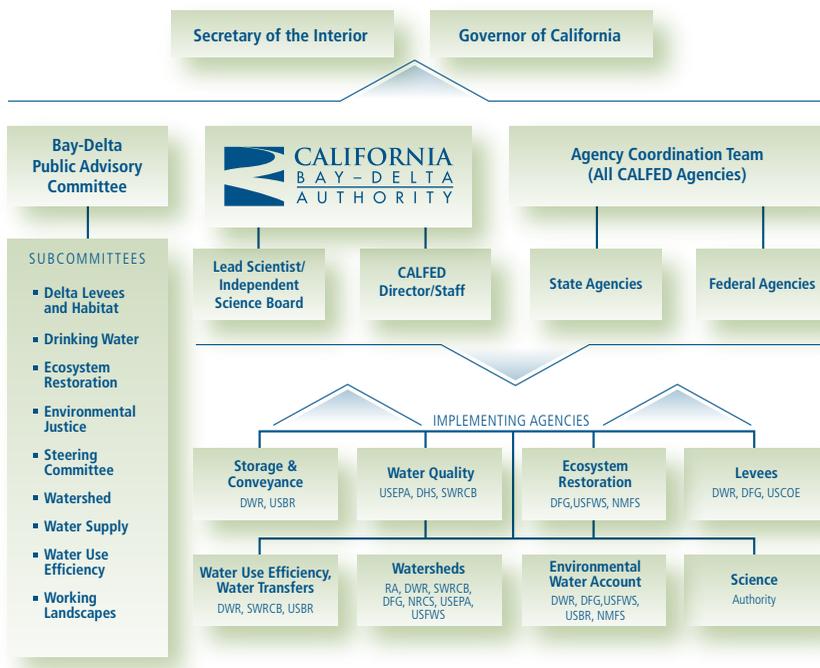
Other specific areas of focus in the plan include:

In fact, over the past year, the Delta with its unresolved issues has often been referred to as the next Katrina-like disaster waiting to happen.

- Fostering a strategic and integrated approach to solving the Delta's sustainability through the Delta Vision initiative, which will finalize its framework by the end of 2007, and a strategic plan by the end of 2008. Delta Vision allows experts and stakeholders from

a variety of perspectives – not just water and ecosystem – to develop a roadmap for a long-term future for the Delta, including but not limited to: land use and housing, culture and communities, agriculture and its economy, recreation uses, transportation, and transmission and storage of natural gas and electricity. To this end, in late 2006, the Governor signed an Executive Order creating Delta Vision, establishing Cabinet-level leadership and the structure for an independent "Blue Ribbon" panel of experts;

CALFED Bay-Delta Program Structure



- Convening through the CALFED Science Program a small panel of experts to review and synthesize the latest relevant scientific information about the Delta. Much of this new information emerged from the 2006 CALFED Science Conference. Fostering new scientific information, particularly that offers new understanding or avenues of research to the critical decline of pelagic organisms in the Delta, is the main objective of CALFED's Science Program as a resource to all implementing agencies;
- Supporting development of a new regulatory framework through BDCP that is intended to be a more focused means of complying with state and federal endangered species acts and creating potential benefits and contributions to both water users and environmental restoration and



species recovery efforts. This is an applicant-driven effort to provide for the conservation and management of aquatic species and regulatory commitments related to water supply reliability and water quality;

- Recommending changes in CALFED governance that would provide for periodic independent review and continue a process for advisory input. In addition, these proposed changes called for continued oversight and accountability by stakeholders and implementing agency leadership, as well as the continued independence of the CALFED Science Program;
- Forging strong organizational functions of strategic planning, fiscal management and reporting, CALFED Program performance and tracking, interagency coordination and science. CALFED had historically been organized by Program Element. Input from the 2005 Independent Review offered this new organizational structure along inter-disciplinary lines; and
- Investing in the long-term future of the CALFED Program by making appropriate use of new general obligation bonds approved by voters in November of 2006. The Governor's proposed 10-year financing plan for a broad range of infrastructure needs resonated with voters, who approved the largest general obligation bond package in state history – more than \$4 billion – including \$3 billion for the state's levee system, in the Central Valley and the Delta.





Strategic Planning Tracking & Measuring Performance

In the past, the CALFED agencies used the CALFED ROD and its milestones set out by stages to guide its annual focus. However, the need for strategic planning beyond the CALFED ROD was made evident through the review and refocusing process of 2005. Additionally, the 2005 effort pointed out a long-known issue that CALFED had struggled with – how to effectively measure its progress toward implementing the CALFED ROD beyond primary or gross measures. In many cases, the amount of funding expended on a specific project was the only sense of outcome CALFED was able to gather. A new monitoring and tracking structure will allow for more refined measures, such as the ability to track outcomes in degrees of completion and improvement toward a goal.

A new Strategic Planning Division was formed, which brings CALFED closer to meshing its end of Stage 1 efforts with Delta Vision as it unfolds. A new Program Performance and Tracking Division was also formed with the expertise to develop performance measures and tracking infrastructure and capabilities.

Both of these units within CALFED will not only make their outcomes available to CALFED coordinating staff, but will provide their planning and evaluating tools to CALFED implementing agency staff as well. The “toolbox” that will emerge from these new functions is expected to offer results in 2007.

Two-thirds of California’s population – a total of 24 million people – rely on water that passes through the Delta. The Delta and its tributaries supply 33 percent of the Bay Area’s water, 23 percent of Kern County’s water and 30 percent of Southern California’s water. In some parts of the state, reliance on Delta water is 100 percent.

The Port of Sacramento is one of two working ports in the Delta.



Eighty percent of California's commercial salmon fishery is dependent on the Bay-Delta system. Other major fish species of the Delta include striped bass, steelhead trout, American shad and sturgeon.



Salinity gates help control saltwater intrusion into the Delta.

CALFED Science

The big news of 2006 was that after a lengthy national and international search, CALFED found its new science leader. Dr. Michael Healey, a distinguished international expert on Chinook salmon from British Columbia, was introduced to stakeholders and scientists by Secretary for Resources Mike Chrisman at the 2006 CALFED Science Conference. He began his duties in January of 2007.

The CALFED Science Program sponsored the 2006 CALFED Science Conference, welcoming more than 1,000 attendees from throughout the nation and beyond to share information and insights on the key issues facing the Delta: pelagic organism decline, growth of invasive species, levee fragility and subsidence, climate change and global warming.

Leading scientists who presented new work at the conference were subsequently brought together by CALFED leadership to jointly formulate a plan to design focused research to test several promising hypotheses and preliminary findings regarding the pelagic organism decline. These studies are being designed and carried out by CALFED implementing agencies under the oversight of CALFED's leadership and coordinating staff.

Leading scientists who presented new work at the conference were subsequently brought together by CALFED leadership...

Conclusion

Many aspects of CALFED's 2005 reorganization began to enhance the organization's processes in 2006 and clarify its direction in the final year of Stage 1 of the CALFED ROD. The Year 2007 promises to be one where many of these initiatives mature and produce outcomes that will clarify Stage 1 decisions.

PROGRESS & ACCOMPLISHMENTS

The CALFED ROD and state and federal legislation require an annual review of the progress of the CALFED Program and an annual report to the Governor, Secretary of the Interior, Legislature and Congress on the implementation status of all elements of the CALFED Program for the previous fiscal year. This report fulfills those requirements by providing the following:

- Highlights of CALFED Program progress over the last six years;
- Accomplishments in 2005-2006 for Year 6; and, if applicable,
- Planning activities that were planned for Year 6, but not completed or included in Year 7 Program Plans.

Although this year's report, for the first time, identifies actions that were not completed during the year, it must also be noted that not all Year 6 Program Plans were adopted by CALFED's oversight body, the California Bay-Delta Authority (CBDA), because those plans failed to address a lack of funding. Program Plans not adopted were for Water Quality, the Environmental Water Account (EWA), Water Transfers and Ecosystem Restoration (ERP). Thus, actions that were reported as not completed should be viewed within the context of those that were completed without a binding commitment to do so.



Recreation is a big part of life in the Delta, with 12 million user-days annually. This includes visits to 290 shoreline recreation areas and 300 marinas by 500,000 boaters.

Boating is a popular recreational pastime in the Delta.

CALFED Bay-Delta Program Objectives & Program Elements

Over the 30-year life of the CALFED Bay-Delta Program, four major resource management objectives guide its actions to achieving a Delta that has a healthy ecosystem and can supply Californians with the water they need. These four objectives are interrelated and interdependent. They are:

- Levee System Integrity
- Water Quality
- Water Supply Reliability
- Ecosystem Restoration

They are further addressed through 11 Program Elements as a way of sustaining CALFED's long-held approach of fulfilling its objectives in a concurrent and balanced manner.



Levee System Integrity Program Objective

The objective of the Levee System Integrity Program is to protect water supplies needed for ecosystems, cities and farms. Through levee improvements, the threat of levee failures and seawater intrusion is reduced and major infrastructure, cities, towns, agricultural land and habitat are protected.

The Delta's Jones Tract levee break in 2004 and the damage to New Orleans' levees by Hurricane Katrina's storm surge in 2005, have accentuated the focus and concerns about the stability of Delta levees. The Department of Water Resources (DWR) is entering the third year of its multi-year study to evaluate the potential risk of Delta levee failure due to sea level rise, climate change, land subsidence and earthquakes. In the first year of the Delta Risk Management Strategy (DRMS), the results highlighted additional risk potential from the current configuration of levees.



In the first six years of the CALFED Levee System Integrity Program, CALFED agencies accomplished numerous goals, including: increased protection for and maintenance of nearly 700 miles of Delta levees; improved stability of more than 45 levee miles; reused 1.36 million cubic yards of dredge material for levee stability and habitat development; and created approximately 50 acres of riparian and wetland habitat, along with 3,000 linear feet of shaded riverine aquatic habitat.

In Year 6, the CALFED agencies accomplished the following Levee System Integrity Program actions:

- Continued levee maintenance on more than 600 miles of eligible project and non-project levees in the Delta and undertook significant levee rehabilitation projects on Bethel, Bradford, Jersey, McDonald and Twitchell islands;
- Continued work with the U.S. Geological Survey (USGS) on a subsidence demonstration project on Twitchell Island to determine relationships between biomass accumulation, sediment deposition and water management;
- Initiated a study to support a large-scale subsidence control and reversal project on Sherman Island in cooperation with Ducks Unlimited;
- Implemented emergency response activities associated with the January and April storms and associated flows, and participated in emergency actions on Bacon, Bethel, Bouldin, Twitchell, Jersey, Bradford and Sherman islands, Hotchkiss Tract and Suisun Marsh;
- Prepared a Report to Congress on the *USACE Strategy for Action* in May of 2006 by U.S. Army Corps of Engineers (USACE) that describes the potential levee stability projects and priorities that could be implemented consistent with the CALFED Bay-Delta Authorization Act (P.L. 108-361) through fiscal year 2010;

The Delta is home to more than 750 species of plants and animals, including 52 mammals, 22 reptile and amphibian species, 225 birds, 54 species of fish and 260 invasive species.



- Finalized the purchase of Meins Landing that will eventually provide 666 acres of land for restoration of tidal estuary and help offset impacts associated with levee projects on Van Sickle Island;
- Initiated a project to plant native vegetation on a newly-constructed setback levee on Sherman Island;
- Reused approximately 60,000 cubic yards of dredge material for levee stability and habitat management; and
- Initiated Phase I of DRMS and implemented some early action items immediately following contract approval.

The following activities were listed in the Year 6 Program Plan for the Levee System Integrity Program Objective, but were not completed as anticipated:

1. Implementation of best management practices for reuse of dredge material.

- There was no substantial progress in implementing best management practices. However, the USACE's Delta Long-Term Management Study was initiated, which will address best management practices for reuse of dredge material.





Water Supply Reliability Program Objective

CALFED's Water Supply Reliability Program Objective is achieved through five Program Elements. They are:

- Conveyance
- Storage
- Environmental Water Account
- Water Use Efficiency
- Water Transfer

Together, they comprise CALFED's Water Supply Reliability Program Objective and seek through partnerships with local and regional agencies, to increase water supplies, ensure efficient use of water resources and add flexibility to California's water system.

Conveyance Program Element

The planning phase of the Conveyance Program continued into the first six years of the CALFED Program with assessment of actions that included several components linked to the South Delta Improvements Package (SDIP). These include increasing the Delta export limit of the State Water Project (SWP) to 8,500 cubic feet per second (cfs); constructing permanent operable gates in the South Delta; constructing an intertie between SWP and the Central Valley Project (CVP); and studying the re-operation of the Delta Cross Channel and the feasibility of a through-Delta facility (TDF). Temporary barriers continue to be installed in the South Delta.

*Water flows southward through
the California Aqueduct.*

In Year 6, the CALFED agencies accomplished the following Conveyance Program actions:

- Released the draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) and initiated a 90-day public comment period for SDIP in October of 2005;
- Initiated Endangered Species Act (ESA) consultation in February of 2006 on Stage 1 of SDIP. Stage 1 proposes the construction and operation of four permanent operable gates and channel dredging in the South Delta. An Action Specific Implementation Plan (ASIP), which assesses the impacts of implementing Stage 1, was submitted at the initiation of the ESA consultation;
- Began preparation of an EIS for the proposed Delta Mendota Canal/ California Aqueduct Intertie. A Finding of No Significant Impact and a Notice of Determination were issued on this project. However, the impact finding was subsequently withdrawn to conduct a more detailed analysis and to prepare an EIS, which is expected to be completed by summer of 2007, followed by completion of a ROD;
- Continued studies to determine the feasibility of the through-Delta conveyance approach to improve water quality and fish protection. These studies involve the Delta Cross Channel, a potential TDF and a potential project at Franks Tract. Salinity monitoring stations were installed in the Central Delta and data collection began for a regional field study. A hydrodynamic model study of pilot project alternatives for Franks Tract, a conceptual study of alternatives for the preferred pilot project and testing of fish tagging and monitoring equipment were completed;

- Continued a multi-year hydrodynamic study to better understand the movement of water, fish and salinity in the South Delta;
- Continued fish collection, handling, transportation and release studies to better understand the effect of SWP and CVP fish salvaging facilities on Delta smelt and evaluate potential improvements in salvaging techniques; awarded contracts for replacement of trash-rack cleaner and acquisition of new fish haul trucks; performed laboratory testing of prototype new louver cleaners and completed design for fabrication of new fish haul tanks and transfer buckets; and
- Prepared and circulated a draft EIS /EIR in May of 2006 and issued a draft ASIP for the Contra Costa Water District Alternative Intake Project.

The following activities were listed in the Year 6 Program Plan for the Conveyance Program, but were not completed as anticipated:

1. SDIP / 8,500 cfs and Permanent Gates – planned to complete final EIS/EIR by April of 2006.
 - Release of the final SDIP EIS/EIR was delayed beyond April of 2006 to allow time to address final cooperating agency comments. The final EIS/EIR was certified in December of 2006 and construction of the project will begin at a later date.
2. Lower San Joaquin Flood Improvements – USACE planned to evaluate a proposal by local interests to develop a flood control project.
 - Work was not initiated because federal funding for a feasibility concept was not approved.



The Delta is an infrastructure hub for California.

Six highways, hundreds of natural gas lines, five high-voltage transmission lines, two shipping channels and three railroads run through it.

3. Delta Cross Channel (DCC) Re-Operation – The DCC/TDF Technical Team was to evaluate the results of three years of studies and initiate a full-scale integrated fisheries and water quality study for fall of 2006; and

4. Through-Delta Facility (TDF) – The DCC/TDF Technical Team was to refine concepts and feasibility of TDF options, determine TDF benefits and impacts on water quality and fisheries and determine the effects on other CALFED actions.

- An Independent Science Panel review was delayed to allow for completion of added technical assessments. The review is planned for inclusion in the fiscal year 2007-08 Program Plan.

5. North Delta – complete environmental documentation was expected by early 2006.

- Completion of a public draft EIR in fall of 2006 and identification of long-term owner and long-term funding source is now anticipated for completion in early 2007.

6. Delta Mendota Canal/California Aqueduct Intertie – completion of construction and beginning of operation was expected by late 2006.

- The U.S. Bureau of Reclamation (USBR) withdrew the construction contract in order to prepare a full EIS due to concerns from the environmental community. Future actions will be determined once the EIS is completed.



Storage Program Element

Work continues on surface storage investigations for five potential projects. DWR and USBR released an update of the CALFED Bay-Delta Program Surface Storage Investigations Progress Report in May of 2006. A draft feasibility study for the In-Delta Storage Project (IDSP) is complete and on hold until a similar level of information is available for the other four surface storage projects. Feasibility and environmental studies are underway for the Shasta Lake Water Resources Investigation (SLWRI); Los Vaqueros Reservoir Expansion (LVRE); Upper San Joaquin River Basin Storage Investigation (USJRBSI); and the North-of-the-Delta Off-stream Storage (NODOS). A DWR report notes that the CALFED Storage Program is refining project alternatives and evaluating potential beneficiaries and funding strategies. Potential state and federal benefits that need to be explored include broad public benefits provided by surface storage projects, such as EWA and ERP identified in-stream flow needs, flood damage reduction and recreation.

In addition to the surface storage investigations, DWR provided technical and financial assistance to local agencies to study and implement groundwater projects. As a result, DWR entered into 22 memoranda of understanding (MOU) with local agencies throughout the state to provide technical, facilitation and financial assistance to plan and develop conjunctive water management programs and projects. Sixty-two groundwater storage and recharge grants and loans for feasibility studies, pilot projects and construction were awarded

Sixty-two groundwater storage and recharge grants and loans for feasibility studies, pilot projects and construction were awarded for a total of \$205 million, with 22 of them now completed.

Friant Dam is a key link in the federal Central Valley Project.



for a total of \$205 million, with 22 of them now completed. An additional \$45 million in state grant funds was awarded for conjunctive use development in Southern California. The Local Groundwater Assistance Program awarded \$27.8 million for 129 projects. Coupled with local cost shares, investments in groundwater storage totaled more than \$1 billion. When completed, it is estimated that the projects will deliver between 300,000 and 350,000 acre-feet (AF) per year.

In Year 6, the CALFED agencies accomplished the following Storage Program actions:

IDSP investigation:

- Completed a supplemental report in response to written and public hearing comments received on the 2004 In-Delta Storage Program State Draft Feasibility Study. The 2004 Jones Tract flooding event allowed DWR to collect information on property damage, seepage to adjacent islands and drinking water quality impacts for use in future modeling studies.

SLWRI:

- Continued technical studies, plan formulation and agency coordination actions;
- Completed and released the Environmental Scoping Report in February of 2006;
- Completed field surveys and baseline for Habitat Evaluation Procedures; and
- Initiated Section 106 process in the summer of 2006.

LVRE investigation:

- Continued technical studies, plan formulation and agency coordination actions;
- Completed an initial economic evaluation for plan formulation in July of 2006;
- Completed and released the Environmental Scoping Report in September of 2006; and
- Initiated development of a feasibility report and EIS/EIR in September of 2006.

NODOS investigation:

- Completed the Initial Alternatives Information Report in May of 2006;
- Continued technical studies, plan formulation and agency coordination actions; and
- Continued development of a suite of predictive models to evaluate the effects on geomorphology and physical river processes of the Sacramento River from NODOS operational alternatives.

USJRBSI:

- Completed a draft report on conjunctive management opportunities;
- Continued technical studies, plan formulation and agency coordination actions;
- Initiated biological field surveys in spring of 2006;
- Initiated cultural resource literature review of alternative sites; and
- Initiated geologic drilling and a materials investigation program in July of 2006.



San Luis Reservoir Low Point Project Feasibility Study:

- Completed an appraisal report in May of 2006;
- Completed the Plan of Study in May of 2006, which described the scope and cost estimate of the Feasibility Phase Study; and
- Initiated a feasibility study and development of EIS/EIR in September of 2006.

Groundwater Storage/Conjunctive Management:

- Administered and provided oversight on previously-funded feasibility study grants and groundwater storage construction grants and loans;
- Provided technical and financial assistance to local agency partnerships to develop groundwater management plans and to plan and develop conjunctive and integrated regional water management actions; and
- Provided independent facilitation and mediation services to local partners for improving stakeholder involvement, fostering local support for improved groundwater management and for enhancing stakeholder understanding of local and regional water resource issues and needs.

The following Storage Program activities were listed in the Year 6 Program Plan, but were not completed as anticipated:

1. SLWRI – As reported in the April 2005 Surface Storage Progress Report, the Plan Formulation Report was to be completed by fall of 2006.





- An administrative draft of the Plan Formulation Report is currently under review and will not be finalized until spring of 2007.
2. LVRE – As reported in the April 2005 Surface Storage Progress Report, the Plan Formulation Report was to be completed by spring of 2006.
 - In order to meet the schedule for a draft feasibility study in December of 2006, the Plan Formulation Report was not prepared as originally scheduled. Instead, an Initial Economic Evaluation for Plan Formulation Report was prepared in July of 2006; and
 - A Draft Feasibility Report and environmental documentation are now due September of 2007.
 3. NODOS – As reported in the April 2005 Surface Storage Progress Report, the Plan Formulation Report was to be completed by summer of 2006.
 - The schedule was revised in mid-2005 and is now scheduled for completion in the fall of 2007.

The Delta is formed by the confluence of California's two largest rivers – the Sacramento and the San Joaquin – as the largest estuary on the Pacific Coast. The Delta includes two other rivers – the Mokelumne and the Cosumnes. These rivers and their tributaries carry approximately half the state's total annual runoff.

Environmental Water Account Program Element

Over the past six years, EWA spent approximately \$156 million purchasing a little more than 1 million AF of water from sellers and obtaining other operational (variable) assets to replace approximately 1.6 million AF of water for fish protection measures taken in the Delta at key times of year while maintaining water deliveries. In 2004, EWA agencies completed an evaluation of the efficacy of EWA. Based on the first four years of operation, the agencies signed an MOU, extending implementation of EWA through December 31, 2007. The agencies also completed final environmental documents, including a ROD and Notice of Determination for the acquisition and management of EWA assets through 2007. In 2005, DWR and USBR entered into

The San Joaquin River is the second longest river in California and joins the Sacramento River at Antioch to form the Delta.



a partnership called the Lower Yuba River Accord with the Yuba County Water Agency, state and federal fishery agencies, and SWP and CVP water contractors. This agreement resulted in annual water supplies for EWA until 2016, pending completion of the Accord's environmental compliance documents and approval from the State Water Resources Control Board (SWRCB), which is expected in 2007. Also in December 2005, EWA agencies conducted a science workshop to evaluate what EWA actions, if any, could or should be taken in 2006 to help stabilize pelagic fish populations in the Delta, specifically Delta smelt.

EWA fish protection measures in the very wet water year of 2006 occurred mainly in May and early June, and totaled approximately 148,000 AF. For 2006, no water was transferred from sellers due to the wet hydrology and the ability to pay off the debt owed to the state and federal water projects. This was done by pumping approximately 70,000 AF of excess water from the Delta during the summer. In addition to the annual 100,000 AF of EWA carryover debt allowed, SWP contractors allowed an extra 80,000 AF of carryover debt to accrue that year for a total of 180,000 AF. It is anticipated that when San Luis Reservoir fills, projected for early 2007, the remaining debt of 78,000 AF will be erased. Final accounting of EWA's water purchases and balance sheet for water year 2006 will be completed in spring of 2007.

In November of 2006, EWA agencies working with the CALFED Science Program sponsored a biennial review of EWA. The review evaluated not only EWA's operations in water years 2005 and 2006, but also included a comprehensive look at the technical basis for EWA operations during its first six years. Results from the biennial review were released in early 2007, and are intended to guide EWA operations in water year 2007, as well as in future environmental water use and management.

Throughout 2006, work was under way to prepare an environmental compliance document for the acquisition and management of EWA assets for a proposed long-term EWA Program to begin January of 2008. However, this process was postponed due to numerous uncertainties. These included the reconsultation of the Operations Criteria and Plan (OCAP) for CVP and SWP under ESA, ongoing investigations into the Delta pelagic organism decline and ongoing planning efforts for a proposed BDCP. EWA agencies propose to take steps necessary to extend the existing Stage 1 EWA Program until these uncertainties are resolved, potentially for up to four years beginning January 2008. Extending EWA will require supplementing the existing EWA EIS/EIR adopted in 2004, extending the EWA Operating Principles Agreement of 2000, amending the MOU between EWA agencies signed in 2004 and extending the commitments provided in the Multi-Species Conservation Strategy (MSCS) of 2004. All of these actions are expected to be completed before December 31, 2007.

The following EWA Program activities were listed in the Year 6 Program Plan as ongoing, but were not completed as anticipated:

1. Water and Power Acquisitions – initiate consideration of storage proposals south of the Delta to provide in-ground storage for EWA assets.
 - Work continues on evaluating enlargement of Los Vaqueros Reservoir and possible groundwater banks south of the Delta.
2. Explore coordination of New Bullards Bar and Oroville Reservoir operations.
 - This activity continues through the Lower Yuba River Accord.
3. Evaluate potential for land retirement and drainage mitigation for EWA assets.
 - This activity continues in coordination with USBR on its Land Retirement Program.



Delta water supports California's \$31 billion agricultural economy, which supplies 50 percent of the nation's fruits and vegetables, and 25 percent of its dairy products. Major crops grown in the Delta include corn, grain, hay, alfalfa, tomatoes, asparagus, fruit, safflower, pears, wine grapes and pasture land.

Water Use Efficiency Program Element

In the first six years of the Water Use Efficiency Program, 366 agricultural and urban water conservation, recycling and desalinization projects were funded for a total of \$932 million in local, state and federal funds. The agricultural and urban grant recipients reported an expectation that the projects would potentially yield 90,000 AF of water when completed. Water recycling and desalinization recipients reported expectations of project yields of 387,000-510,000 AF and 35,500 AF when completed, respectively.

Year 6, CALFED agencies accomplished the following Water Use Efficiency (WUE) actions:

DWR:

- Developed 69 urban and agricultural WUE state Proposition 50 contracts awarding a total of \$26.5 million of Year 5 funding, including 42 urban contracts for \$16.5 million, with \$17.3 million in local cost sharing; and 27 agricultural projects for \$10 million with \$18.1 million in local cost sharing. (Grant funding was not included in DWR's budget for Year 6);
- Reviewed previously-funded Senate Bill (SB) 23 and state Proposition 13 WUE projects;
- Initiated a cooperative agreement with the Agricultural Water Management Council (AWMC) to review 2004 Proposition 50 proposals and provide input for ways to improve future proposal solicitation package (PSP) processes and provide input enabling agricultural agencies to prepare proposals that are better linked to targeted benefits and quantifiable objectives;
- Awarded 24 desalination projects totaling \$21.5 million of Proposition 50 (Chapter 6) funds in fiscal year 2005-06 on a 50 percent cost-share basis. These projects included four construction, nine pilot and demonstration, seven research and development, and four feasibility studies. DWR developed agreements for the 24 projects;

- Developed a draft 2007 WUE PSP for \$35.3 million urban and agricultural grant projects. The draft PSP was released in October of 2006. Public workshops were conducted before the final PSP was issued to receive public comments;
- Continued making Proposition 13 loans available for agricultural projects;
- Continued providing technical assistance to urban and agricultural local agencies through the California Irrigation Management Information System and other activities;
- Received more than 325 Urban Water Management Plans, which are under review. DWR prepared and submitted a legislative report in December of 2006;
- Implemented state Assembly Bill (AB) 2717 through the California Urban Water Conservation Council (CUWCC) and published the *Water Smart Landscape for California Guide*, with assistance from the Landscape Task Force. CUWCC submitted the report to the Governor in 2005. It makes recommendations to improve urban water use efficiency, including updating of the Model Water Efficient Landscape Ordinance. DWR, USBR and SWRCB representatives participated in the task force;
- Worked with AWMC to incorporate quantifiable objectives and targeted benefits into the Water Management Planning process;
- Developed a draft assurance package to take an adaptive management approach and provide incentives to further linkage of funding to targeted benefits; and
- Incorporated more specific performance measure information into the Year 6 Request for Proposal (RFP) issued by USBR and Year 7 PSP from DWR.



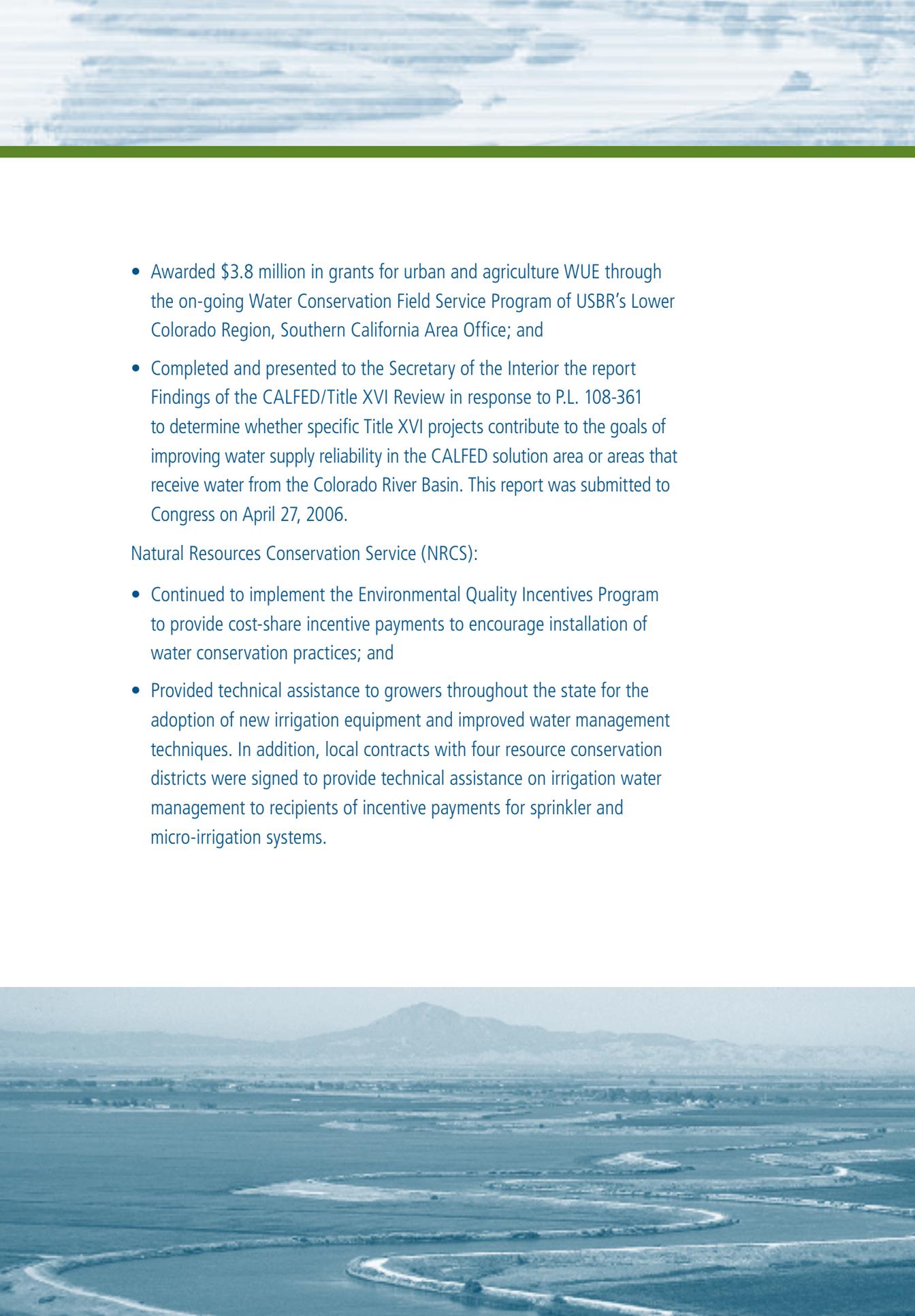
SWRCB:

- Developed and administered contracts on water recycling research, feasibility planning and construction for projects approved in Year 6 and prior years;
- Approved 15 water recycling research projects for a total of \$800,000;
- Approved one water recycling Proposition 13 construction grant for \$640,350, seven water recycling Proposition 13 facility planning study grants for a total of \$515,000 and 18 water recycling Proposition 50 construction grants totaling \$42.2 million;
- Worked with DWR to implement Proposition 50 (Chapter 8) Integrated Regional Water Management Planning grants in a two-step solicitation process; and
- Continued to provide technical assistance on water recycling.

USBR:

- Began development of state and federal refuge plans in accordance with the Refuge Water Management Plan Criteria;
- Began developing Sacramento Valley Settlement Contractors regional plan in accordance with regional criteria;
- Awarded \$1.1 million in grants supporting seven urban and 25 agricultural grant projects through USBR's Mid-Pacific Region's Water Conservation Field Services Program;
- Awarded \$2.8 million through a CALFED RFP for WUE projects to eight urban and seven agricultural projects. The total amount for projects funded was more than \$6.8 million;
- Placed notices for 32 water management plans in the *Federal Register* by December of 2006 through USBR's Mid-Pacific Region;

*Delta water meanders through
1,100 miles of levees from Sacramento
west to San Francisco Bay.*

- 
- Awarded \$3.8 million in grants for urban and agriculture WUE through the on-going Water Conservation Field Service Program of USBR's Lower Colorado Region, Southern California Area Office; and
 - Completed and presented to the Secretary of the Interior the report Findings of the CALFED/Title XVI Review in response to P.L. 108-361 to determine whether specific Title XVI projects contribute to the goals of improving water supply reliability in the CALFED solution area or areas that receive water from the Colorado River Basin. This report was submitted to Congress on April 27, 2006.

Natural Resources Conservation Service (NRCS):

- Continued to implement the Environmental Quality Incentives Program to provide cost-share incentive payments to encourage installation of water conservation practices; and
- Provided technical assistance to growers throughout the state for the adoption of new irrigation equipment and improved water management techniques. In addition, local contracts with four resource conservation districts were signed to provide technical assistance on irrigation water management to recipients of incentive payments for sprinkler and micro-irrigation systems.

CALFED Bay-Delta Program Coordinating Staff:

- Released the Year 4 Comprehensive Evaluation for the CALFED WUE Program;
- Revised and developed targets that were delayed until the Year 4 Comprehensive Evaluation was completed;
- Prepared draft legislation for water use measurement, but its adoption was delayed due to the legislative process; and
- Developed plans for promoting implementation of cost effective urban best management practices.

The following activities were listed in the Year 6 Program Plan for Water Use Efficiency Program actions, but were not completed as anticipated:

1. Appropriate water use measurement implementation – continue to follow the direction of CDDBA in implementing the administrative actions called for in the Implementation Approach for Water Use Measurement (CDDBA Resolution 04-04-01).
 - No notable progress made in 2006. This work is considered on-going.
2. WUE Science Application Advisory Committee – periodically convened to address science needs.
 - No project was identified for the Committee to address.
3. Convene Water Management Science Board.
 - Board did not meet in Year 6 and its purpose and responsibilities have been folded into the revamped Independent Science Board (ISB).

4. Convene Bay-Delta Public Advisory Committee (BDPAC) WUE Subcommittee to share information and provide CALFED Program updates.

- This subcommittee was not convened and was incorporated into the BDPAC Water Supply Subcommittee.

5. Develop partnerships with integrated water management planning efforts.

- Work was not undertaken in Year 6 due to other priorities.

Water Transfer Program Element

In the first six years of the CALFED Program, more than 4.1 million AF of water was transferred for EWA, DWR Dry Year Program, Central Valley Project Improvement Act Transfers and the Colorado River Contingency Plan.

The following Water Transfer Program activities were listed in the Year 6 Program Plan, but were not completed as anticipated:

1. Measurement and monitoring – coordinated development of measurement and monitoring programs required to evaluate transfers; and
2. Refine crop idling transferable water definition – review and update draft papers on the subject.
 - The state Legislature cut all funding for the Water Transfer Program Element in 2005. Work was initiated on both items 1 and 2, and then stopped when the Program Element was unfunded; and
3. Continue Operation of the On-Tap Website.
 - The Website was established, but it did not continue as planned due to a lack of funding which led to its suspended operation in July of 2005.



Water Quality Program Objective

The objective of CALFED's Water Quality Program is to invest in projects to improve water quality from source to tap to benefit the more than 24 million Californians who obtain at least some of their water through the Delta.

The Water Quality Program awarded \$76 million during the first six years, with \$41 million going to 54 successful applicants for competitive grants. A total of \$13 million was directed to three projects to address agricultural discharges affecting Contra Costa Water District and \$20 million was designated in legislation for water quality exchange partnerships between the San Joaquin Valley and the Metropolitan Water District of Southern California.

There are 16 additional projects totaling \$18.1 million that contribute to the Water Quality Program and are tracked for purposes of meeting Program commitments. These projects were funded through three CALFED Program Elements: ERP, Watershed and Conveyance, as well as by EPA. Of the 54 successful project applicants, 40 projects and nearly half the overall Water Quality funding went toward source water improvement in the Delta and its tributaries. The remaining funding was divided among scientific studies, treatment technology demonstration projects and regional planning.

Program progress for the first six years was summarized in the June 2005 CALFED Water Quality Program Assessment Report. The Water Quality Program implementing agencies have continued to select, fund, manage and implement projects which help to achieve the goals and objectives of the program through Proposition 50 and other statewide bond-funded programs.



In Year 6, CALFED agencies accomplished the following Water Quality Program actions:

- Completed construction of the Old River and Rock Slough Water Quality Improvement Projects through the Contra Costa Water District. The purpose of these projects is to reduce 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;
- Gained approval from SWRCB for a total maximum daily load 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 was formed to implement an alternative solution to prescribed load reductions;
- Released conceptual models for organic carbon and nutrients as part of the Central Valley Drinking Water Policy (CVDWP) development project. Conceptual models for pathogens and salinity are in progress. The CVDWP work group is now refining the models and soliciting feedback from a larger audience. These conceptual models are also expected to assist CALFED in development of drinking water quality performance measures and program strategy. Funding has been secured from several sources: \$300,000 from California Urban Water Agencies/Sacramento Regional County Sanitation District; \$178,000 from EPA; \$970,000 from state Proposition 50 funds administered by SWRCB; \$35,000 from the Sacramento Regional Watershed Program; and \$80,000 from SB 23 administered by DWR;
- Prepared a pre-feasibility study report for flooded islands. 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 and results before moving to a full-scale project;

- 
- Completed and presented to the Secretary of the Interior for transmittal to Congress a report entitled Program to Meet Standards, prepared by USBR in response to P.L. 108-361, the federal CALFED legislation that requires annual reporting on CALFED performance. DWR also completed a similar report for the state Legislature;
 - Concluded bench scale testing, conducted treatment technology demonstration projects and prepared a draft report as part of the Bay Area Ultraviolet Light and Multiple Disinfectants Project funded by a \$750,000 grant from EPA;
 - Continued to receive final reports from completed projects funded by the Water Quality Program during the first few years of implementation. Results from many of these projects will be analyzed and incorporated into the Program's final assessment;
 - Contributed to a peer review of the San Joaquin River CALSIM II Model, completed in February of 2006 through \$20,000 in funding from EPA;
 - Selected specific constituents and indicators for the development of performance measures to protect both human and ecosystem health through the Performance Measures Tech Group and Water Quality Subcommittee; and
 - Developed a contract for consultant services for a work plan by CALFED Water Quality Program staff and supported by USBR. Additionally, work began on a final assessment of progress toward meeting the CALFED ROD goals and objectives, including the water targets and treatment technology objectives.

In the fall of 2006, emergency levee repairs were completed on 33 sites throughout Northern California, including 17 in the Delta.



The following activities were listed in the Year 6 Program Plan for the Water Quality Program, but were not completed as anticipated:

1. Water Quality Exchanges – facilitate water quality exchanges.
 - Individual pilot projects to improve water supply reliability for Friant Water Users Authority and water quality for Metropolitan Water District are scheduled to be approved for implementation as early as March of 2007.
2. Delta Improvements Package Performance Evaluation and Monitoring Program – develop and implement a program to evaluate the water quality and biological resource effects of the activities comprising the Delta Improvements Program;
3. Coordinated Monitoring – development of a comprehensive monitoring and assessment program by the beginning of 2003; and
4. Final Program Assessment – begin scoping for final assessment on progress toward meeting water quality targets and alternative treatment technologies.
 - Tasks 2-4 were identified, but it was recognized that there was no funding and in all likelihood the tasks would not be completed in 2006, so no agency was identified to implement these actions.





Ecosystem Restoration Program Objective

CALFED's ERP Program Objective is implemented through the ERP and Watershed program elements. The objective of the ERP Program Element is to improve the ecological health of the Bay-Delta watershed through restoring and protecting habitats, ecosystem functions and native species. The Watershed Program Element funds, coordinates and provides technical support for local watershed activities.

ERP Program Element

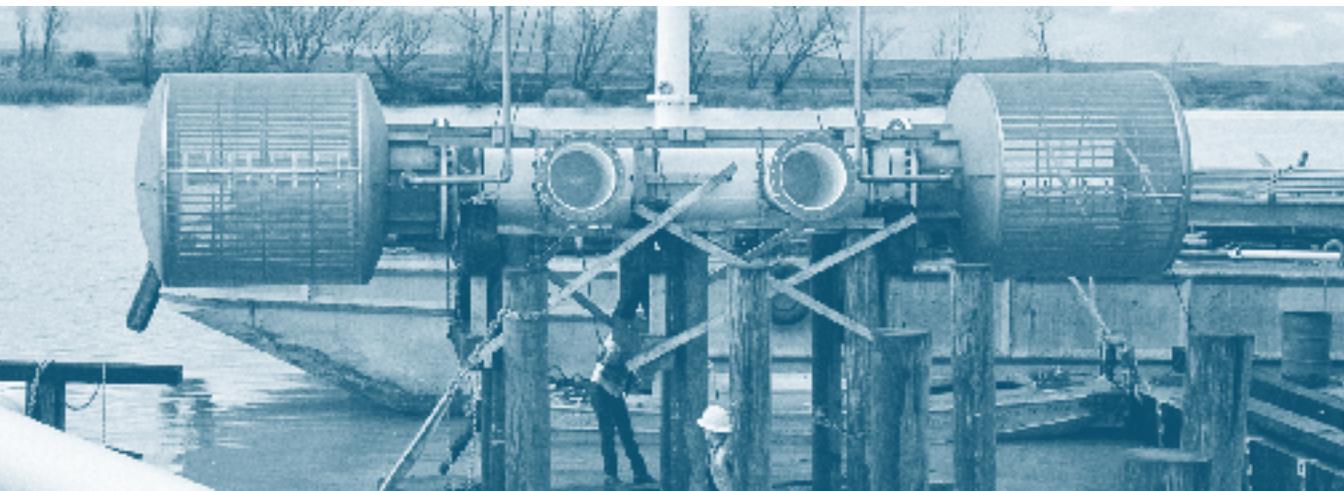
Early implementation of ERP began three years prior to the signing of the CALFED ROD in recognition that ecological systems take time to show change. In the first nine years of implementation, ERP has made significant progress in improving habitat and species associated with the Bay-Delta and its watersheds.

During those nine years, the CALFED agencies:

- Awarded more than \$615 million to 493 projects. To date, 276 projects or about 56 percent have been completed. Grant recipients reported approximately \$285 million in matching funds, which resulted in a combined total of about \$825 million;
- Met or exceeded schedule for nearly 80 percent of the 119 ecosystem milestones provided for in Stage 1 by 2004. Many ERP actions addressed priority Multi-Species Conservation Strategy (MSCS) species listed in the milestones. The fishery agencies – U.S. Fish and Wildlife Service (USFWS); U.S. National Marine Fisheries Service (NMFS); and California Department of Fish and Game (DFG)– along with other CALFED agencies, extended the regulatory commitments of the MSCS through the end of Stage 1, or December of 2007;

CALFED has funded several fish screen projects to protect Delta fisheries.

- Protected or restored more than 100,000 acres of habitat. Some examples are:
 - CALFED-funded cooperative projects contributing to the restoration and protection of 7,000 acres of wetlands in San Pablo Bay and Suisun Marsh, exceeding the Stage 1 target for tidal marsh restoration in San Pablo Bay;
 - More than 50,000 acres of seasonal wetlands in the Sacramento River Region enhanced, protected or restored; and
 - Approximately 500 acres of fresh emergent wetland in the San Joaquin River region enhanced, protected or restored.
- Installed or improved 82 fish screens, restored stream habitats and removed impediments to salmonid passage, assisting the rebounding of salmon populations observed in some streams;
- Underwrote the protection of 54,000 acres of agricultural land, largely through easements. For example, more than 11,000 acres of wildlife-friendly agricultural land was protected in the Delta, meeting the Stage 1 target for the region;



- 
- Coordinated with DRMS and Delta Vision, the latter of which is a newly-established multi-disciplinary program, to develop a plan for a sustainable future for the Delta; and
 - Reviewed and made recommendations for Assistance to Farmers in Integrating Agricultural Activities (AFIAA) with Ecosystem Restoration PSPs. Project awards will be made in Year 7.

In Year 6, the CALFED agencies accomplished the following:

- Funded 28 projects for approximately \$85 million, including seven projects to monitor and evaluate previously-funded ecosystem restoration projects for approximately \$8 million;
- Completed approximately \$3.9 million in educational projects, including outreach and education on fish contamination in the Sacramento-San Joaquin Delta Watershed;
- Made progress on the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) by developing conceptual models for hydrodynamics, toxicity and invasive vegetation to be used to evaluate restoration actions;
- Developed a planning process to conduct end of Stage 1 assessments of ERP and address Stage 2 ERP activities and related issues;
- Addressed needs for developing ERP performance measures;
- Refocused efforts in Year 6 and Year 7 Program Plans on high-priority activities to address problems of pelagic organism decline;
- Coordinated with or participated in other Delta planning efforts, including Delta Vision, DRMS and BDCP;



- Prepared a 2006 milestones assessment update for inclusion in the ERP Plan for Year 7;
- Reviewed plans and proposals and made recommendations for projects that assist farmers in integrating agricultural activities with the Ecosystem Restoration PSP. Project awards will be made in Year 7; and
- Provided a significant portion of funding that established the 4,235-acre Llano Seco Ranch Conservation Easement. This acquisition includes active agricultural lands, as well as native habitats supporting native wildlife and at least six threatened and endangered species.

The state-funded implementation of ERP was transferred to DFG in 2006 as part of a transition plan initiated with the formation of CBDA. DFG ERP staff continues to work collaboratively with federal ERP implementing agencies – FWS and NMFS.

The following activities were listed in the Year 6 Program Plan for the ERP Program Objective, but were not completed as anticipated:

1. Major activities – 62 priority projects were postponed for Year 6.
 - Of these, 45 will be executed in Year 7. Delays occurred in the contracting process, which postponed project start dates. Many of these projects are expected to be implemented early in Year 7.
2. AFIAA – dedicate funds to a focused solicitation and directed actions to implement these projects.
 - Project selection for AFIAA with Ecosystem Restoration was carried out in Year 6. Eight projects were recommended for funding, three were recommended to be reconsidered if revised and one was recommended as a directed action. Contract scopes are currently under development and contracts will be executed later in Year 7.

The Delta occupies more than 700,000 acres, of which nearly half is devoted to agriculture. It contains more than 1,000 miles of levees, 57 reclaimed islands and numerous channel islands.



3. Additional milestones projects based on annual milestones assessment – a total of \$5 million was proposed for actions that would allow covered species to make significant progress toward restoration and recovery.

- No proposals were developed for this project category during Year 6. However, these actions will be carried over into future years as new proposals are developed.

Watershed Program Element

During the first six years, the CALFED agencies awarded four rounds of competitive Watershed Program grants. A total of 146 grants were funded for just under \$60 million. To date, 79 of these projects have been completed. Beginning in 2003 and continuing through 2007, 64 statewide watershed coordinators were funded through the Department of Conservation (DOC) for \$3 million per year. DOC reported that the watershed coordinators brought \$31 million of other grant and project funds into the Watershed Program through their work. Finally, the Watershed Program developed watershed assessments covering approximately 27,400 square miles and watershed management plans covering approximately 20,500 square miles in various watersheds throughout the CALFED regions.

In Year 6, the CALFED agencies accomplished the following Watershed Program actions:

- Funded 28 watershed grants through a DWR solicitation totaling approximately \$9 million for projects located throughout the CALFED area;
- Continued support of 64 watershed coordinators located in 48 watersheds through grants administered by DOC;
- Participated through the Watershed Health Indicators group to develop a framework for indicators of watershed health;

The Sierra snowpack acts as a natural reservoir for precipitation that ultimately flows through the Delta as runoff.

- 
- Held a Watershed Partnership Seminar and trained 36 participants in effective locally-driven watershed management;
 - Continued support of the Watershed Program through the Interagency Watershed Advisory Team, which provided direction to the Watershed Program on a broad array of issues, including: grant focus, priorities and review criteria; directed actions; and participation in the development of Integrated Regional Water Management components of the State Water Plan. These components related to communications with departmental management on support for administrative and legislative initiatives and on coordination of technical and policy support for watershed management;
 - Completed Volume I of the *California Watershed Assessment Manual*;
 - Continued to work with the BDPAC Watershed Subcommittee, as an important public forum and participation process for stakeholders; and
 - Submitted a proposal to deputy directors and the Watershed Subcommittee for transition to a statewide watershed program.

The following activities were listed in the Year 6 Program Plan for the Watershed Program, but were not completed as anticipated:

- No actions were reported in this category.





There are four major cities at least partly within the Delta, plus 14 unincorporated towns and villages. More than 500,000 Californians call the Delta home, where there are 160,000 existing houses and more than 250,000 others under construction or planned for development.

Science Program Element

In its first six years, the Science Program has been involved in an intensive effort to improve the understanding of the Bay-Delta system, as well as the application of science in all CALFED Program Elements.

During its first six years, the Science Program:

- Appointed an Independent Science Board;
- Established an EWA Science Panel;
- Funded 19 directed research projects totaling approximately \$10 million;
- Funded more than \$10 million in research grants through its first PSP;
- Initiated the CALFED Science Fellows program and funded 16 fellows in collaborative data analyses and research projects;
- Funded and convened 25 workshops dealing with CALFED priority issues;
- Organized 10 program or large-scale project reviews that ensured that the latest and most credible scientific and technical information is considered in project and program implementation;
- Sponsored four biennial CALFED Science conferences and co-sponsored seven biennial State of the Estuary conferences;
- Produced 50 reports and white papers on a wide range of topics, with emphasis on water operations and species of interests;
- Published the online journal *San Francisco Estuary and Watershed Science*;
- Published the newsletter *Science Action* to bring important scientific information and understanding to the general public; and
- Established a Bay-Delta Science seminar series in collaboration with the University of California, Davis, to present current information on resource management and water operations in the Bay-Delta system.

In Year 6, the Science Program accomplished the following:

- Recommended to the Secretary for Resources the appointment of a new Lead Scientist, who began working for the Program in January of 2007;
- Organized the fourth biennial CALFED Science Conference;
- Published three issues of new scientific findings on the Bay-Delta in *San Francisco Estuary and Watershed Science*;
- Organized two issue workshops and three extensive reviews of the CALSIM II model: San Joaquin Representation, IEP work plans addressing pelagic organism decline and the OCAP Biological Opinion;
- Commissioned a report, *The Role of Science in the Delta Visioning Process*, that considers the current scientific understanding of the Sacramento-San Joaquin Delta system. The report will be used to help develop a long-term Delta Vision;
- Developed a flexible framework to support agency efforts in developing performance measures and indicators for CALFED;
- Developed and released a \$6 million focused PSP and the third CALFED Science Fellows solicitation;
- Sponsored four seminars in the Bay-Delta seminar series; and
- Sponsored and worked with EWA agencies in developing and organizing the biennial review of the EWA Program in November.



The following activities were listed in the Year 6 Program Plan for the Science Program, but were not completed as anticipated:

1. Complete an initial evaluation of the present monitoring, assessment and data integration system to help plan for a CALFED-wide comprehensive monitoring and assessment program and data integration system proposed in coordination with Interagency Ecological Program (IEP).

- This task will be accomplished in fiscal years 2006-07 and 2007-08 as part of the Science Program task described in the Year 7 Program Plan under Performance Evaluation of CALFED Programs: Coordinate performance measure, monitoring, assessment and research activities.

2. Develop a strategic plan and CALFED-wide science agenda.

- Components of this effort, including gaps in scientific knowledge, will be identified as part of the Science Program's *State of Science for the Bay-Delta System Report* scheduled for completion in December of 2007. Upon completion of that report, the Lead Scientist will determine next steps for development of a strategic plan and CALFED-wide science agenda.

Conclusion

At the December 14, 2006 joint meeting of the California Bay-Delta Authority, the oversight and independent review body of the CALFED Bay-Delta Program, and the Bay-Delta Public Advisory Committee, the Federal Advisory Committee Act (FACA) advisory committee to the Secretary of the Interior, both bodies adopted the position that while CALFED Program progress has been made during Year 6 across the Program Elements, there continue to be deficiencies in the development of performance measures. Therefore, the Authority and the Advisory Committee approved the progress and accomplishments report under the condition that the following actions would be undertaken by the end of 2007, which marks the conclusion of Stage 1 of the CALFED ROD:

- Performance measures must be developed and implemented for the four CALFED Program Objectives: Levee System Integrity, Water Quality, Water Supply Reliability and Ecosystem Restoration.
- A more detailed evaluation and analysis of CALFED Program progress in relation to the CALFED ROD must be prepared; and
- A revised CALFED implementation schedule must be prepared.

Finally, the Authority and the Advisory Committee determined that unless these measures are taken, it would be difficult not to find the CALFED Program out of balance by the end of 2007.



2006 LEGISLATION IN REVIEW

This report highlights the key legislation affecting the CALFED Bay-Delta Program.

Proposition 1E (AB 140 - Nunez/Perata) Disaster Preparedness and Flood Prevention Bond Act of 2006

As approved by the voters, this proposition establishes a comprehensive financing plan to maintain and improve the state's levee and flood control system and provide for safe, reliable water supplies. It authorizes the sale of \$4.09 billion in general obligation bonds for financing urgent repairs and improvements:

- Levee Evaluation, Repair and Delta Levee Maintenance (\$3 billion);
- Flood Control Subventions (\$500 million);
- Flood Protection Corridor, Bypasses and Mapping (\$290 million); and
- Storm Water Flood Management (\$300 million).

AB 142 (Nunez/Perata) Levee and Flood Control System Evaluation and Repair (Chapter 34)

This bill appropriates \$500 million from the General Fund to DWR for levee evaluation, repair and flood control system improvements. It also requires that the appropriation fund the Governor's emergency declaration to address the repair of critical levee erosion sites that require immediate attention before the 2006-07 flood season.

AB 798 (Wolk) Delta Levees Subvention Program (Chapter 548)

This bill extends the sunset date for the 75-25 percent cost sharing formula for the Delta Levee Maintenance Subvention Program to July 1, 2010. It requires DWR to identify levees that are at risk of failure and to make funding priority recommendations to the state Legislature and Governor for



Rice fields in the Delta.



Four pumping stations move water out of the Delta to a number of diversions: the State Water Project, the federal Central Valley Project, Contra Costa Canal, North Bay Aqueduct, City of Vallejo diversion and the Western Delta Industry diversion.

levee maintenance or improvement projects by January 1, 2008. In addition, beginning January 1, 2010, only levees identified by DWR as requiring financial assistance would receive assistance. DWR administers the Subvention Program cooperatively with levee maintaining agencies to preserve assets of statewide interest located in the Delta. Local agencies engaged in levee maintenance and improvements are eligible to cost-share the expense of their work through the Subvention Program. These local agencies, including mainly reclamation districts, participate in the Subvention Program at a maximum contribution rate of 25 percent.

AB 1803 (Committee on Budget) Public Resources (Chapter 77)

This bill adds new provisions and amends existing provisions of law with respect to the organization of CALFED staff (formerly CBDA) and requires development of a Delta strategic plan. It establishes the Resources Agency as the implementing agency for the CALFED Science Program, continues all public processes of the CALFED Program, designates the Secretary for Resources as the successor entity for the purpose of managing grants and contracts (except for those relating to ecosystem restoration, which will be managed by DFG), and authorizes the Secretary to enter into contracts for scientific experts through an expedited process until January 1, 2009, for conducting Delta fisheries studies and other CALFED purposes.

The bill requires the Secretary to develop a strategic plan to achieve a sustainable Sacramento-San Joaquin Delta. The plan will include a description or definition of a sustainable Delta, taking into account ecosystem functions, land use patterns, transportation and utility uses, water supply uses and recreation uses; include measurable goals and objectives for achieving a sustainable Delta; recommend institutional changes needed to sustain the Delta; include a strategic financing plan; and contingency plans for levee

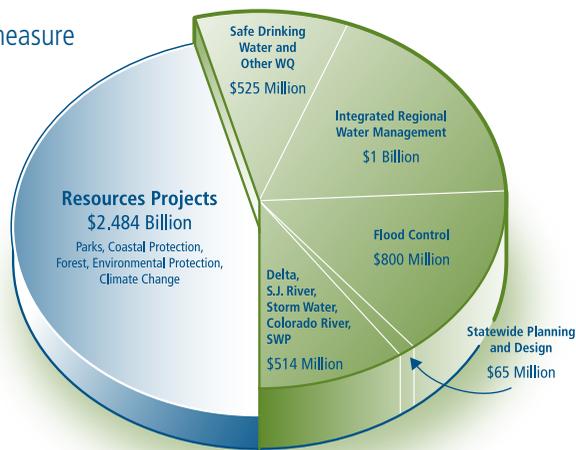
failure, earthquake and climate change. This bill will inform future Delta planning decisions with respect to the CALFED Program, BDCP, the Suisun Marsh Plan, general plan updates, transportation and utility infrastructure and integrated regional water management plans.

SB 1574 (Kuehl) Sacramento-San Joaquin Delta (Chapter 535)

This bill provides a statutory framework for implementing the Governor’s Delta Vision by requiring the Secretary for Resources to convene a nine-member committee to develop a Strategic Vision for a sustainable Delta by December 31, 2008. It provides for the Governor or the committee to appoint a blue ribbon commission to assist in developing the Strategic Vision, including ecosystem functions, land use and land use patterns, transportation issues, utility uses, water supply uses, recreation uses and flood management strategies. The provisions of AB 1803 that require the Secretary to develop a Delta strategic plan will provide the framework for the Strategic Vision.

Proposition 84 (Initiative Statute) Water Quality, Safety and Supply. Flood Control. Natural Resource Protection. Park Improvements.

Approved by voters in November of 2006, this measure provides for the sale of \$5.4 billion in general obligation bonds to be repaid from the state’s General Fund. Funds generated by the bond are designated for a large number of priority purposes. A portion of the funding –\$275 million – would be used to finance flood control projects in the Delta. Additional funding would benefit Delta water quality and ecosystem restoration programs and projects.



OVERSIGHT, GOVERNANCE & OUTREACH

Oversight and governance of the CALFED Bay-Delta Program is provided by CBDA, its governing board comprised of state and federal agency representatives, public members, a BDPAC member and ex-officio legislative members. As CALFED's oversight body, CBDA is responsible for accountability, ensuring balanced implementation, tracking and assessing of progress, ensuring the use of sound science to guide decision-making, encouraging public involvement and outreach and coordinating and integrating related government programs.



Gary Hunt

California Strategies
Chairman and Bay-Delta
Public Advisory
Committee Representative

California Bay-Delta Authority

State Agency Representatives



Michael Chrisman
Secretary for Resources



Linda Adams
Secretary for
Environmental Protection
Agency



A.G. Kawamura
Secretary of Food
& Agriculture



Ryan Broddrick
Director, Department
of Fish and Game

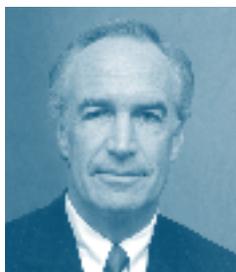


Sandra Shewry
Director, Department of
Health Services



Lester Snow
Director, Department of
Water Resources

Federal Agency Representatives



Dirk Kempthorne
Secretary of the Interior



Colonel Ronald Light
District Engineer, Army
Corps of Engineers



Rodney R. McInnis
Regional Administrator,
National Marine
Fisheries Service



Wayne Nastri
Regional Administrator,
Environmental Protection
Agency



Kirk C. Rodgers
Regional Director,
Bureau of Reclamation
Mid-Pacific Region



Steve P. Thompson
Manager, California-
Nevada Operations
Office, U.S. Fish &
Wildlife Service

Regional Members



Paula A. Daniels
Southern California Region



Patrick Johnston
Sacramento-San Joaquin
Delta Region



Bill Jones
San Joaquin Valley
Region



Alfred Montana
Sacramento Valley Region



Vacant
San Francisco Bay Region

Ex-Officio Members



Senator Sheila Kuehl

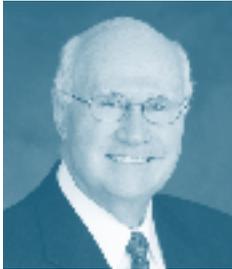
Chair, Senate Natural Resources and Water Committee



Assembly Member

Lois Wolk

Chair, Assembly Water, Parks and Wildlife Committee



Senator Bob Margett

Vice-Chair, Senate Natural Resources and Water Committee



Assembly Member

Mike Villines

Vice-Chair, Assembly Water, Parks and Wildlife Committee

At-Large Members



Mark Holmes
Senate Appointee,
The Bay Institute



Daniel Wheeler
Assembly Appointee,
United Association of
Plumbers, Pipe Fitters
and Sprinkler Fitters
International Union



The Bay-Delta Public Advisory Committee

The Bay-Delta Public Advisory Committee is the cornerstone of CALFED's public involvement. The 30-member body provides advice and recommendations on implementation of the CALFED Bay-Delta Program. Members represent a wide array of environmental, water, tribal and civic interest groups and serve as a key link among CALFED agencies, stakeholders and the public. Public involvement also comes to the CALFED Program through stakeholders representing environmental justice and tribal constituencies and concerns.

Gary Hunt
California Strategies
Chair

Denny Bungarz
Glenn County Supervisor
Vice-Chair

Patricia Acosta
Water Replishment
District of Southern
California

Gary Bobker
The Bay Institute

Christopher Cabaldon
Mayor of
West Sacramento

Tom Clark
Kern County Water Agency

Marci Coglianese
City of Rio Vista

Martha Davis
Inland Empire Utilities
Agency

Gregory Gartrell
Contra Costa Water District

David Guy
Northern California Water
Association

Steve Hall
Association of California
Water Agencies

Ronald Jacobsma
Friant Water Authority

Steve Johnson
The Nature Conservancy

Lillian Kawasaki
Los Angeles Department
of Water and Power

Leslie Lohse
Paskenta Band of Nomlaki Indians

Steve Macaulay
California Urban Water Agencies

Don Marciochi
Grassland Water District

Robert Meacher
Plumas County Supervisor

Jerry Meral
Planning and Conservation
League Foundation

Barry Nelson
Natural Resources Defense
Council

Dan Nelson
San Luis and Delta-Mendota
Water Authority

Bill Pauli
California Farm Bureau
Federation

Timothy Quinn
Metropolitan Water District

Rudolph Rosen
Ducks Unlimited

Michael Schaver
Big Valley Rancheria

Frances Spivy-Weber
Mono Lake Committee

Maureen Stapleton
San Diego County Water
Authority

O.L. Van Tenney
Glenn-Colusa Irrigation District

Walter Wadlow
Santa Clara Valley Water
District

Thomas Zuckerman
Central Delta Water Agency

CALFED Independent Science Board

CALFED's ISB is a standing board of distinguished experts (scientists and engineers) with a range of multi-disciplinary expertise, including members with local experience and those with external relevant expertise. These experts help CBDA and the CALFED Science Program establish an independent and objective view of the science issues that underlie important policy decisions for the Bay-Delta. The ISB provides guidance for strong and independent understanding of the science of the Bay-Delta.



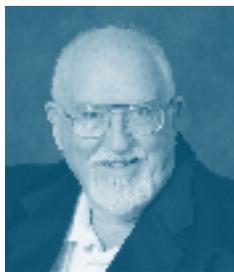
Jeff Mount, Ph.D.
Professor, Department
of Geology, University of
California, Davis
ISB Chair



Judith Meyer, Ph.D.
Distinguished Research
Professor of Ecology
Emeritus
University of Georgia



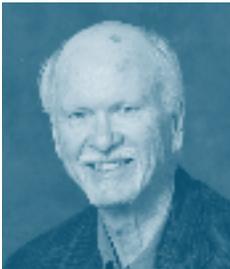
Antonio Baptista, Ph.D.
Head of the Department
of Environmental and
Biomolecular Systems
Oregon Graduate Institute
School of Science and
Engineering
Oregon Health and Science
University



Paul Smith, Ph.D.
Adjunct Professor
Scripps Institution of
Oceanography
University of California,
San Diego



Robert Twiss, Ph.D.
Professor, Graduate Center
for Environmental Design
Research
University of California,
Berkeley



William Glaze, Ph.D.

Professor Emeritus
University of North
Carolina at Chapel Hill



**Peter Goodwin,
Ph.D., P.E.**

DeVlieg Presidential
Professor
Department
of Civil Engineering
University of Idaho



Jack Keller, Ph.D., P.E.

Principal, Keller-Bliesner
Engineering and Professor
Emeritus
Utah State University



Daene McKinney, Ph.D.

Professor, Environmental
and Water Resources
Engineering Program
University of Texas at Austin



Richard Norgaard, Ph.D.

Professor of Energy,
Resources, Agricultural
& Resource Economics
University of California,
Berkeley



Duncan Patten, Ph.D.

Research Professor
Montana State University



PROGRAM FINANCING

The following Year 6 Funding table contains fiscal information provided by state and federal CALFED agencies.

Year 6 represents fiscal year 2005-06 for the state agencies, and fiscal year 2006 for the federal agencies. Funding included is only for those programs that are directly contributing to the CALFED objectives, and commonly referred to as Category A programs or projects. The local cost-share funding information is also provided by the state and federal agencies and reflects an estimate of expected local cost shares associated with grant funds.

YEAR 6 FUNDING (\$ IN MILLIONS)

February 13, 2007

| Program Element | Total Year 6 | FY 2005-06 State Spending ¹ | | | | | | | FY 2006 Federal Spending ² | | | Water User/Local Funding ³ | | | |
|-----------------------------|----------------|--|--------------|--------------|--------------------|----------|---------------------------|----------------|---------------------------------------|----------------------------|------------------|---------------------------------------|---------------|-----------------------------------|---------------------|
| | | General Fund | Prop. 204 | Prop. 13 | Prop. 50 | Prop. 84 | Other States ⁴ | State Subtotal | USBR | Other Federal ⁵ | Federal Subtotal | SWP | CVPIA RF | Local Grant Matching ⁷ | User/Local Subtotal |
| Conveyance ⁶ | \$21.1 | \$0.9 | | \$0.7 | \$0.0 ⁸ | | | \$1.6 | \$6.6 | | \$6.6 | \$12.9 | | | \$12.9 |
| Ecosystem Restoration | \$60.1 | \$0.9 | \$1.8 | | \$17.6 | | | \$20.3 | \$7.2 | \$1.5 | \$8.7 | \$2.0 | \$29.1 | | \$31.1 |
| Environmental Water Account | \$13.9 | | | | \$9.0 | | | \$9.0 | \$4.7 | \$0.2 | \$4.9 | | | | |
| Levee System Integrity | \$19.7 | | | | \$18.8 | | | \$18.8 | | \$0.4 | \$0.4 | \$0.5 | | | \$0.5 |
| Oversight and Coordination | \$8.0 | \$6.9 | | | | | \$0.1 | \$7.0 | \$0.8 | \$0.2 | \$1.0 | | | | |
| Science | \$16.2 | \$0.0 ⁸ | | | \$1.3 | | | \$1.3 | \$5.6 | \$1.5 | \$7.1 | \$7.8 | | | \$7.8 |
| Storage | \$21.3 | \$0.1 | | | \$8.7 | | | \$8.8 | \$12.5 | | \$12.5 | | | | |
| Water Quality | \$2.2 | \$0.2 | | | \$0.3 | | | \$0.5 | \$1.7 | | \$1.7 | | | | |
| Water Supply Reliability | \$6.6 | | | | \$6.6 | | | \$6.6 | | | | | | | |
| Water Use Efficiency | \$212.7 | \$1.1 | | | \$22.9 | | \$1.8 | \$25.8 | \$19.8 | | \$19.8 | | | \$167.1 | \$167.1 |
| Watershed Management | \$1.9 | \$0.1 | | \$0.8 | \$0.9 | | \$0.1 | \$1.9 | | | | | | | |
| Grand Total | \$383.7 | \$10.2 | \$1.8 | \$1.5 | \$86.1 | | \$2.0 | \$101.6 | \$58.9 | \$3.8 | \$62.7 | \$23.2 | \$29.1 | \$167.1 | \$219.4 |

¹ State financing includes funding for the CALFED Bay-Delta Program, Department of Water Resources, Department of Fish and Game, State Water Resources Control Board, Department of Forestry and Fire Protection, Department of Conservation and the San Francisco Bay Conservation and Development Commission.

² Federal funding sources include U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, U.S. Geological Survey, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency and National Marine Fisheries Service.

³ Water User/Local funding includes State Water Project Funds and federal CVPIA Restoration Funds that are collected from state water contractors and Central Valley Project water users, but budgeted and appropriated through the federal and state governments. USBR reports a non-federal share for Title XVI recycling projects. The state vs. local contribution of this amount is unknown at this time and is therefore shown as non-federal funding.

⁴ Includes DWR funds that contribute to the Water Conservation Program, Interagency Ecological Program funds from various departments that contribute to the Science Program, and oversight and coordination funding at the Department of Conservation.

⁵ Other federal funding includes funding for ERP, EWA and Oversight and Coordination from the National Marine Fisheries Service, and IEP funding (science) from the U.S. Fish and Wildlife Service, U.S. Geological Survey, EPA and National Marine Fisheries Service.

⁶ Includes federal funding for the San Luis Reservoir Low Point Project.

⁷ Funding amounts may include some state funding as well as local water user funds.

⁸ Program Element - Conveyance, Proposition 50 funding amount is \$14,000, Program Element - Science, General Fund funding amount is \$1,000.



GLOSSARY OF ACRONYMS

| Acronym | Full Name |
|-------------------|--|
| AB | Assembly Bill |
| AF | Acre feet |
| AFIAA | Assistance to Farmers in Integrating Agricultural Activities |
| ASIP | Action Specific Implementation Plan |
| AWMC | Agricultural Water Management Council |
| BDCP | Bay-Delta Conservation Plan |
| BDPAC | Bay-Delta Public Advisory Committee |
| CALFED | CALFED Bay-Delta Program |
| CALFED ROD | CALFED Bay-Delta Program Record of Decision |
| CBDA | California Bay-Delta Authority |
| CFS | Cubic Feet per Second |
| CUWCC | California Urban Water Conservation Council |
| CVDWP | Central Valley Drinking Water Policy |
| CVP | Central Valley Project |
| DCC | Delta Cross Channel |
| DOC | California Department of Conservation |
| DFG | California Department of Fish and Game |
| DRERIP | Delta Regional Ecosystem Restoration Implementation Plan |
| DRMS | Delta Risk Management Strategy |
| DWR | Department of Water Resources |
| EIR | Environmental Impact Report |
| EIS | Environmental Impact Statement |
| ERP | Ecosystem Restoration Program |
| ESA | U.S. Endangered Species Act |
| EWA | Environmental Water Account |
| FACA | Federal Advisory Committee Act |

| Acronym | Full Name |
|----------------|---|
| IDSP | In-Delta Storage Project |
| IEP | Interagency Ecological Program |
| ISB | Independent Science Board |
| LVRE | Los Vaqueros Reservoir Expansion |
| MOU | Memorandum/Memoranda of Understanding |
| MSCS | Multi-Species Conservation Strategy |
| NMFS | U.S. National Marine Fisheries Service |
| NODOS | North of Delta Off-Stream Storage |
| NRCS | Natural Resources Conservation Service |
| OCAP | Operations Criteria and Plan |
| PSP | Proposal Solicitation Package |
| RFP | Request For Proposal |
| ROD | Record of Decision |
| SB | Senate Bill |
| SDIP | South Delta Improvements Program |
| SLWRI | Shasta Lake Water Resources Investigation |
| SWP | State Water Project |
| SWRCB | State Water Resources Control Board |
| TDF | Through-Delta Facility |
| USACE | U.S. Army Corps of Engineers |
| USBR | U.S. Bureau of Reclamation |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| USJRBSI | Upper San Joaquin River Basin Storage Investigation |
| WUE | Water Use Efficiency |



CALFED Bay-Delta Program
650 Capitol Mall
Sacramento, Ca 95814

916.445.5511
www.calwater.ca.gov