

CALFED BAY-DELTA PROGRAM
ANNUAL REPORT 2002

*Securing California's
Water Future*



MISSION STATEMENT

The mission of the CALFED Bay-Delta Program is to develop and implement a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta.

CALFED AGENCIES

California

The Resources Agency

Department of Water Resources

Department of Fish and Game

The Reclamation Board

Delta Protection Commission

Department of Conservation

San Francisco Bay Conservation and
Development Commission

California Environmental Protection Agency

State Water Resources Control Board

California Department of Health Services

California 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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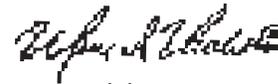
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California, in partnership with the federal government, has created a new, more collaborative approach to balance water supply reliability and the ecological health of Central Valley Rivers and the Bay-Delta Estuary – the CALFED Bay-Delta Program. As we close out the second year of implementation of the CALFED Record of Decision, it's important to acknowledge the hard work of the stakeholder communities and the state and federal agencies.

In particular, the new Public Advisory Committee, under the leadership of Chair Gary Hunt, played a pivotal role in building support for governance legislation and Proposition 50, which will provide accountability and balanced state funding for the Program while we continue to seek federal authorization from Congress.

While State and federal budget constraints will continue to provide implementation challenges, the CALFED agencies and stakeholders are committed to working together as they have in the past, and staying focused on making progress in all program areas. California deserves no less.



Mary D. Nichols
Secretary for Resources
The Resources Agency



In California and across the West, we face the common challenge of ever-growing demands for water and the complex and controversial challenges associated with increasing supplies. The CALFED Program represents a unique approach to reaching common objectives and taking actions needed to achieve balanced progress on these fronts. We support the concepts of CALFED, and our main task is to move forward in the implementation phase in a way that is true to the concepts of CALFED while recognizing the fiscal realities of the state and federal budgets.

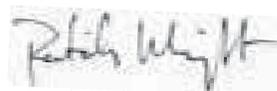
We greatly appreciate the advice of the public advisory group and the hard work of the House Water and Power Subcommittee Chairman Ken Calvert and Senator Dianne Feinstein on trying to get CALFED authorized. We will continue to work closely with them and with the people of California.



Bennett W. Raley
Assistant Secretary for Water and Science
Department of the Interior



Since its inception, many have questioned whether this grand experiment in collaborative decision-making could survive in the face of competing interests, agency cultures, and limited budgets. But as the accomplishments described in this second annual report demonstrate, the Program is not only surviving, but thriving. Hundreds of projects are now underway, conflicts over water project operations have been reduced, and our future is now secure through the passage of governance legislation and Proposition 50. Our challenge will be to build upon our accomplishments to date with a renewed commitment to the strengths of the Program: collaborative, locally-based solutions, science-based decision-making, extensive public and stakeholder involvement, strong interagency coordination at all levels, and balanced implementation.



Patrick Wright
Director
CALFED Bay-Delta Program

WE ALL DEPEND ON THE BAY-DELTA

The Bay-Delta system provides drinking water for 22 million people. It supports California's trillion-dollar economy, including its \$27 billion agricultural industry. Its levees protect farms, homes, and infrastructure. It is the largest estuary on the west coast — home to 750 plant and animal species — and it supports 80% of the state's commercial salmon fisheries.

DEFINING AND RESOLVING THE BAY-DELTA CONFLICT

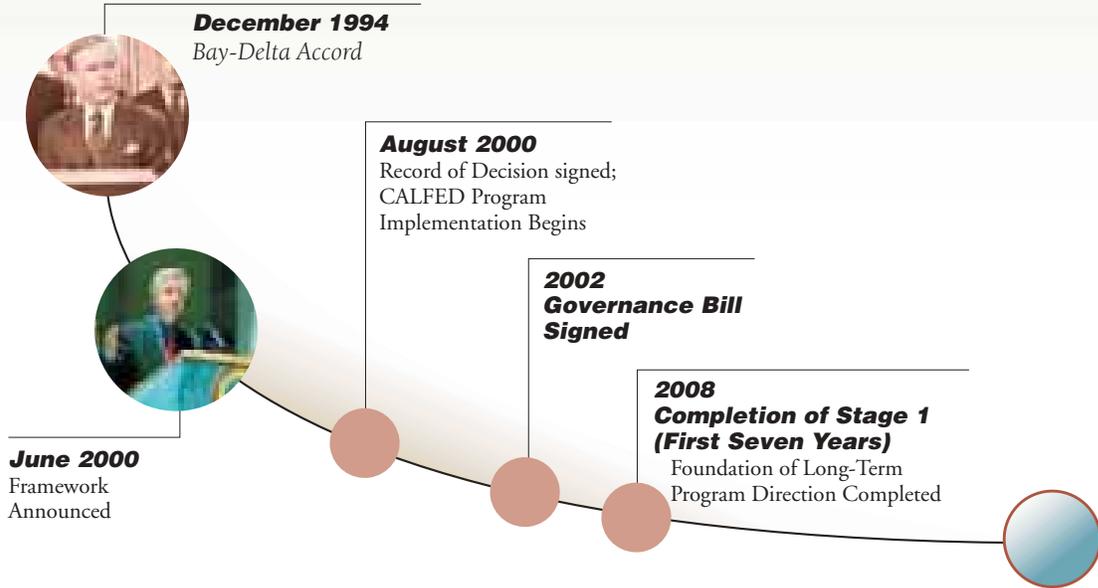
Straining under dual roles as crucial habitat and water project crossroads, the Bay-Delta is in decline from decades of competing demands, no longer functioning as a healthy ecosystem or as a reliable source of water.

The CALFED Bay-Delta Program is a collaborative effort among 23 state and federal agencies (CALFED Agencies) to improve water supplies in California and the health of the San Francisco Bay-Sacramento/San Joaquin River Delta watershed.

IMPLEMENTATION PRIORITIES:

- Meet commitments and milestones in the Bay-Delta Plan.
- Apply independent scientific review and adaptive management to all major activities with accurate and frequent reports to the public.
- Conduct early and continuous agency, stakeholder and public involvement.
- Support local and regionally based strategies to achieve the Program's goals.
- Develop performance standards and milestones for each program element.
- Maintain a balanced and integrated Program.

CALFED TIMELINE



The CALFED Bay-Delta Program is a comprehensive collaborative effort that will take 30 years or more to complete.



EXECUTIVE SUMMARY
OBJECTIVES

The Bay-Delta Program is unique in its approach to solving many of California's most significant environmental and water problems. The Program addresses four inter-related, interdependent resource management objectives concurrently:

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

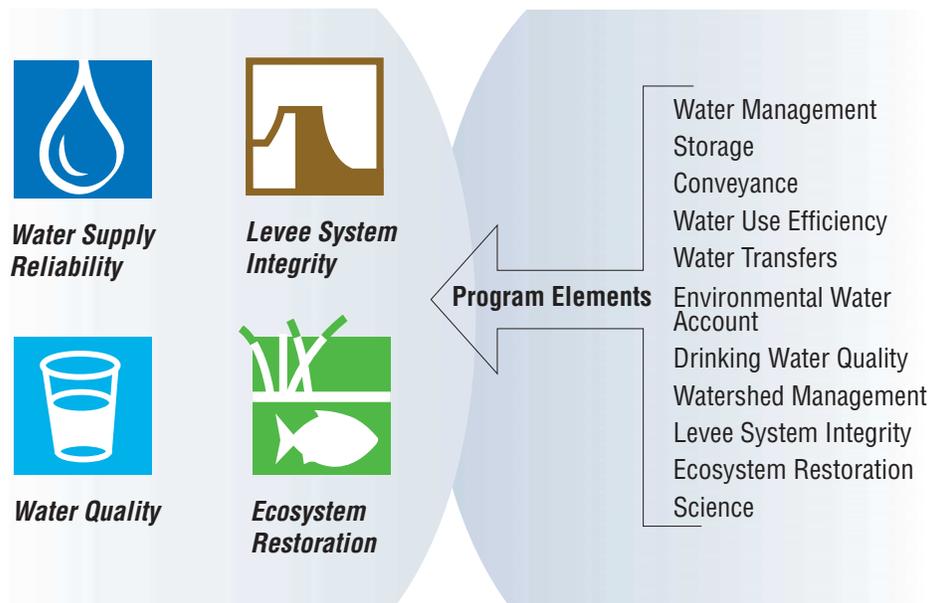
PLAN FOR RESOLVING THE BAY-DELTA CONFLICT

Launched in the summer of 2000 with broad public support, the CALFED Bay-Delta Program Record of Decision (Bay-Delta Plan) sets forth a 30-year plan to address ecosystem health and water supply reliability problems in the Bay-Delta. The document proposed actions and investments over the first seven years (Stage 1) to meet Program goals.

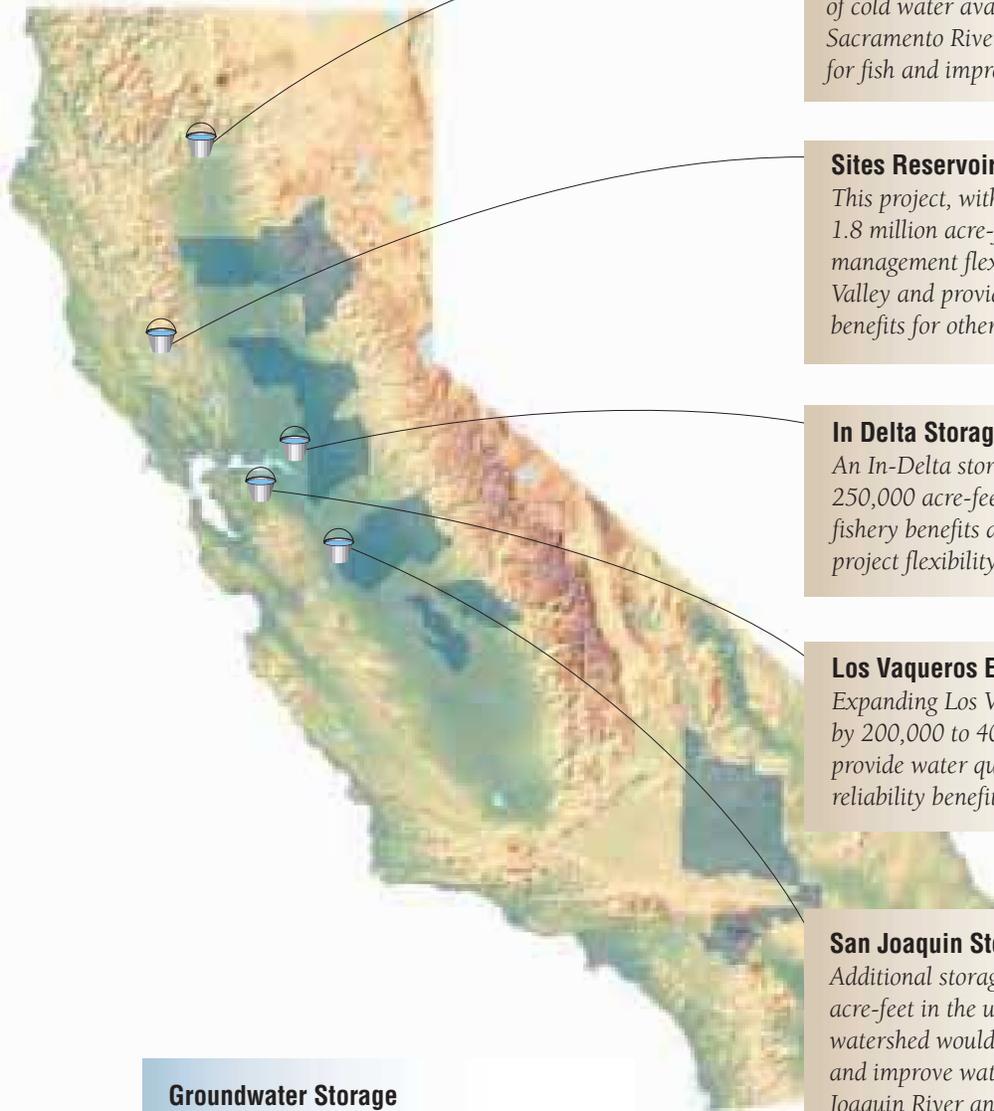
A BALANCED APPROACH

The Bay-Delta Plan is a balanced, comprehensive approach to reduce conflicts over limited water supplies and to address the Program's four objectives through 11 major program elements.

RESOURCE MANAGEMENT OBJECTIVES



POTENTIAL WATER STORAGE PROJECTS



Shasta Enlargement

An increase in Shasta storage capacity by 300,000 acre-feet would increase the pool of cold water available to maintain lower Sacramento River temperatures for fish and improve water supply.

Sites Reservoir

This project, with a capacity of about 1.8 million acre-feet, would enhance water management flexibility in the Sacramento Valley and provide storage and operational benefits for other CALFED programs.

In Delta Storage

An In-Delta storage facility of 250,000 acre-feet would provide both fishery benefits and enhanced water project flexibility.

Los Vaqueros Enlargement

Expanding Los Vaqueros reservoir by 200,000 to 400,000 acre-feet would provide water quality and water supply reliability benefits to Bay Area water users.

San Joaquin Storage

Additional storage of 250,000 to 700,000 acre-feet in the upper San Joaquin River watershed would be designed to help restore and improve water quality for the San Joaquin River and facilitate conjunctive water management and water exchanges that improve the quality of water deliveries to urban communities.

Groundwater Storage

Groundwater Memorandums of Agreement

- 16 agreements with counties and local water management agencies

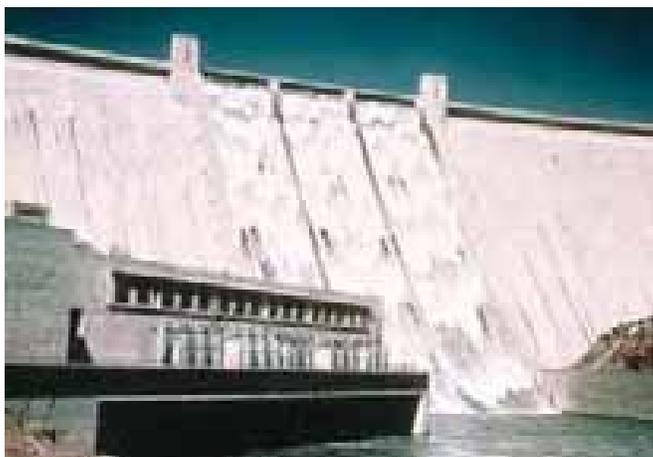
Groundwater Grants and Loans

- \$107.6 million for 39 projects (Prop. 13, Chapter 8 Article 4 and Chapter 9 Article 2, and AB 303)

The program encompasses an array of projects and approaches to improve water supply reliability and ensure efficient use of the resource. Working with local and regional agencies, the program has identified actions that could increase California water supplies over the next 30 years. Highlights include:

BAY-DELTA PLAN

- **Surface Storage:** Expand surface storage capacity at existing reservoirs and strategically located off-stream sites by 3.5 million acre-feet: North-of-the-Delta off-stream storage, Shasta enlargement, Los Vaqueros expansion, In-Delta storage and additional storage in the Upper San Joaquin (Friant), or a functional equivalent.
- **Groundwater:** Develop locally managed and controlled groundwater and conjunctive-use projects in the Sacramento and San Joaquin valleys with a total of 500,000 to 1 million acre-feet of additional storage capacity.
- **Conveyance:** Increase permitted pumping capacity at State Water Project (SWP) facilities from current limit of 6,680 cubic feet per second (cfs) to 8,500 cfs and eventually to 10,300 cfs. Design and construct new fish screens at Clifton Court Forebay and Tracy pumping plant, and dredge and install permanent operable barriers to improve water levels and water quality in the South Delta.
- **Water Use Efficiency:** Implement an aggressive water-use efficiency program to make the best use of existing water supplies, including: definition of appropriate water measurement; certification of urban best management practices (BMPs) and refinement of quantifiable objectives for agricultural water use efficiency.
- **Water Transfers:** Promote an effective water transfer market that protects water rights, the environment and local economies.



Shasta Dam

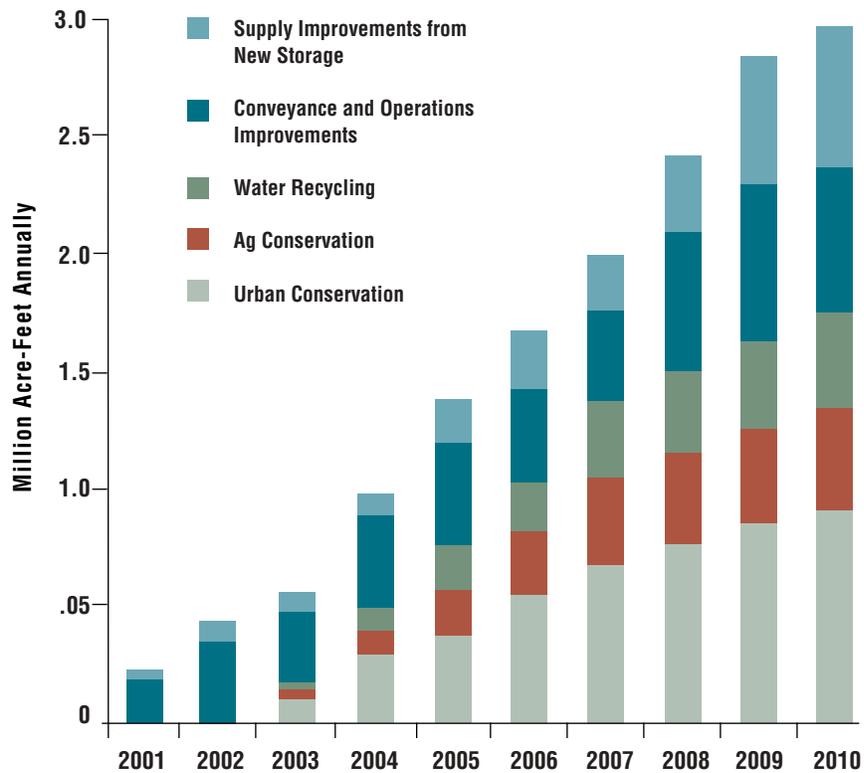
WATER SUPPLY RELIABILITY

2002 PRIMARY ACCOMPLISHMENTS

STORAGE

- Awarded 39 groundwater storage grants and loans totaling more than \$107 million under Proposition 13 and AB 303.
- Filed North-of-Delta Off-Stream Storage Notice of Preparation/Notice of Intent (NOP/NOI) and completed public scoping.
- Completed In-Delta Storage Draft Summary Report including analysis of alternatives.
- Completed Draft Concept Report for Los Vaqueros expansion.

POTENTIAL IMPROVEMENTS IN WATER SUPPLY RELIABILITY



POTENTIAL IMPROVEMENTS IN WATER SUPPLY RELIABILITY**WATER MANAGEMENT ACTION**

Water Use Efficiency (first 7 years)	Acre-Feet/year
Urban Conservation	520,000 to 690,000
Agricultural Conservation	260,000 to 350,000
Water Reclamation	255,000 to 310,000
Potential Increase from Water Use Efficiency	Up to 1.4 Million Acre-Feet/year
Conveyance and Operational Improvements	Up to 600,000 Acre-Feet/year
Includes: SWP Pumping of (b)(2) Upstream Releases, Export/Inflow Ratio Flexibility, Increased Banks Pumping Plant Capability, Joint Point of Diversion and San Luis Bypass	
Potential Increase from New Storage	600,000 to 900,000 Acre-Feet/year*
Total Potential Increase in Water Supply Reliability from Water Use Efficiency, Conveyance and Operations Improvements and New Storage	Up to 2.9 Million Acre-Feet/year

POTENTIAL NEW STORAGE CAPACITY*

CALFED Storage Projects	Acre-Feet
Enlarge Shasta Lake	300,000
Enlarge Los Vaqueros Reservoir	200,000 to 400,000
In-Delta Storage	250,000
Sites Reservoir	1,800,000
Upper San Joaquin River Storage	250,000 to 700,000
Groundwater Storage and Conjunctive Use	500,000 to 1,000,000
Total Potential New Storage	4.5 Million Acre-Feet

***Storage Capacity versus Water Supply Reliability**

Total increase in storage capacity is not a direct measure of increased water supply reliability. The estimate of increased water supply reliability provided here is the quantity of water expected to be available annually from new storage during extended dry periods.

New storage capacity would also be used to provide improved flows and reduced effects of diversions for fish, improved water quality, and improved conjunctive management of surface and groundwater.

CONVEYANCE

- Continued work on South Delta Improvements Program.
- Completed Clean Water Act Alternatives [404(b)(1)] analysis and continued work on EIR/EIS for permanent barriers.
- Continued EIR/EIS for North Delta Flood Protection and Ecosystem Restoration, and developed a North Delta regional hydraulic model.
- Conducted research and monitoring related to fish movement and water quality at the Delta Cross Channel to support through-Delta conveyance.

WATER TRANSFERS

- Assisted in the transfer of water: 600,000 acre-feet in 2001, a dry year, and 300,000 acre-feet in 2002, a dry/below normal year.
- Continued operation of ON TAP website and developed a Department of Water Resources (DWR) water transfers web page.
- In coordination with the Bay-Delta Modeling Forum, developed and implemented an approach for real-time transfer carriage water requirements.



<http://ontap.ca.gov>

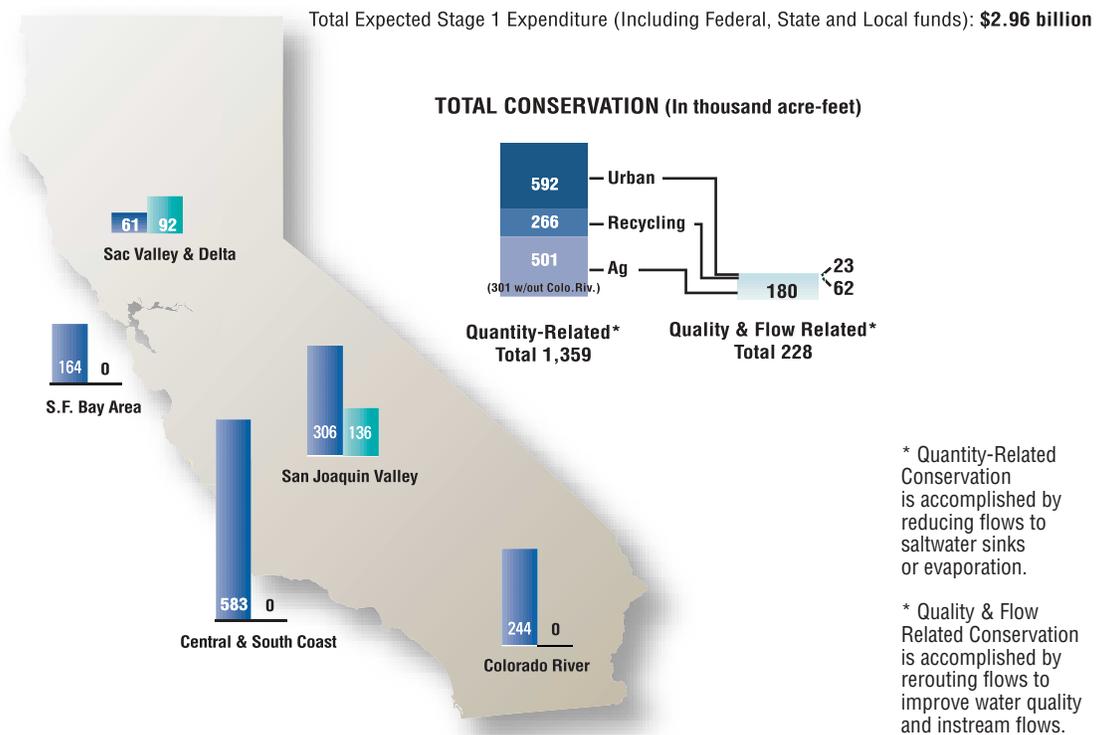


The California Aqueduct

WATER USE EFFICIENCY

- Awarded eight agricultural water conservation grants, valued at more than \$1.3 million.
- Awarded 29 urban water conservation grants totalling more than \$9 million. These projects are projected to conserve more than 100,000 acre feet of water.
- Awarded six recycling loans valued at \$72 million and 24 recycling grants for almost \$70 million. Local cost shares for these projects cover the remaining 75% of the project costs, making the total commitment in recycling more than \$500 million in Year 2. These recycling projects will provide an increase of 36,000 acre feet of recycled water each year.
- Prepared a draft Urban Water Conservation Certification framework that will continue development in Year 3. Made progress on defining appropriate measurement of agricultural and urban water use.

EXPECTED STAGE 1 WATER CONSERVATION BY TYPE AND REGION



The Bay-Delta Water Quality Program is focused on improving water quality from source to tap for 22 million Californians whose drinking water supplies come from the Bay-Delta watershed.

BAY-DELTA PLAN

- Develop and implement source improvement and drainage management programs.
- Invest in treatment technology projects.
- Develop Bay Area Blending and Exchange Program (also known as the Bay Area Water Quality and Supply Reliability Program) to enable Bay Area water districts to cooperatively address water quality and reliability issues.
- Facilitate efforts to develop alternative sources of water supply for Southern California.
- Improve dissolved oxygen conditions in the San Joaquin River near Stockton.

2002 PRIMARY ACCOMPLISHMENTS

- Awarded 28 water quality grants worth \$15 million for projects such as source water protection and assessment, agricultural pollution, and treatment technology.
- Began a strategic planning process through Drinking Water Subcommittee of the Bay-Delta Public Advisory Committee.
- Continued work on previously funded projects, such as the Bay Area Water Quality and Water Supply Reliability Project and studies regarding contaminant sources and loads.



Water quality grants will improve supplies from source to tap for 22 million Californians.



PROJECT HIGHLIGHTS

Sacramento

Urban Areas

- Steelhead Creek Water Quality Assessment

Delta

Science and Source Assessment

- Modeling of Delta Hydrodynamics
- Organic Carbon Dating
- Microbial Contamination in Delta
- Ion Exchange for Organic Carbon Removal

Delta Agricultural Drainage

- Rock Slough and Old River Drainage Management

Pollution Prevention and Source Control

- North Bay Aqueduct Alternative Intake Study
- Chemical Dosing for DOC Reduction (Cost split with ERP)

Agriculture

- North Bay Aqueduct Watershed BMPs
- Reducing Non-Point Total Organic Carbon and Nitrogen Exports From Rice Fields

Marinas and Recreational Boating

- The Water You Play In Is The Water You Drink

Bay

Treatment Technology

- Bromate Control

Southern California

Marinas and Recreational Boating

- Lake Perris Pollution

Urban Areas

- Assessing Contamination in Castaic Lake

Treatment Technology

- Integrating Ultraviolet Light

San Joaquin

Agriculture

- San Luis Drain Algae and TOC Control Project
- Orestimba Creek Watershed-Agriculture Water Quality Pilot Project
- Control of Agricultural Runoff
- Contaminants from Animal Feeding Operations
- Dairy Nutrient Management Program
- Agricultural Drainage Treatment: Intermediate-Scale Experiments

Watersheds

- County of Tuolumne Water Quality Plan
- Salt and Martinez Creeks Watershed Assessments
- Little Panoche and Cantua Creeks Watershed Assessment

Science and Source Assessment

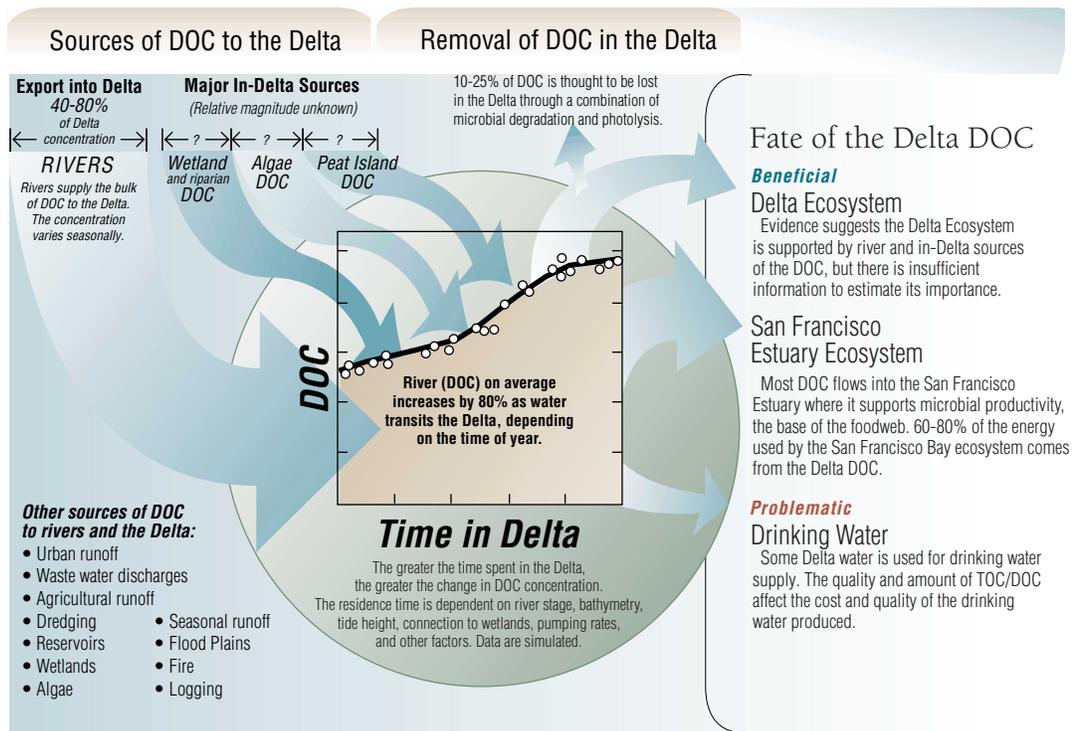
- Vernalis Water Quality Monitoring Station
- Disinfection Byproduct-Forming Material in the State Water Project
- Real-Time Monitoring at San Luis National Wildlife Refuge

San Joaquin Valley Drainage

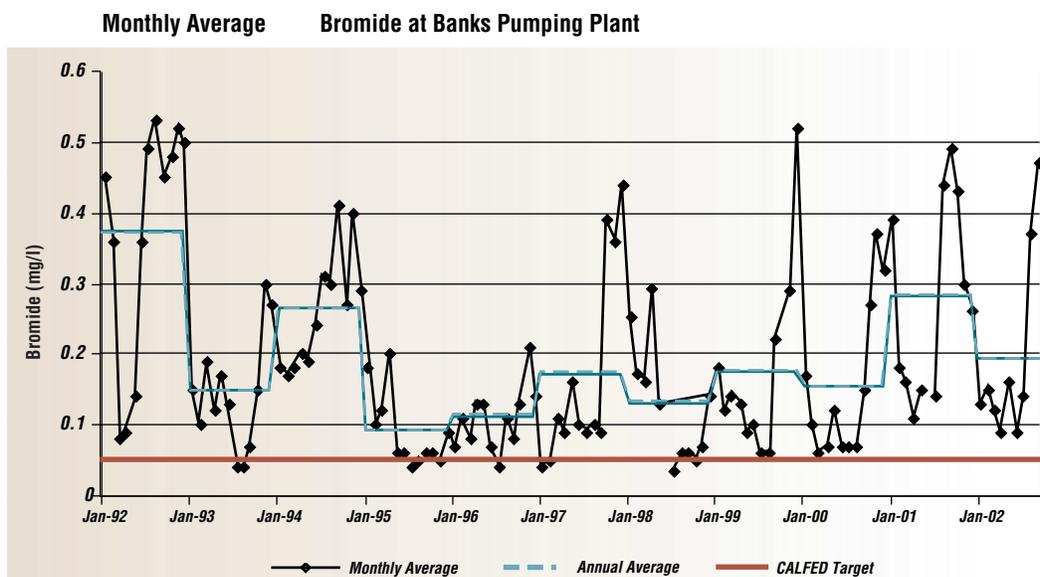
- Drainage recycling using membrane technology (cost split with ERP)

Total Organic Carbon (TOC) is an indicator of the quality of Delta water as a source of drinking water. In the Delta, total organic carbon (TOC) is composed primarily of dissolved organic carbon (DOC) plus a smaller amount of particulate organic carbon. Source water with high DOC and bromide concentrations requires additional treatment steps, is more costly to treat, and may lead to increased health risk from exposure to disinfection byproducts. This diagram is a conceptual model for organic carbon in the Delta. Although this diagram was prepared for DOC, the sources and fate of TOC are nearly identical.

CONCEPTUAL MODEL: SOURCE AND FATE OF DISSOLVED ORGANIC CARBON IN DELTA WATER



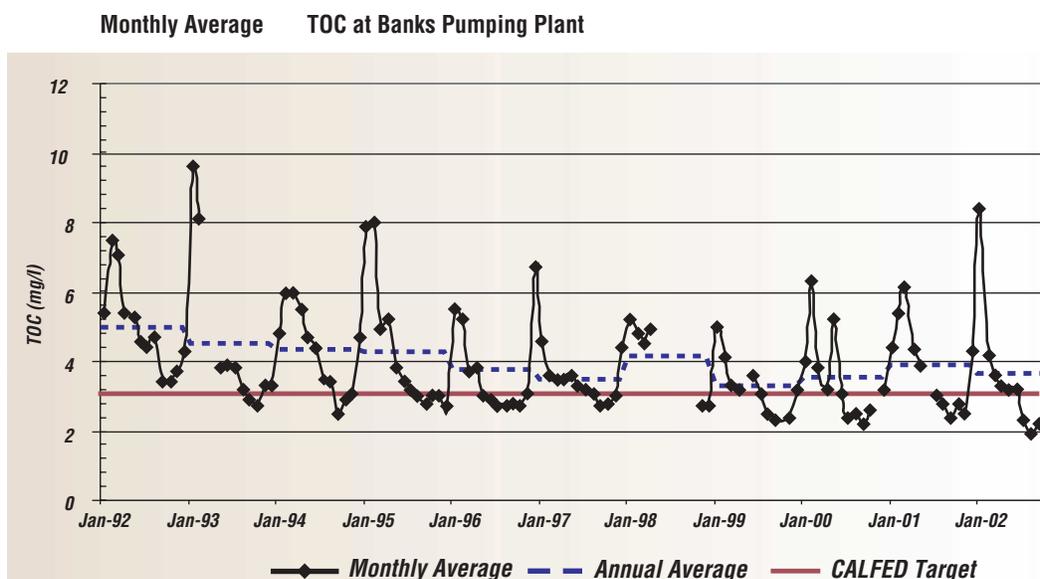
DRINKING WATER PERFORMANCE MEASURE



Data source: Department of Water Resources

This data shows that the bromide concentration has varied widely over the past 10 years, but is nearly always above the CALFED target. Since nearly all bromide in the Delta comes from sea water, concentrations are lowest when freshwater flows are the highest. Harvey O. Banks Delta Pumping Plant is the point where the majority of the water destined for municipal uses leaves the Delta.

DRINKING WATER PERFORMANCE MEASURE



Data source: Department of Water Resources

The 10 years of data presented here clearly show the consistent annual cycle of TOC in the Delta. TOC typically meets the 3 mg/L CALFED target in late summer and fall and spikes well above this level in winter and spring during periods of high runoff.

PROJECT HIGHLIGHTS

Reduce Levee Failures

- Improved levees on over 50 Delta islands while investing funding in special projects like ecosystem and levee restoration for water quality and flood protection.
- Continued Delta levee raising, widening, and improvements to withstand extreme high water conditions and reduce levee failures, *examples: Bradford Island, Twitchell/Webb Tract*

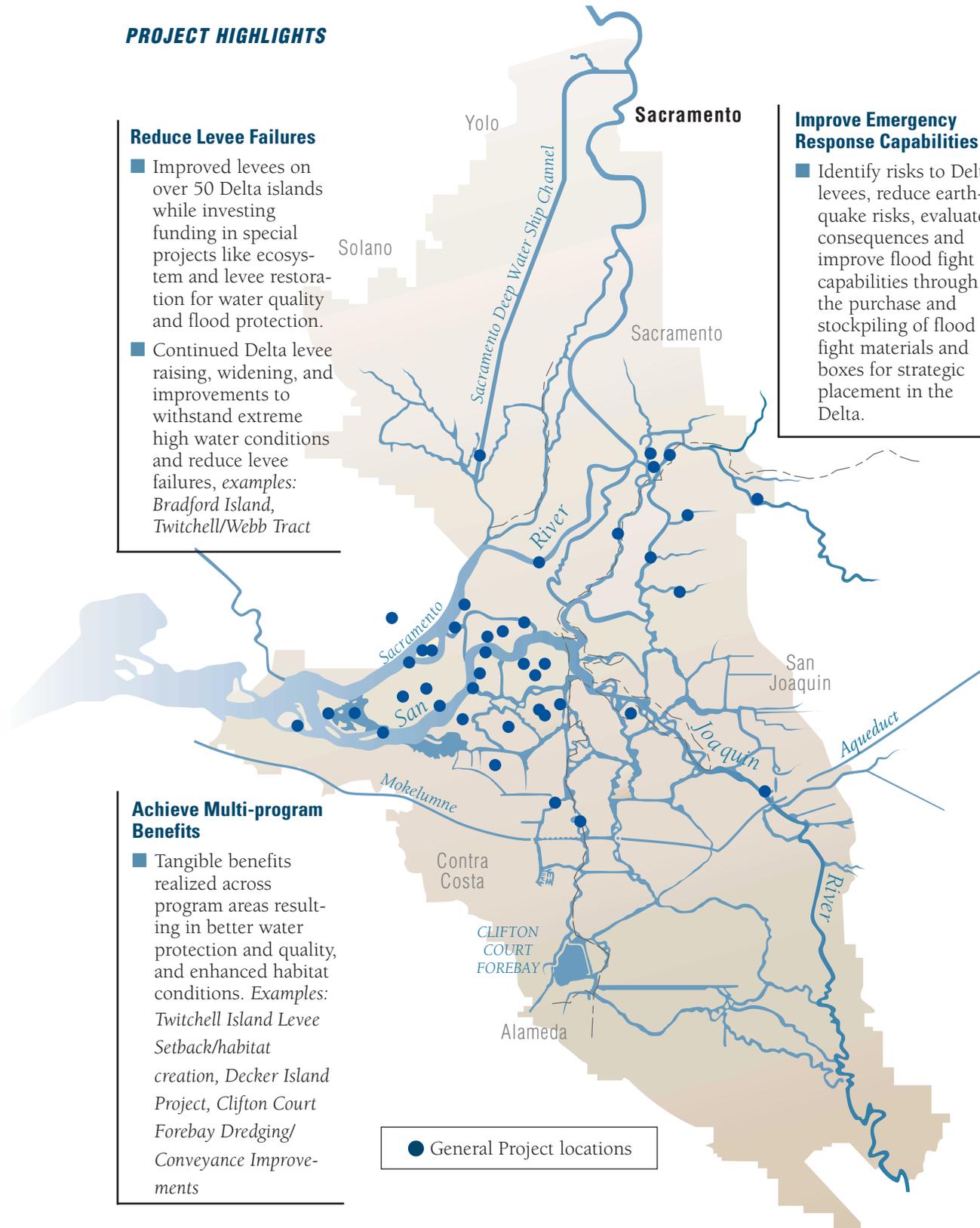
Improve Emergency Response Capabilities

- Identify risks to Delta levees, reduce earthquake risks, evaluate consequences and improve flood fight capabilities through the purchase and stockpiling of flood fight materials and boxes for strategic placement in the Delta.

Achieve Multi-program Benefits

- Tangible benefits realized across program areas resulting in better water protection and quality, and enhanced habitat conditions. *Examples: Twitchell Island Levee Setback/habitat creation, Decker Island Project, Clifton Court Forebay Dredging/Conveyance Improvements*

● General Project locations



LEVEES

Bay-Delta levees protect water supplies and water quality needed for the environment, agriculture and urban users by reducing the threat of levee failure and seawater intrusion. Additionally, Delta levees protect a major interstate (I-5), roadways, cities, towns, agricultural lands and environmental and aquatic habitat.



Twitchell Island levee setback

BAY-DELTA PLAN

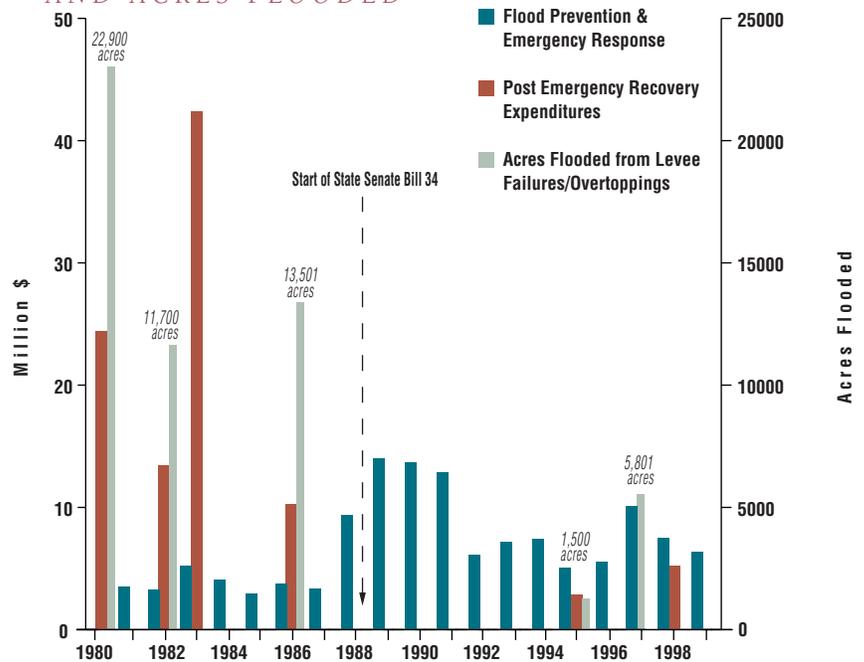
- Provide funding for local reclamation districts to reconstruct Delta levees to a base level of protection (PL 84-99).
- Increase levee stability on levees of particular importance to the Delta system for water supply and quality.
- Develop Best Management Practices for beneficial reuse of dredged material.
- Refine Delta Emergency Management Plan and development of a Delta Risk Assessment.
- Develop a management strategy to identify risks to Delta levees, evaluate consequences and recommend actions.

2002 ACCOMPLISHMENTS

- 62 agencies submitted \$31.5 million in requests to maintain and repair almost 700 miles of levees - the state provided \$4.5 million towards this effort.
- Completed levee stability enhancement projects on 5.7 miles of Delta levees.
- Continued work on 47 levee stability and habitat projects.
- Opened Decker Island aquatic habitat enhancement project to tidal flow.
- Improved emergency response capabilities in the Delta through improved coordination and acquisition of flood fight materials.

DELTA LEVEE FLOOD PREVENTION COSTS

POST DISASTER ASSISTANCE COSTS AND ACRES FLOODED



This indicator measures the number of acres in the Delta flooded each year. Flooding can cause significant damage, especially to agriculture, but to other land uses as well. Levees are also important for the control of salinity at key points in the Delta, and flooding at certain locations can thus threaten fresh water supplies crucial to a wide range of agricultural, urban, and ecosystem uses.

ECOSYSTEM RESTORATION & WATERSHED MANAGEMENT

PROJECT HIGHLIGHTS

Delta & East Side Tributaries

Ecosystem Restoration

- Upper Cosumnes River Watershed Conservation Project
- Restoration of eastern Delta Floodplain Habitats on Grizzly Slough in the Cosumnes River Watershed
- Staten Island Wildlife-Friendly Farming Demonstration
- Restoration and Monitoring of Riparian Habitat Corridors Along The Lower Mokelumne River
- McCormack-Williamson Tract Restoration: Wildlife-Friendly Levee Management
- Evaluation of Mercury Transformations and Trophic Transfer in the San Francisco Bay/Delta

Watersheds

- Plymouth Area Vineyard Erosion Control
- Upper Mokelumne River Watershed Assessment

Bay

Ecosystem Restoration

- Suisun Marsh Land Acquisition and Tidal Marsh Restoration
- Sustainable Restoration Technologies for Bay/Delta Tidal Marsh and Riparian Habitat
- Bahia Acquisition and Tidal Wetland Restoration
- Selenium Effects on health and Reproduction of White Sturgeon in the Sacramento-San Joaquin Estuary

Watersheds

- Assessment for Wildcat/San Pablo Creeks
- Manage & Restore the Lower Rheem Creek Watershed
- Oakland Relief Watershed Protection Program

San Joaquin

Ecosystem Restoration

- Knights Ferry Gravel Replacement Project, Phase 2
- Patterson Irrigation District Fish Screen Design and Environmental Review
- Lower San Joaquin River Water Temperature Modeling and Analysis
- Tuolumne River/Big Bend Project
- Full-Scale Demonstration of Agricultural Drainage-Water Recycling Process Using Membrane Technology

Watersheds

- Finegold Watershed Planning
- Upper Merced River Watershed Management Plan
- Stewards of the Arroyo Pasajero CRMP
- Panoche Creek Stabilization Project

Sacramento

Ecosystem Restoration

- Lower Butte Creek Project: Sutter Bypass - Willow Slough Weir Fish Passage Project - Preliminary Engineering Investigation
- Meridian Farms Water Company & Sutter Mutual Water Company-Tisdale Positive Barrier Fish Screen Pumping Plant
- Riparian Restoration Planning and Feasibility Study for the Riparian Sanctuary, Llano Seco Unit
- Comprehensive Assessment of Genetic Population Structure and Diversity for Central Valley Chinook Salmon
- Narrow 2 Powerplant Flow Bypass System
- Yuba Goldfields Fish Barrier Replacement Project

Watersheds

- Upper Spanish Creek, Bear Creek, Clear Creek, and Tehama West Watershed Assessment
- Yuba River Water Quality Monitoring Project: Phase II
- Deer Creek, Upper Trinity, Cottonwood Creek, Upper Pit River, South Yuba, and Stony Creek Watershed Management Programs
- Deer Creek Watershed Erosion & Sediment Control Project: Phase II
- Lower Clear Creek Spawning Gravel Injections
- Water Quality Improvement in Cow Creek Watershed
- Abandoned Mine Reclamation & Restoration
- Glenn County Surface Water Stewardship
- Colfax Community Watershed & Fire Safe Ecosystem Project

ECOSYSTEM RESTORATION AND WATERSHED MANAGEMENT

The Ecosystem Restoration Program is improving the ecological health of the Bay-Delta watershed through restoring and protecting habitats, ecosystem functions, and native species. CALFED's Watershed program offers the funding, coordination and technical assistance to support local watershed activities.

BAY-DELTA PLAN

- Annual grant program to fund local projects in habitat restoration, fish passage, invasive species management and environmental water quality.
- Habitat restoration in the Delta and its tributary watersheds.
- Stream flow augmentation in upstream areas through voluntary water purchases of up to 100,000 acre-feet annually for native fish.
- Fish passage improvements through modification or removal of dams, improved bypasses, and ladders.
- Integrate flood management and ecosystem restoration.
- Build local capacity to assess and effectively manage watersheds that affect the Bay-Delta system; develop watershed assessments and plans; implement specific watershed conservation, maintenance and restoration actions.
- Manage an Environmental Water Account to provide benefits to fish as well as water supply reliability to farms and cities.



Merced River floodplain and channel restoration to improve ecosystem function

2002 ACCOMPLISHMENTS

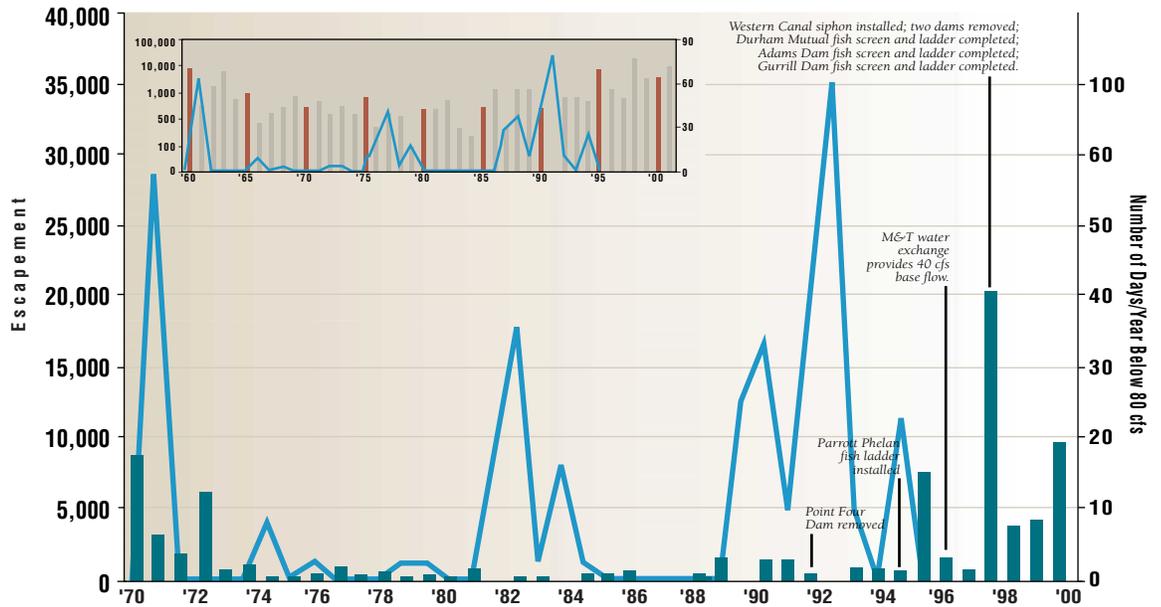
ECOSYSTEM RESTORATION

- Conducted a scientifically rigorous annual grant program and awarded funding for 59 ecosystem restoration projects totaling \$63 million.
- Provided fisheries protection and water supply reliability commitments to water users through the Environmental Water Account; acquired 231,000 acre-feet of water, plus 84,000 acre-feet from the prior year, for the EWA to offset water supply reductions to farms and cities as a result of fish protection measures. About 248,000 acre-feet of water was used in 2002 for EWA actions.
- Completed the ERP Draft Stage 1 Implementation Plan and funded \$6.3 million for 12 planning projects based on the Plan.
- Continued work on many ongoing activities including the Environmental Water Program, Yuba River Studies Program, Stockton Dissolved Oxygen Directed Action.

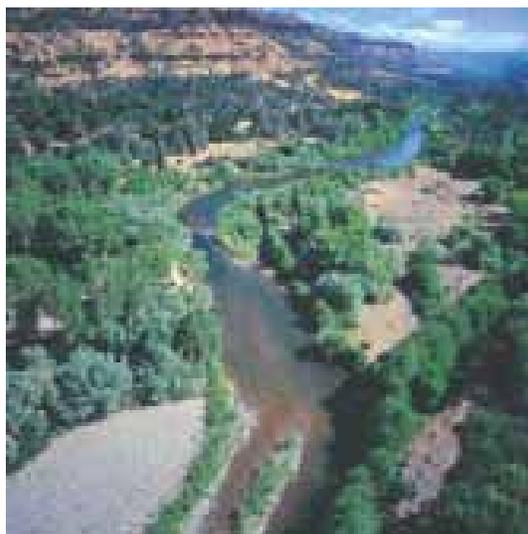
ECOSYSTEM RESTORATION & WATERSHED MANAGEMENT

ECOSYSTEM RESTORATION PERFORMANCE MEASURE

Spring Run Escapement for Butte Creek



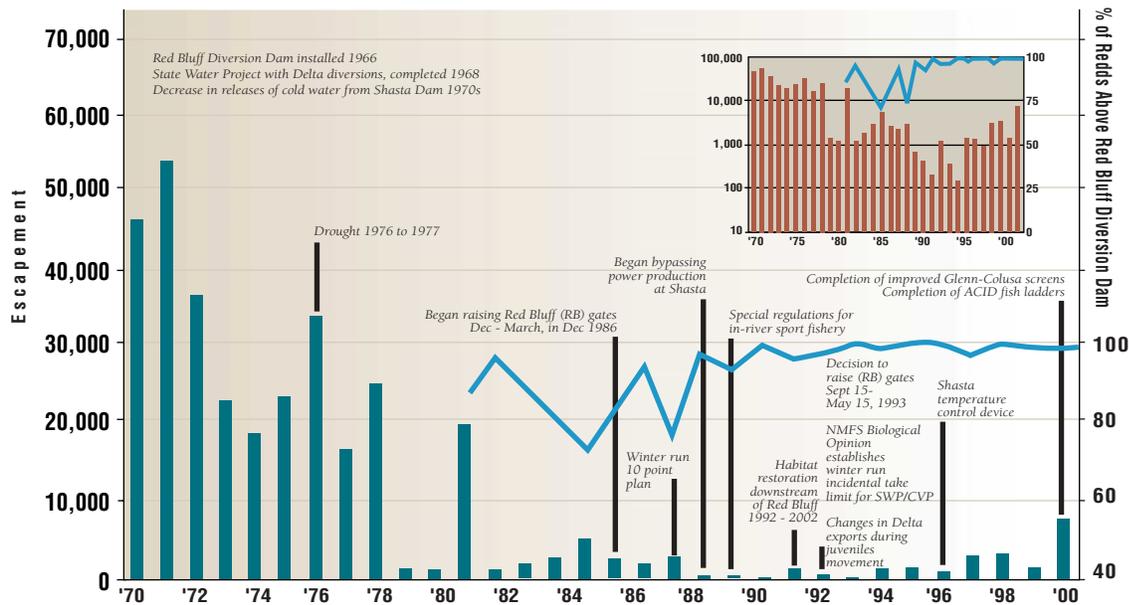
This data reports the escapement (the number of adult salmon escaping mortality and successfully returning each year to spawn) of adult spring-run Chinook salmon, a candidate species for listing under the Endangered Species Act, on Butte Creek. The Butte Creek population is one of the few remaining self-sustaining populations of spring-run Chinook salmon in the Central Valley. The spring-run in Butte Creek has been affected by significant impediments to upstream passage of adults stemming from dams, inoperative fish ladders, and the dewatering of portions of the creek as a result of water diversions. Since 1995, restoration actions have included dam removal, installation and/or repair of fish ladders and fish screens, and improvements to base flow.



Butte Creek

ECOSYSTEM RESTORATION PERFORMANCE MEASURE

Sacramento River Winter Run



This performance measure reports the escapement (the number of adult salmon escaping mortality and successfully returning each year to spawn) of adult winter-run Chinook salmon, an endangered species under the Endangered Species Act, on the Sacramento River. The Sacramento River population is the only remaining population of winter-run Chinook salmon in the Central Valley

2002 Accomplishments continued

WATERSHED MANAGEMENT

- Funded 129 watershed and environmental education projects.
- Initiated work on 51 projects funded in the first two years.
- Initiated a successful Year 2 grant funding process.
- Provided funding to support 17 local watershed coordinators.
- Sponsored the first Watershed Partnership seminar to be held in California.
- Held regional watershed meetings in Modesto, Los Angeles and Cache Creek in conjunction with the Bay-Delta Public Advisory Committee Watershed subcommittee.

SCIENCE

CALFED agencies are incorporating the best-available scientific knowledge into all CALFED activities and decisions. The Science Program is focusing on large-scale issues that cut across multiple program objectives and regions. Within each program area there are also specific science and project technical needs. Activities include:

BAY-DELTA PLAN

- Peer review of specific study designs, proposals submitted through grant solicitation, and final technical products.
- Balanced and unbiased descriptions of the state of science relative to a specific issue.
- Identification of **critical unknowns** needed to assess program performance or define types of activities needed to reach program goals.
- Refinement of predictive models and establishment of performance measures to inform and guide adaptive management.
- Specific data analyses and monitoring needed to support performance assessment.

CRITICAL UNKNOWN S

Strategic information gaps that, if filled, will help each program:

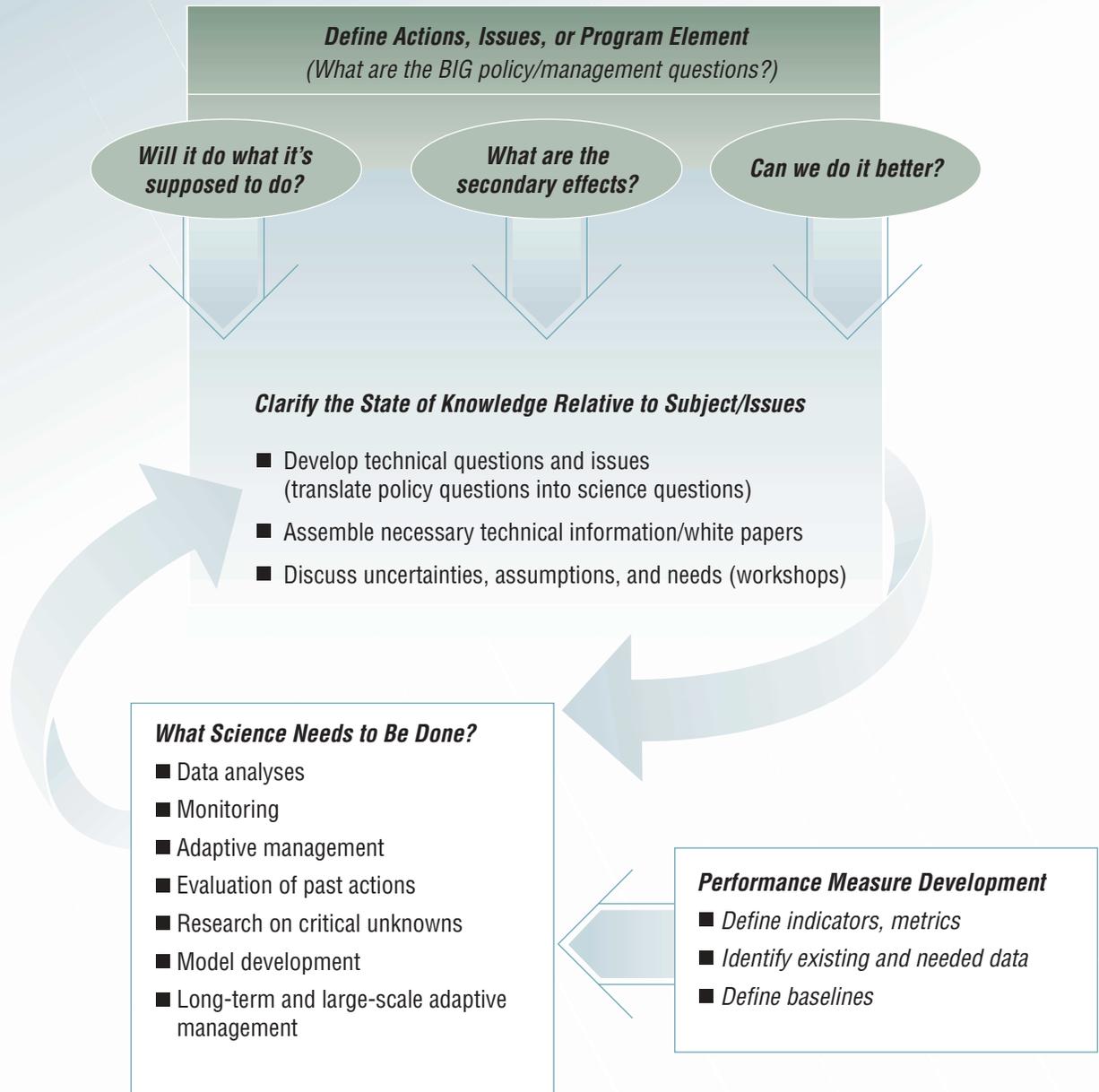
- *evaluate effectiveness of actions*
- *increase accuracy rate*
- *design & use more effective actions*

2002 PRIMARY ACCOMPLISHMENTS

- Assisted programs with technical and scientific peer review.
- Facilitated the development of performance measures for each of the four program objectives.
- Conducted five science workshops on salmon, delta smelt, data management, and Suisun Marsh modeling, and convened a public workshop on Water Operations for CALFED leaders and stakeholders.
- Convened EWA panel for the annual EWA science review.
- Co-sponsored the State of the Estuary Conference and planned the second CALFED Science Conference scheduled for January 2003.
- Initiated a new online technical journal for research related to water and ecosystem management scheduled to debut in early 2003.
- Continued development and support for the CALFED Science Consortium, a collaborative effort to link agency, university, and stakeholder scientific activities.
- Conducted Delta Cross Channel Program Review, and initiated a scientific review of the In-Delta Storage Project.

SCIENCE INTEGRATION

Adaptive Approach for Integrating Science Across Issues and Programs



The CALFED Bay-Delta Program has made significant progress in its second year of implementation. State and federal CALFED agencies allocated more than \$340 million, primarily from state general obligation bond funds, for local projects in areas such as groundwater management, water-use efficiency, water recycling and ecosystem restoration.

Several key programs already are seeing measurable results, while others are making incremental advances due to funding, staffing and contracting constraints.

The following is a brief description of the status of each program element.

STORAGE

Efforts to expand groundwater storage remain ahead of schedule, with more than \$107 million in grants and loans awarded to local agencies in 2002 for conjunctive water management projects. CALFED agencies completed the public scoping process for off-stream, North-of-Delta storage, and a draft summary report has been completed analyzing alternatives for In-Delta Storage. A draft concept report was completed in 2002 for potential expansion of Los Vaqueros Reservoir, and a preliminary report was released identifying potential sites for adding storage in the Upper San Joaquin system. Lack of funding or federal authority to participate in feasibility studies is pushing back the schedules for all five surface storage projects. The target date for completion of draft environmental documents on several of the projects has been pushed back to the end of 2004.

CONVEYANCE

CALFED agencies completed a draft analysis of the impact of permanent barriers and initiated the public scoping process for increasing periodic pumping to 8,500 cubic feet per second (cfs). The agencies initiated a North Delta hydraulic model as well as feasibility studies for drainage reduction on Veale and Byron tracts. Construction of permanent barriers and increasing pumping to 8,500 cfs are making good progress, but have been delayed one year to 2004. The CALFED agencies and stakeholders are re-evaluating the Program's approach to the Tracy Fish Test Facility and work on screening Clifton Court Forebay based on reduced availability of funds and other related technical issues. Feasibility studies and environmental review for San Luis Low Point are also moving forward, but their schedules have been revised due to expansion of the project's scope. North Delta Flood Protection and Ecosystem Restoration environmental review work has been delayed due to lack of funding and staff.

TRANSFERS

The program is on track and has met all deadlines to date. CALFED agencies assisted in the transfer of 300,000 acre-feet of water in 2002, and developed a memorandum of understanding for a Water Transfers Information Clearinghouse. White papers on transfers and related issues were published. The On Tap web site is operational, although contracting issues have delayed further refinement of the site into Year 3. Development of in-stream water tracking protocols has been pushed back due to delays in the Environmental Water Program.

WATER USE EFFICIENCY

The program continues to move forward with efforts to develop “appropriate measurement” of water use. CALFED agencies completed a draft framework for certifying urban Best Management Practices in 2002, and further refinement is planned for Year 3. More than \$10 million in grants was awarded in 2002 for 37 agricultural and urban water conservation projects. In addition, more than \$140 million in grants and loans was awarded for 30 local water recycling projects that will increase statewide recycling by 36,000 acre-feet per year. Contracting delays have affected awarding of some grants, and a lack of resources for defining performance measures and monitoring local water use efficiency projects is affecting CALFED’s ability to evaluate the overall effectiveness of WUE actions. Grant funding is expected to fall below levels identified in the Bay-Delta Plan in Year 3 and beyond, which could impede progress on WUE goals and other programs linked to accomplishments in the WUE program.



ENVIRONMENTAL WATER ACCOUNT

Through use of the EWA, CALFED agencies provided fisheries protection and water supply reliability commitments to water users in 2002. EWA managers acquired 231,000 acre-feet of water, with 84,000 acre-feet carried over from the previous year. A total of 248,000 acre-feet was used to maintain deliveries to water users during export reductions due to fishery needs. The environmental review process for the EWA was initiated in 2002, and completion is expected in May 2003. The second annual science review of EWA operations was held, and new levels of multi-agency cooperation were reached on regulatory and fish protection issues. CALFED agencies are working to integrate EWA activities into the 2002-2003 water operations plan, and Tier 3 water assets are expected to be operational in 2003.

DRINKING WATER QUALITY

CALFED agencies awarded \$15 million in 2002 for 28 water quality projects in the areas of source water improvements, agricultural pollution control and drainage, and treatment technology. Work continued on several previously funded projects, including the Bay Area Water Quality and Water Supply Reliability Project, and studies regarding contaminant sources and loads. Lack of funding and contracting issues have affected implementation of projects. Delays in assessing options to reduce bromide and total organic carbon impacts could have implications for other areas of the CALFED Program. Passage of Proposition 50 in November 2002 will provide significant funding to the drinking water quality program, which will help implementation efforts in this area.

WATERSHEDS

CALFED agencies provided \$1.25 million to support 17 local watershed coordinators and sponsored the first-ever Watershed Partnership seminar in 2002. CALFED agencies finalized contracts and initiated work on 51 of 84 local watershed projects funded in the first two years of the program. A Year 3 grant funding process was initiated, with completion expected in 2003. Contracting delays have put project implementation behind schedule. Lack of authority for some federal agencies to implement the watershed program has affected staffing, technical assistance, science, education and outreach.

LEVEES

CALFED agencies provided \$4.5 million for levee maintenance and repair in 2002, though requests totaling more than \$31 million were received. Year 2 projects resulted in improvements to 5.7 miles of Delta levees, and work continued on another 47 levee stability and habitat projects. CALFED agencies improved emergency response capabilities in the Delta by enhancing coordination and acquiring flood fight materials. Significant funding reductions have severely delayed all aspects of the Levee Program, including efforts to improve Delta levees to a base level of protection (Public Law 84-99 standard).

ECOSYSTEM RESTORATION

CALFED agencies awarded \$63 million in funding for 59 ecosystem restoration projects in 2002, including 12 planning projects based on the draft Stage 1 Implementation Plan completed in Year 2. Work continued on several ongoing activities, including the Environmental Water Program and the Upper Yuba River Studies Program, but delays are expected in Year 3 due to funding and contracting issues. Lack of funding and problems with contracting have delayed work on preparation of a Delta-wide Ecosystem Restoration Plan, while administrative and staff constraints have delayed development of ecosystem restoration planning activities.

SCIENCE

The Science Program conducted five issue-specific science workshops in 2002 on salmon, Delta smelt, data management, Suisun Marsh modeling and water operations. In addition to providing peer review and technical assistance to other programs, the Science Program continued development of performance measures for each program element and the CALFED Program as a whole. A new online technical journal was launched and several other activities were carried out in support of the CALFED Science Consortium. Science activities also have been constrained by contracting delays.

PROGRAM OVERSIGHT AND IMPLEMENTATION

Key accomplishments in 2002 included development and passage of state legislation providing a permanent governance structure for CALFED. The new Bay-Delta Public Advisory Committee was created, and continued refinements were made to the program-wide tracking system. Lack of state and federal funding has impeded progress on CALFED's water management and finance plan, tribal coordination and environmental justice activities.

YEAR 2 CONCLUSION

During Year 2, CALFED marked progress in every program area, particularly those supported by state bond funds such as groundwater storage, ecosystem restoration and water recycling. CALFED agencies provided technical assistance and more than \$340 million in funding for local projects to improve water quality, restore habitats, expand storage and boost water use efficiency. The Environmental Water Account provided water to protect fish and stabilize water supplies, resulting in no major conflicts over water exports despite a second consecutive dry year. Interim water supply reliability efforts enabled the Central Valley Project and State Water Project to provide a 70% supply to their customers in a dry year.

Funding remains a critical challenge. When actual dollars are compared with budget levels identified in the Bay-Delta Plan, programs such as water quality, levees, agricultural water use efficiency and science have been underfunded. Progress in other key areas, including surface storage studies, conveyance and water use efficiency has been delayed due to funding constraints, lack of federal authority to participate and other factors.

However, establishment of CALFED's new governance structure in early 2003 and funding from the recently approved Proposition 50 will give the Program additional tools to address these funding shortfalls and to maintain balanced implementation.

YEAR 3 AND BEYOND

In Year 3 (fiscal 2002-'03), the state budget includes \$503 million in funding for the CALFED Program, including \$45.9 million in general fund support. Those numbers are expected to decrease, however, as the Legislature acts to reduce spending for all state programs to address a growing budget deficit. The President has proposed spending \$15 million to support CALFED program goals, but final action on appropriations is not expected until early 2003. With the funds made available through the passage of Proposition 50, however, the Program will continue to make significant progress in all program areas, and to maintain its commitment to balanced implementation.



REGIONAL
SUMMARIES

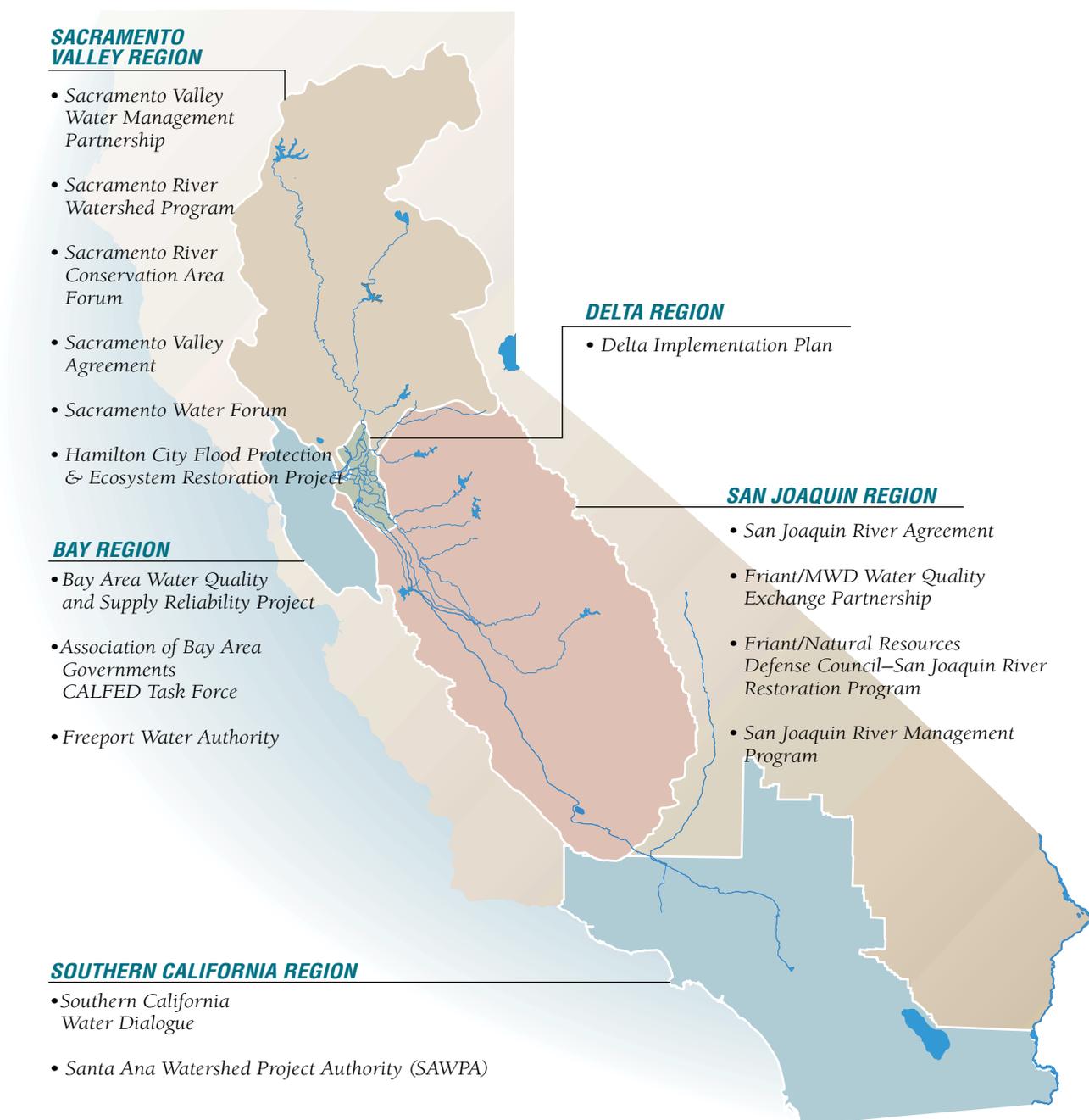
This Regional View provides information on CALFED Program highlights and accomplishments in each region.

The Program's regional approach:

- *Maximizes local involvement*
- *Improves program integration*
- *Addresses local issues & needs*
- *Provides greater access to local officials*

PROMOTE LOCAL PARTNERSHIPS

The CALFED Agencies are investing in collaborative regional projects that provide local benefits while helping achieve overall Program objectives and commitments. Many locally based collaborative efforts exist throughout California to provide ongoing information exchange with the CALFED agencies. In addition, the Watershed Program focuses on the development of local partnerships at the watershed level to support the objectives of the Bay-Delta Plan.



YEARS 1 & 2 Funding | 214 projects for approx. \$228,000,000

The Sacramento Region:

- Provides 60%, or 22 million acre-feet of water flowing into the Delta.
- Provides water supply for much of California from Sacramento Valley runoff.
- Offers major habitat/spawning ground for several threatened and endangered fish species.
- Contributes significantly to the state's farmlands and agriculture output.
- Provides major nesting areas for the Pacific flyway waterfowl.
- Provides a dynamic hydrologic interaction between rivers and aquifers, which benefits fisheries, habitat, and wildlife.

Water Supply Reliability

- Continued progress on Sites Reservoir studies.
- Continued development of Shasta Dam improvement.
- Initiated 25 environmental projects.
- Continued review of options for Red Bluff Diversion Dam.
- Dedicated \$2 million for 9 water conservation efficiency grants.

Ecosystem Restoration and Watersheds

- Funded numerous fish screens, including state-of-the-art fish screen and ladder for Anderson-Cottonwood Irrigation District.
- Funded over 135 ecosystem restoration projects totaling \$200 million, including Hamilton City Flood Prevention & Ecosystem Restoration Project.
- Initiated & supported numerous watershed management and conservation programs in tributary watersheds.
- Funded 42 watershed projects totaling \$11.6 million.

Water Quality

- Funded over \$500,000 to address impacts of urban storm water on water quality.
- Improved water quality of the North Bay Aqueduct through Watershed Management and Treatment Technology Projects.

* For a comprehensive look at CALFED projects log on to <http://calfed.ca.gov>

INNOVATIVE PARTNERSHIPS

Several integrated regional programs emerged from the Sacramento Valley during 2002 that will help meet local water needs for farms, wildlife refuges, cities and local communities and the environment. Many of these programs will help implement the Bay-Delta Plan and will provide benefits to the Bay-Delta and the rest of the state. These exciting and innovative partnerships include the Sacramento Valley Water Management Forum, the Sacramento River Conservation Area Forum, Sacramento Valley Agreement (Phase 8), and the Sacramento River Watershed Program.



Fish ladder at Anderson-Cottonwood Irrigation District

REGIONAL PRIORITIES AND ISSUES

- Reliability and flexibility of regional water supply for agriculture, environmental and urban uses
- Flood protection for agriculture and urban areas through habitat restoration, fish barrier removal, water and hatchery management
- Source water protection, including water rights
- Enhance regional water supply reliability by improving water diversions
- Improve flood management through watershed restoration, levee restoration, and surface storage
- Preserve water quality through source control, mine remediation and water use efficiency for all beneficial uses
- Enhance the Sacramento River recreational fishing and local economic development
- Increase local resource development by local/regional/ CALFED partnerships in all areas of the watershed

STATEWIDE BENEFITS

Many Sacramento Valley actions directly benefit other regions. These include:

- Creating new surface storage, which when used conjunctively with groundwater storage will improve water quality and flexibility for water supply reliability
- Improving diversions with fish-friendly screens and barrier removal and other habitat improvements contributes to greater overall populations of salmon in the Sacramento River and Bay-Delta system, allowing for better water supply reliability throughout the state
- Upper watershed management improves water supply reliability and water quality for the Delta system

YEARS 1 & 2 Funding | 142 projects for approx. \$168,000,000

The Delta Region:

- The Delta is a maze of sloughs and islands supporting an agricultural way of life that is in sharp contrast to the surrounding cities and towns.
- The Delta provides aquatic and terrestrial habitat for over 750 species of plants and animals.
- It is the hub of California's water system, supplying water to cities in the Bay area and Southern California as well as to farms in the San Joaquin Valley.
- The Delta is an important recreation area which supports many different activities.

Ecosystem Restoration and Watersheds

- Funded over 80 ecosystem restoration projects totaling \$115 million.
- Funded 7 watershed projects including flood protection, creek restoration strategies, and stewardship.
- Supported restoration of tidal habitats and scientific analysis of the results.

Water Quality

- Conducted methyl mercury workshop on mercury distributions and contamination patterns.
- Continued efforts to identify and resolve sources of dissolved oxygen in the Stockton Deep Water Ship Channel.
- Conducted further operational studies to address fishery and water quality impacts.
- Funded development of North Bay Aqueduct BMPs and evaluation of North Bay Aqueduct Alternative Intakes.

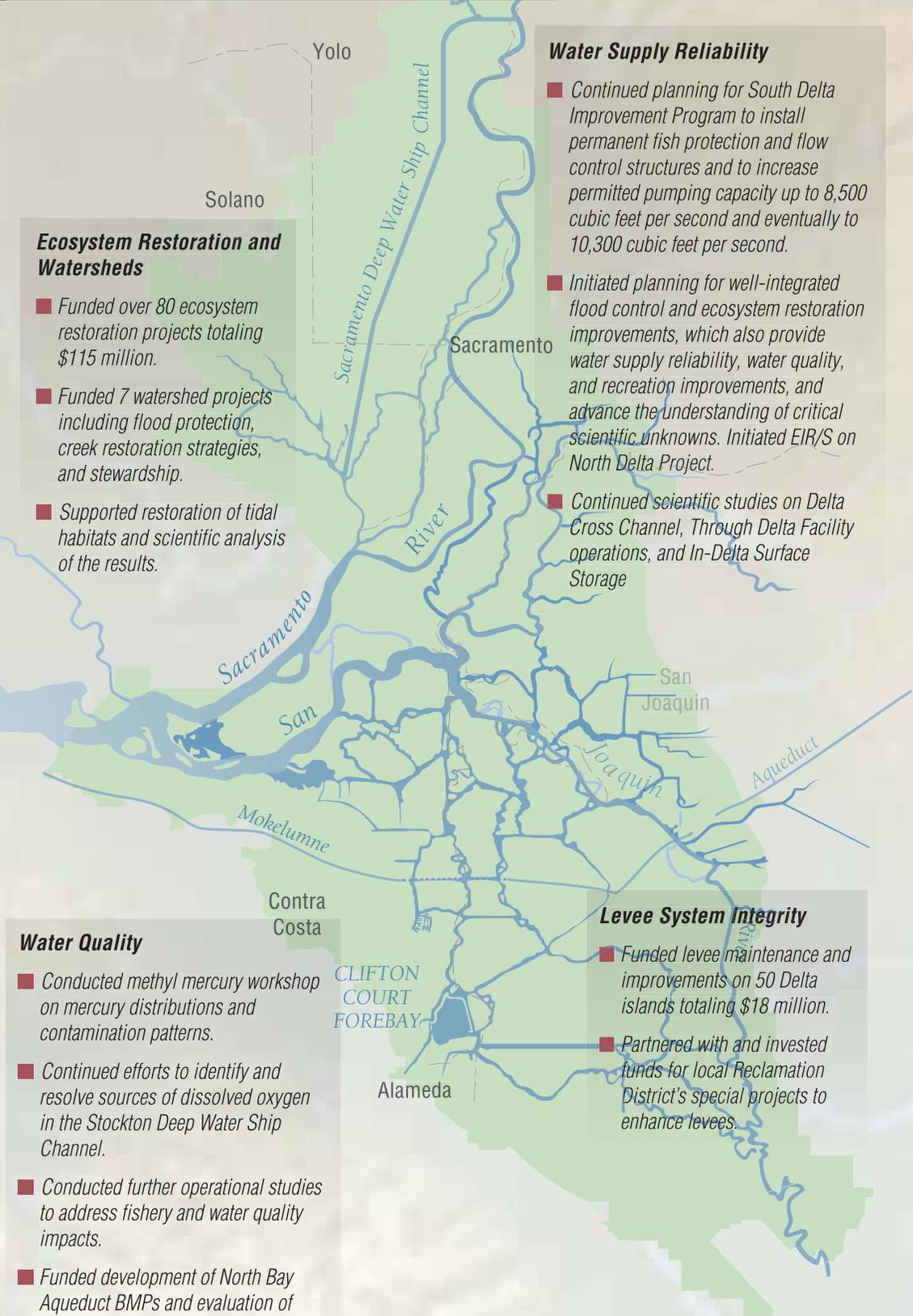
Water Supply Reliability

- Continued planning for South Delta Improvement Program to install permanent fish protection and flow control structures and to increase permitted pumping capacity up to 8,500 cubic feet per second and eventually to 10,300 cubic feet per second.
- Initiated planning for well-integrated flood control and ecosystem restoration improvements, which also provide water supply reliability, water quality, and recreation improvements, and advance the understanding of critical scientific unknowns. Initiated EIR/S on North Delta Project.
- Continued scientific studies on Delta Cross Channel, Through Delta Facility operations, and In-Delta Surface Storage

Levee System Integrity

- Funded levee maintenance and improvements on 50 Delta islands totaling \$18 million.
- Partnered with and invested funds for local Reclamation District's special projects to enhance levees.

* For a comprehensive look at CALFED projects log on to <http://calfed.ca.gov>



INNOVATIVE PARTNERSHIPS

The Delta Protection Commission has been charged with regional planning for the “heart” of the Delta. This includes land uses and resource management for the Delta area. Key land uses are agriculture, wildlife habitat and recreation. The Commission, as a CALFED agency, works closely to keep local stakeholders informed about how the CALFED plan is being implemented and brings their concerns and suggestions forward.

REGIONAL PRIORITIES AND ISSUES

- Preserving a viable agricultural base
- Maintaining strong levees
- Protecting water quality for agricultural and urban water users in and around the Delta
- Protecting and increasing recreational opportunities
- Restore healthy ecosystems to benefit native species



Boating in the Delta near Sacramento



Decker Island ecosystem and levee restoration

STATEWIDE BENEFITS

Many Delta actions directly benefit other regions. These include:

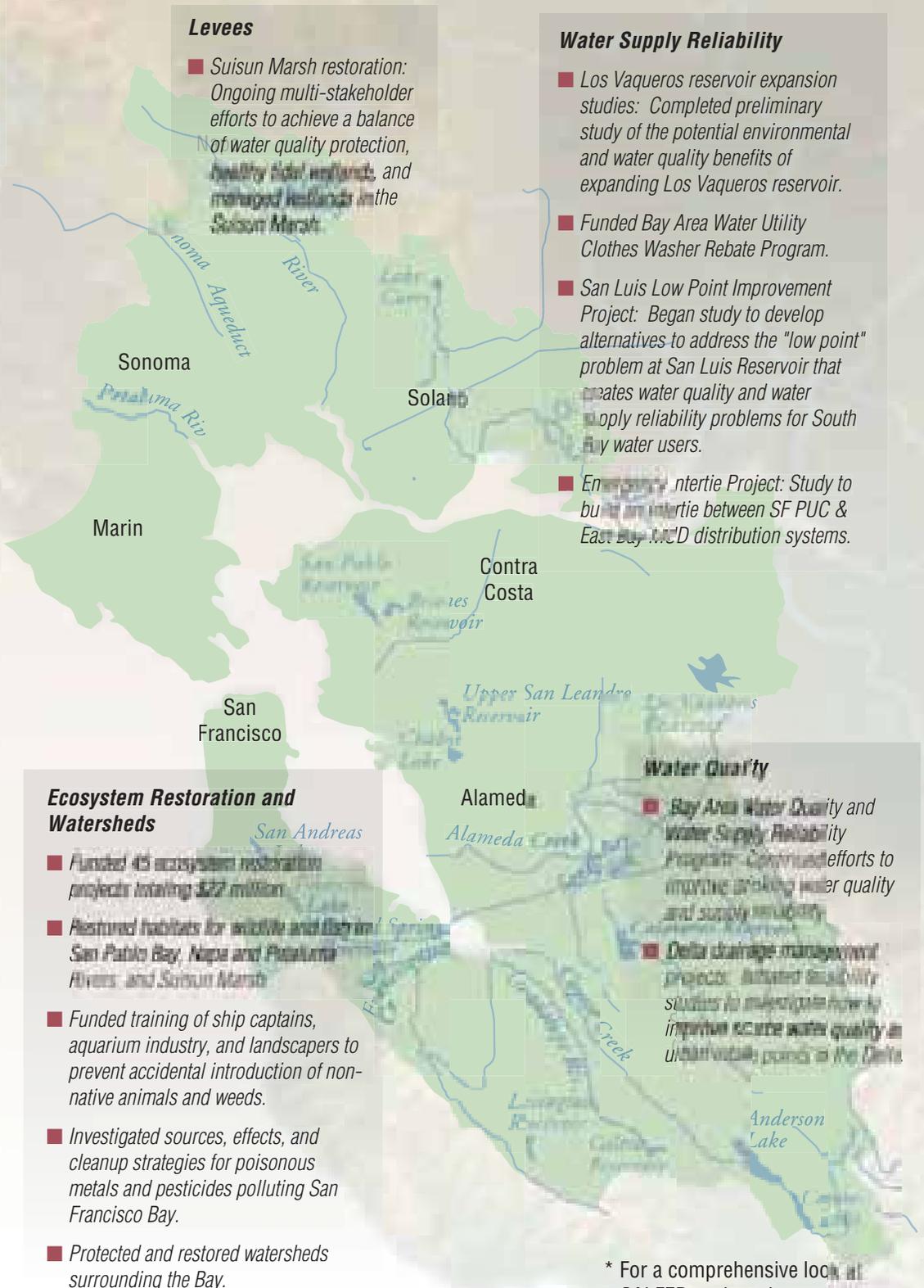
- Reliable levees in the Delta also protect water quality and supply for exporters
- Partnering with local efforts to support wildlife-friendly agriculture can help restore fish and wildlife populations while protecting the viability of agriculture
- Protecting water quality in the Delta is also important for water users that divert from the Delta
- Delta recreational resources are used by anglers, boaters, and many other recreational interests from other areas

REGIONAL VIEW
BAY

YEARS 1 & 2 Funding | 85 projects for approx. \$42,000,000

The Bay Region:

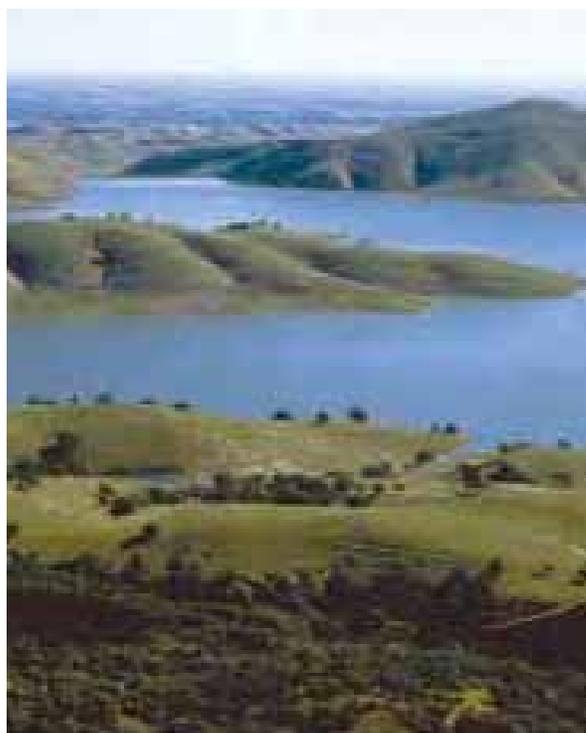
- The Bay region is the fourth largest metropolitan area in the United States and the second largest in California, with water supply reliability and drinking water quality issues becoming even more challenging in the future.
- The Bay and adjoining Delta comprise the West Coast's largest estuary.
- The Bay region drains more than 40% of the state's water.
- The Bay has lost over 75% of its vital wetlands.



* For a comprehensive look at CALFED projects log on to <http://calfed.ca.gov>

INNOVATIVE PARTNERSHIPS

- Association of Bay Area Governments (ABAG) CALFED Task Force: Local elected officials and elected water district board members established a task force in 2000 to promote the CALFED program in the Bay Area. The task force has supported CALFED legislation, reviewed local CALFED ecosystem projects, educated local government on regional water issues, and initiated efforts to link smart growth and water supply planning.
- Bay Area Water Agencies Coalition (BAWAC): Seven Bay Area water agencies joined together in 2002 to provide a unified voice in resolving the region's water quality and supply reliability challenges.



Los Vaqueros Reservoir

REGIONAL PRIORITIES AND ISSUES

- Improve ecosystem health in the San Francisco Bay and its tributary watersheds to contribute to the overall resilience of the Bay-Delta estuary
- Improve drinking water quality across the region by continuing to meet and exceed current drinking water standards
- Improve water supply reliability across the region to protect the environment and public health as well as economic health and quality of life

STATEWIDE BENEFITS

Many actions taken in the Bay benefit other regions. These include:

- Improved regional cooperation on water quality improvements and regional interties can help take pressure off Delta diversions during droughts and other emergencies
- Restoration of wetlands in the Bay contributes to improved overall health of the estuary
- Water quality improvements in the Bay and its watersheds help support healthy anadromous fish populations



YEARS 1 & 2 Funding | 134 projects for approx. \$129,000,000

The San Joaquin Valley Region:

- Supplies 45% of the nation's fruits and vegetables.
- Has the three largest agricultural counties in the Nation based on gross receipts.
- Provides drainage for seven major Sierra Nevada rivers.
- Anticipates population to double in the next 20 years.
- Contains 12 different groundwater basins – six are subject to critical overdraft.
- Provides major resting areas for the Pacific flyway waterfowl.

Water Quality

- Implemented selenium, dissolved oxygen, and other water quality projects.
- Conducted drinking water quality treatment technology projects.
- Monitored water quality at the watershed and project level.

Ecosystem Restoration and Watersheds

- Funded 48 ecosystem restoration projects totaling \$66 million.
- Reconstructed channel-floodplain habitat and restore dynamic river processes on the Tuolumne and Merced Rivers.
- Supported restoration of the San Joaquin River below Friant Dam.
- Supported local community-based efforts to make watersheds healthier, improving water quality, ecosystems, and water supply, including Calaveras, Mokelumne Creek, Tuolumne and Merced watersheds.

Water Supply Reliability

- Initiated preliminary studies for new surface storage in the central San Joaquin river watershed.
- Provided grants to local agencies to plan for more effective conjunctive use of surface and groundwater supplies.
- Supported Friant/MWD water quality exchange. Local agriculture water contractors are working with Southern California urban suppliers to make high quality Sierra runoff available for potable uses.
- Supported local water conservation and recycling projects to increase usable water supply, improve water quality, and enhance stream flows. Projects include canal lining and automation, drip irrigation, and on-farm integrated drainage.



For a comprehensive look at CALFED projects log on to <http://calfed.ca.gov>

INNOVATIVE PARTNERSHIPS

The San Joaquin Valley and Tulare Basin are as varied as they are rich in agricultural, natural, and human resources. As such, regional partnerships have a long history here. CALFED agencies are doing their part to help local initiatives that are aimed at restoring and enhancing ecological and water supply resources.

Ongoing programs in the San Joaquin Valley include:

- San Joaquin River Restoration Program – a partnership of the Friant Water Users Association and the Natural Resources Defense Council to determine ways to restore the river below Friant Dam.
- Water Quality Exchange Program – a partnership of the Friant Water Users Association and the Metropolitan Water District of Southern California to develop methods to provide high quality Sierra runoff for potable uses.
- Groundwater Conjunctive Use Studies – DWR has entered into several cooperative agreements with local groundwater management agencies to investigate potential conjunctive use programs.

REGIONAL PRIORITIES AND ISSUES

- Expanding existing or constructing new surface storage
- Enhancing locally managed groundwater conjunctive use
- Recovering at-risk native species by restoring habitat
- Rehabilitating natural riverine processes
- Reducing local health concerns by improving water quality



STATEWIDE BENEFITS

As progress is made on enhancing local water and ecosystem resources, the San Joaquin Region provides benefits to the state as a whole, including:

- Reduced Delta demand during critical periods by increasing regional surface and groundwater storage and reducing water losses
- Improved and inter-connected aquatic and terrestrial habitat contributes to improving the overall health of the estuary
- Improved regional water quality in the San Joaquin River and its tributaries reduces demand for Delta water
- Investing in local programs to restore watersheds contributes to the overall environmental and economic health of the region and the state
- Increasing utility of water supplies by streamlining water transfers and investing in local water use efficiency projects reduces regional demands on the Delta

YEARS 1 & 2 Funding | 69 projects for approx. \$103,000,000



The Southern California Region:

- As California grows, half of its anticipated new residents will reside in the semi-arid Southern California region.
- Adequate supplies of high quality water are required to maintain the economic potential in the region and state.
- Southern California's large contribution to the state's economy depends on a reliable water supply, some of which is imported from the Delta.

Water Quality

- Groundwater Replenishment System treats wastewater using microfiltration, reverse osmosis, and ultraviolet light plus hydrogen peroxide.
- Water quality exchange feasibility study with upper San Joaquin Valley agencies.
- Studies evaluating ultraviolet light treatment, management of sources of disinfection by-product forming material in SWP, and occurrence and sources of microbial contamination in the Delta region.

Water Supply Reliability

- Groundwater storage and well field restoration in Los Angeles and Ventura Counties.
- Conservation rebates for residential washers and toilets.
- Industrial, residential, and landscape water use efficiency programs throughout the region.
- X-Ray Processor Retrofit for conservation.
- Desalination pilot projects.

Watersheds

- Capturing and using stormwater in the Arroyo Seco watershed.
- Community outreach and education in Arroyo Seco watershed.
- Coordination of watershed project activities in the LA and San Gabriel River watersheds.
- Watershed coordination in Malibu, Topanga, and Mission Oak watersheds.



* For a comprehensive look at CALFED projects log on to <http://calfed.ca.gov>

INNOVATIVE PARTNERSHIPS

Southern California uses integrated planning processes to manage diverse water resources including imported water from the Delta, Colorado River, and Owens Valley, local groundwater supplies, recycled water, conserved water, and desalinated ocean water.

Stakeholders representing environmental, business, agricultural, environmental justice, and community interests are successfully collaborating in regional planning efforts. The Metropolitan Water District of Southern California, Santa Ana Watershed Project Authority, and Southern California Water Dialogue are among the groups facilitating this collaboration. The Dialogue, with assistance from a newly funded CALFED regional coordinator, is working with other regional agencies, organizations, and stakeholders on projects that will improve the quality and reliability of Southern California's water supply and benefit the CALFED program.



Water cleansing process at the Santa Monica Urban Runoff Facility



Orange County Groundwater Replenishment Ponds

REGIONAL PRIORITIES AND ISSUES

- Producing drinking water that meets or exceeds increasingly stringent state and federal standards
- Maximizing use of groundwater basins by expanding conjunctive use and groundwater cleanup programs
- Expediting water use efficiency projects including conservation, recycling, and water management programs
- Expanding watershed partnerships and developing integrated solutions to restore ecosystems and manage polluted stormwater runoff
- Developing mutually beneficial water transfer programs
- Reducing the salinity levels of imported water and the overall salt balance of the region
- Developing ocean water desalination projects

STATEWIDE BENEFITS

Many projects and programs implemented in Southern California provide benefits to the Delta and other regions of the state. These efforts include:

- Developing new treatment technology and water quality exchanges to improve Southern California drinking water quality and reduce the need for water exported from the Delta during critical periods
- Increasing storage capacity in Southern California through conjunctive use projects and new surface storage
- Implementing water conservation and recycling projects to reduce Southern California's dependence on water imported from the Delta
 - conserving 480,000 acre feet/year and
 - producing 200,000 acre feet/year of recycled water
- Investing and managing for healthy watersheds which can improve Southern California water quality and provide other local water management benefits
- Developing and funding desalination technology to create new local water supplies and reduce the need for imported water



PROGRAM
ELEMENTS

The Program has developed a planning and tracking system to monitor progress on the milestones and commitments in the Bay-Delta Plan and to maintain a balanced approach to implementation.

The following section provides highlights of the schedules for each Program element.

The guide below describes the content of each of the following ten schedules.

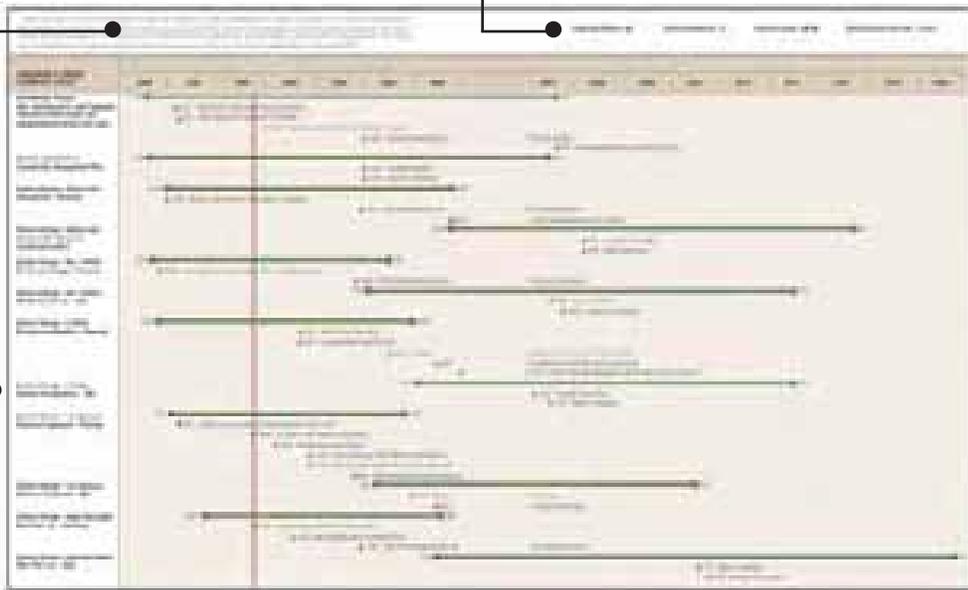
Schedule Summary

Overview of key points noted in the schedule.

Milestone & Schedule Icons

The timelines provide information related to key milestones and activities.

PROGRAM TRACKING
SAMPLE CHART

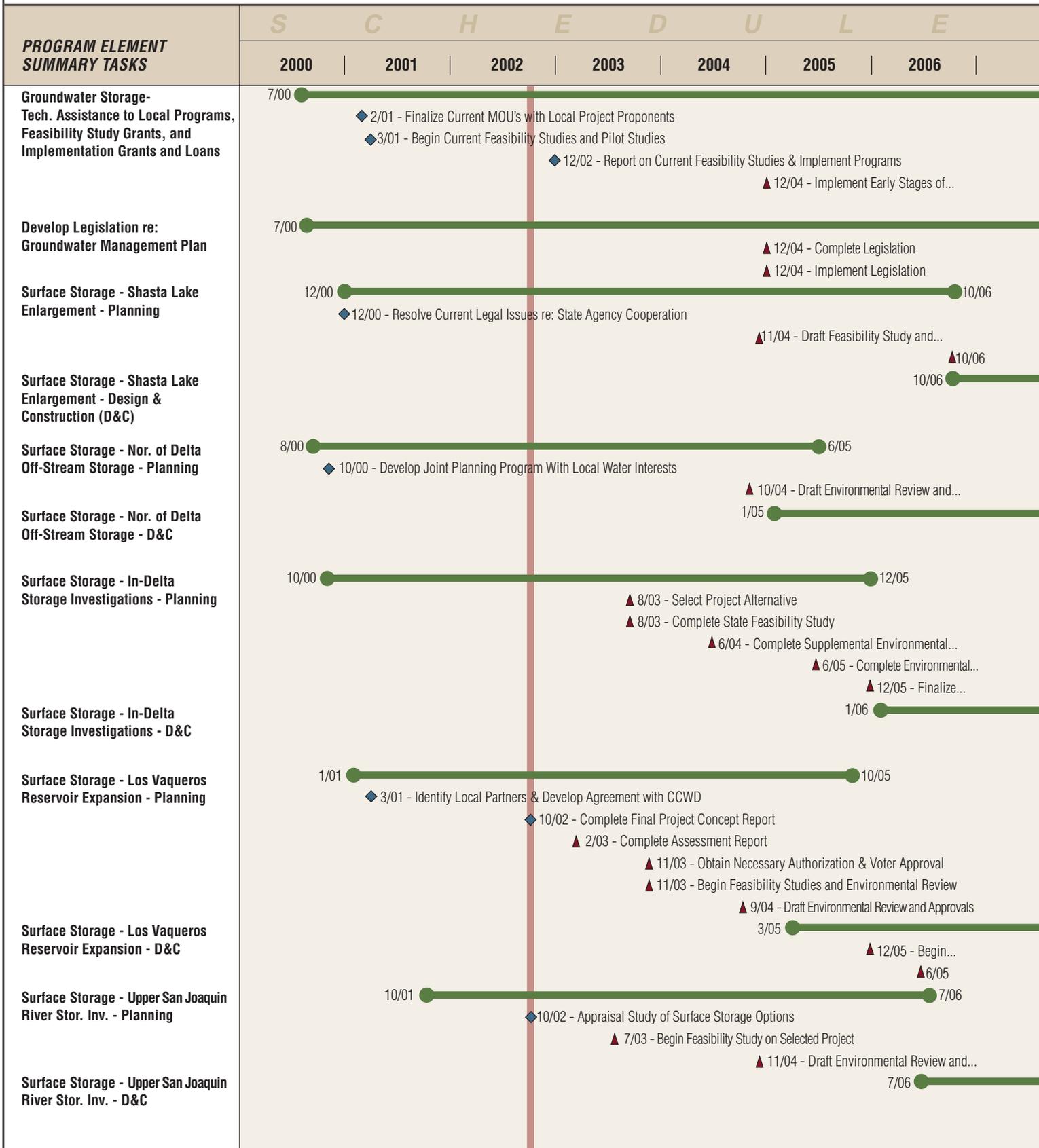


Task List

Significant tasks are identified along this column. In some cases sub-tasks are listed and identified by dashes on the timeline.

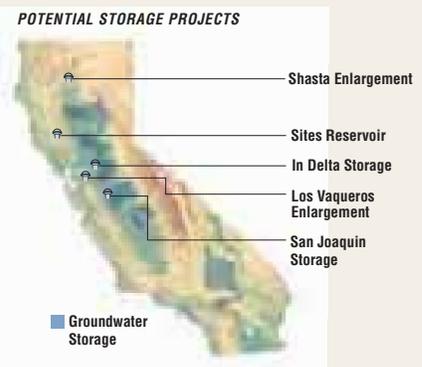
STORAGE

Grant and loan awards for groundwater storage and conjunctive water management are ahead of schedule, but funding constraints have delayed grant administration and technical support for local partnerships. Progress is being made on surface storage investigations, but lack of funding or federal authority to participate in feasibility studies has pushed back the schedules for all five surface storage projects. The target date for completion of draft environmental documents on several of the projects has been pushed back to the end of 2004.



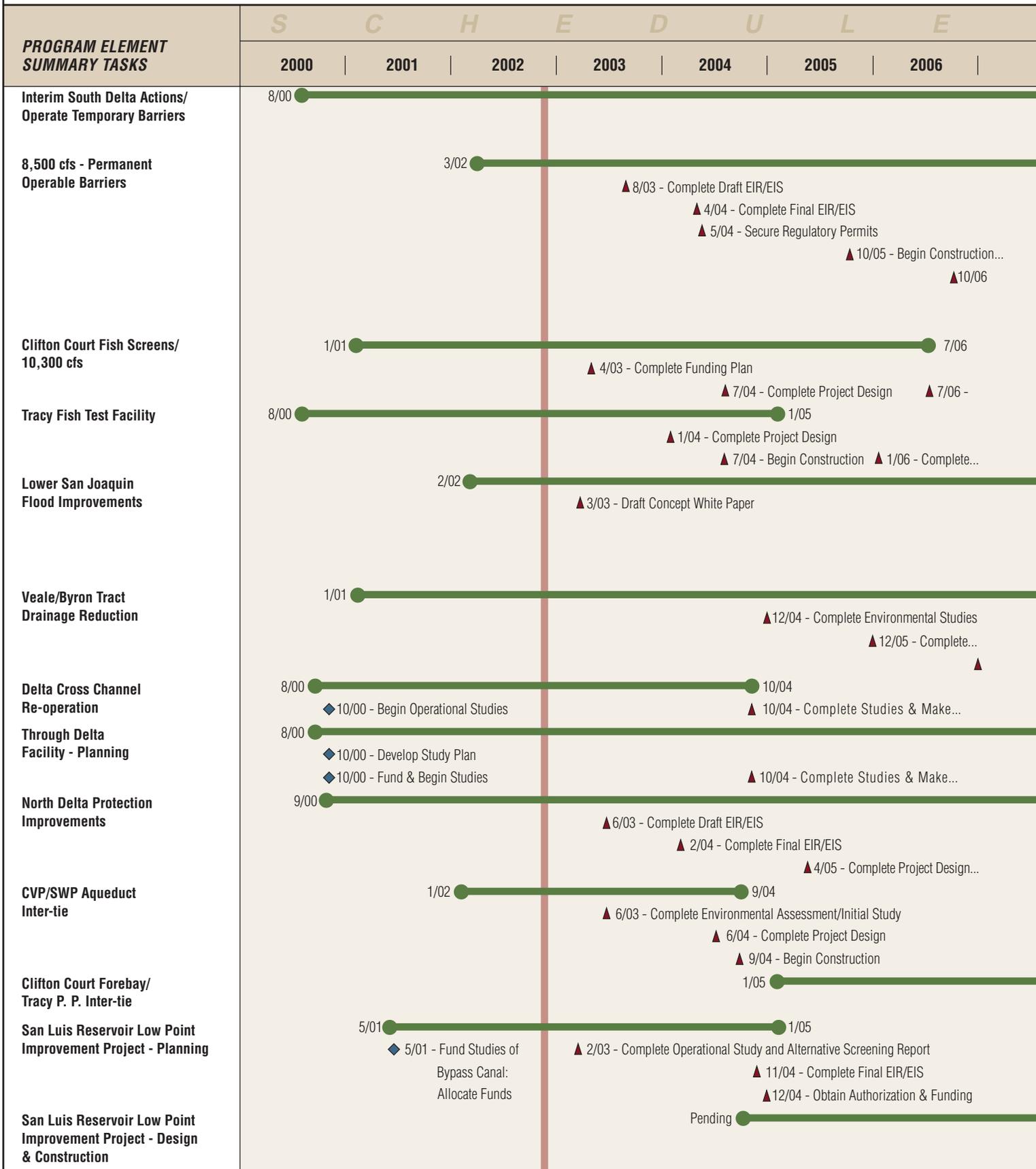
Completed Milestone ◆ Remaining Milestone ▲ Present Schedule ● Date Reporting Period Ends —

S C H E D U L E



CONVEYANCE

The public scoping process has begun for increasing South Delta pumping to 8,500 cfs and a draft impact analysis has been completed for construction of permanent barriers, but the schedule for both projects has been delayed one year to 2004. Funding constraints and related technical issues have led to delays and a reevaluation of the Tracy Fish Test Facility and screening of Clifton Court Forebay. The schedule for San Luis Low Point has been revised due to expansion of scope, while environmental review of North Delta Flood Protection and Ecosystem Restoration Project has been delayed due to lack of funding and staff.



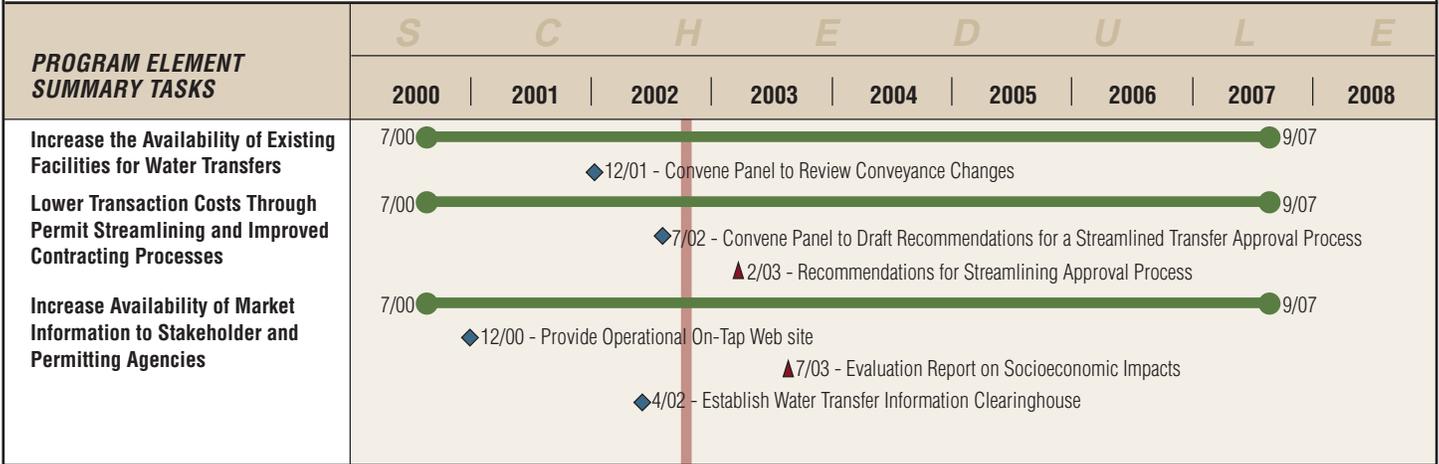
Completed Milestone ◆ Remaining Milestone ▲ Present Schedule ●—● Date Reporting Period Ends —



WATER TRANSFER PROGRAM

All deadlines have been met to date. A Water Transfers Information Clearinghouse has been established and white papers on transfers and related issues have been published. A panel of interested stakeholders has prepared and submitted a water transfers issues report for consideration. The On Tap web site is operational, but refinement will continue into Year 3 due to contracting issues.

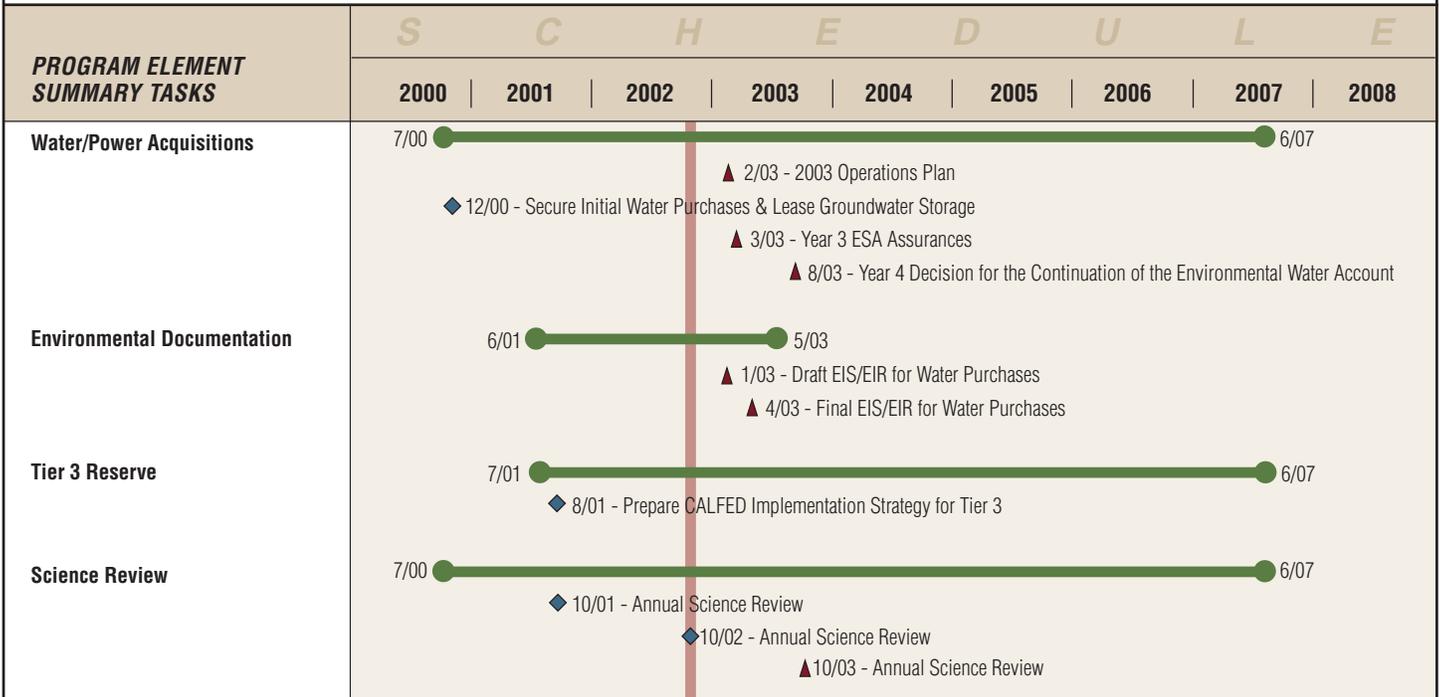
- ◆ Completed Milestone
- ▲ Remaining Milestone
- Present Schedule
- Date Reporting Period Ends



ENVIRONMENTAL WATER ACCOUNT

Fish protection and water supply reliability benefits were achieved in 2002, despite a second consecutive dry year. An environmental review process for the EWA has been initiated, with completion expected in May 2003. The second annual science review was held in 2002, and CALFED agencies are working to integrate EWA activities into the 2002-'03 water operations plan. Tier 3 water assets are expected to be operational in 2003.

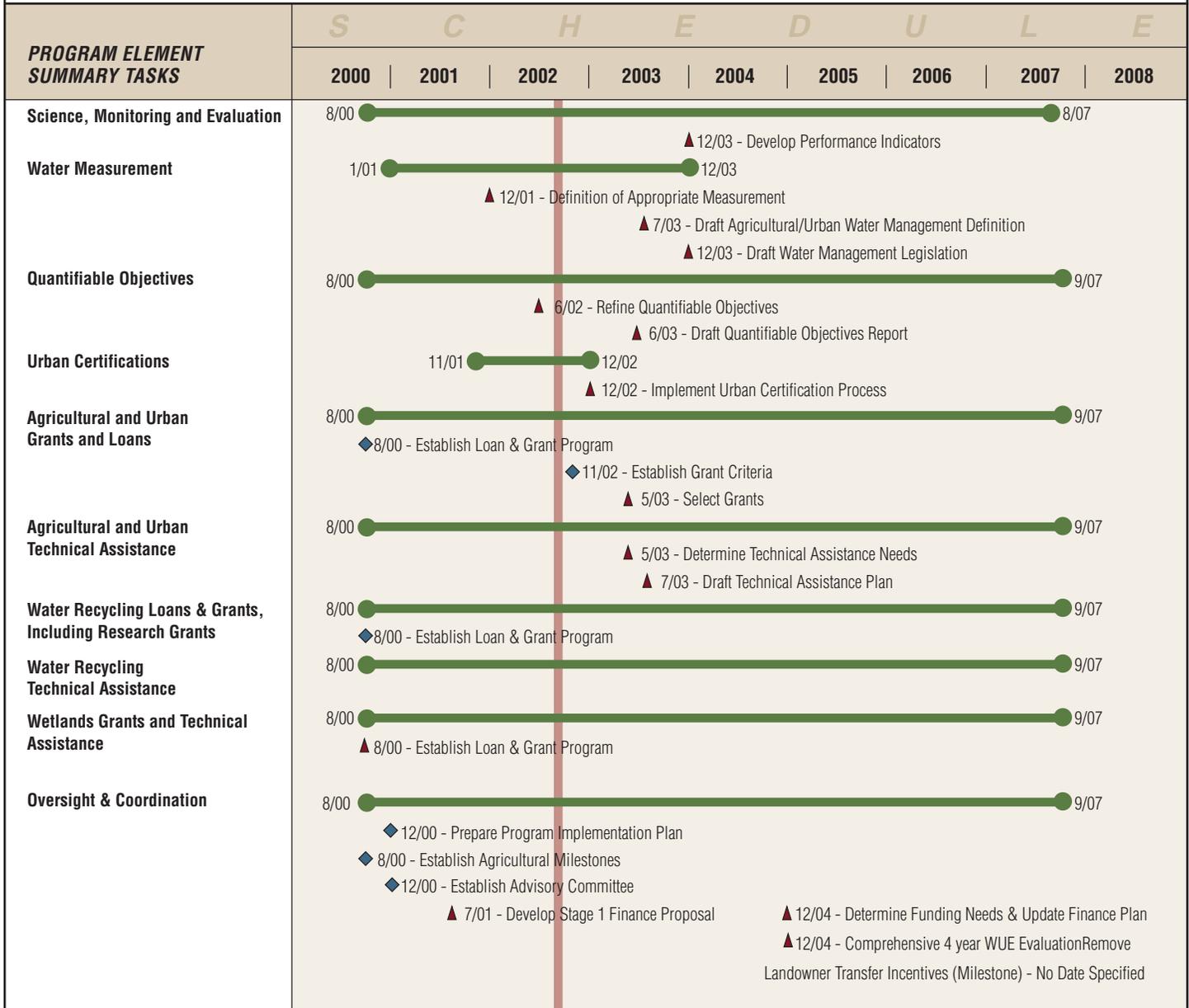
- ◆ Completed Milestone
- ▲ Remaining Milestone
- Present Schedule
- Date Reporting Period Ends



WATER USE EFFICIENCY

The focus of CALFED's Water Use Efficiency program is to support local water conservation and recycling projects that can contribute to the Bay-Delta solution. CALFED Agencies provide financial support through grants and loans and technical support through technical assistance programs. To assure the public of high water use efficiency, CALFED agencies are investing in scientifically-based performance measures including agricultural quantifiable objectives. Efforts to establish appropriate water measurement and urban water conservation certification are integral parts of these assurances.

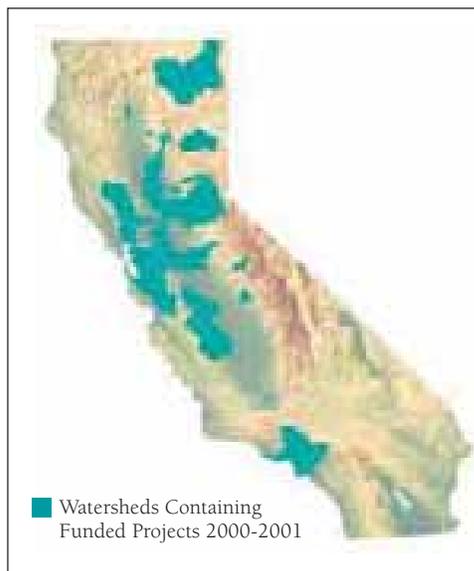
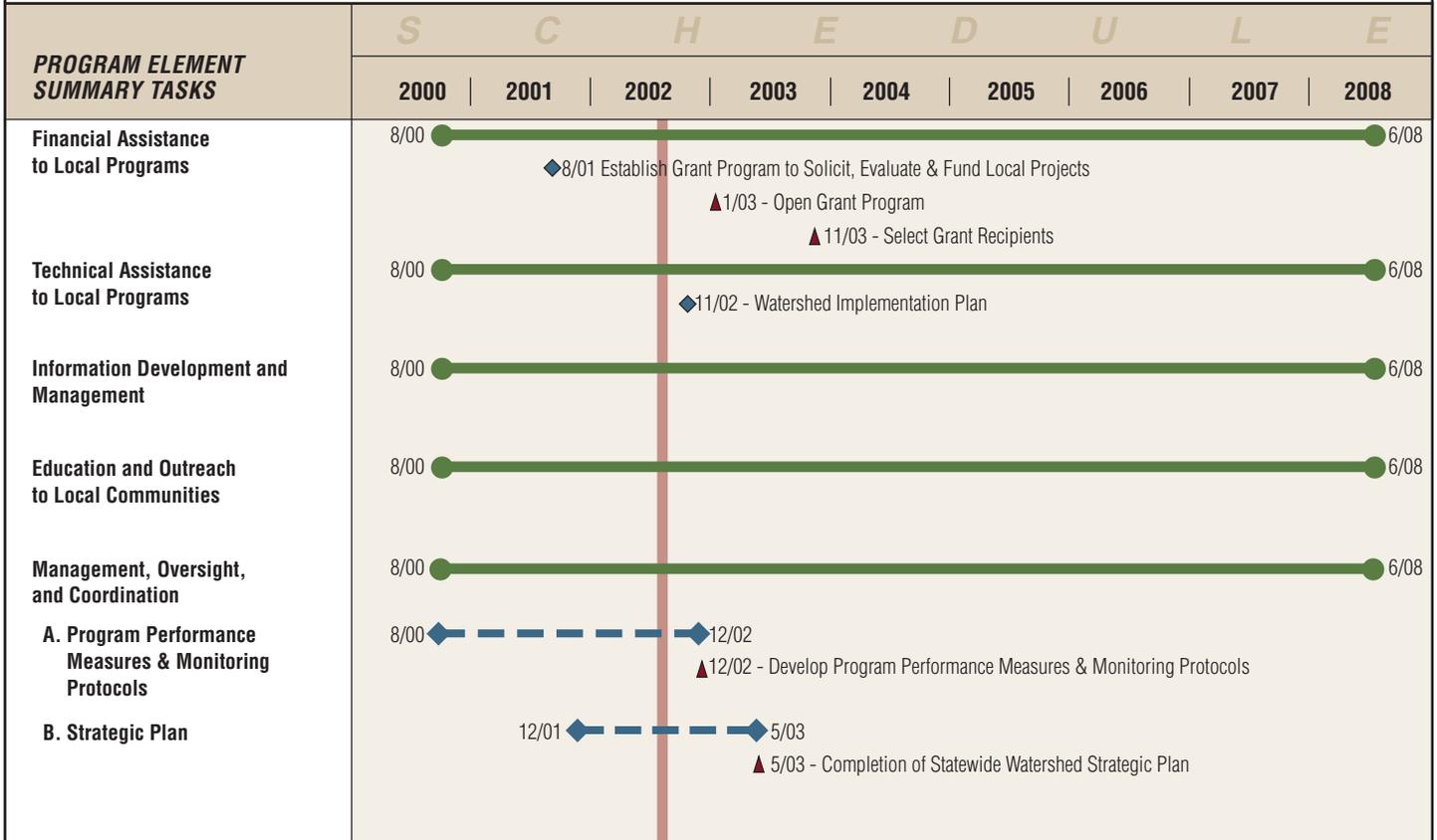
- ◆ Completed Milestone
- ▲ Remaining Milestone
- Present Schedule
- Date Reporting Period Ends



WATERSHED MANAGEMENT

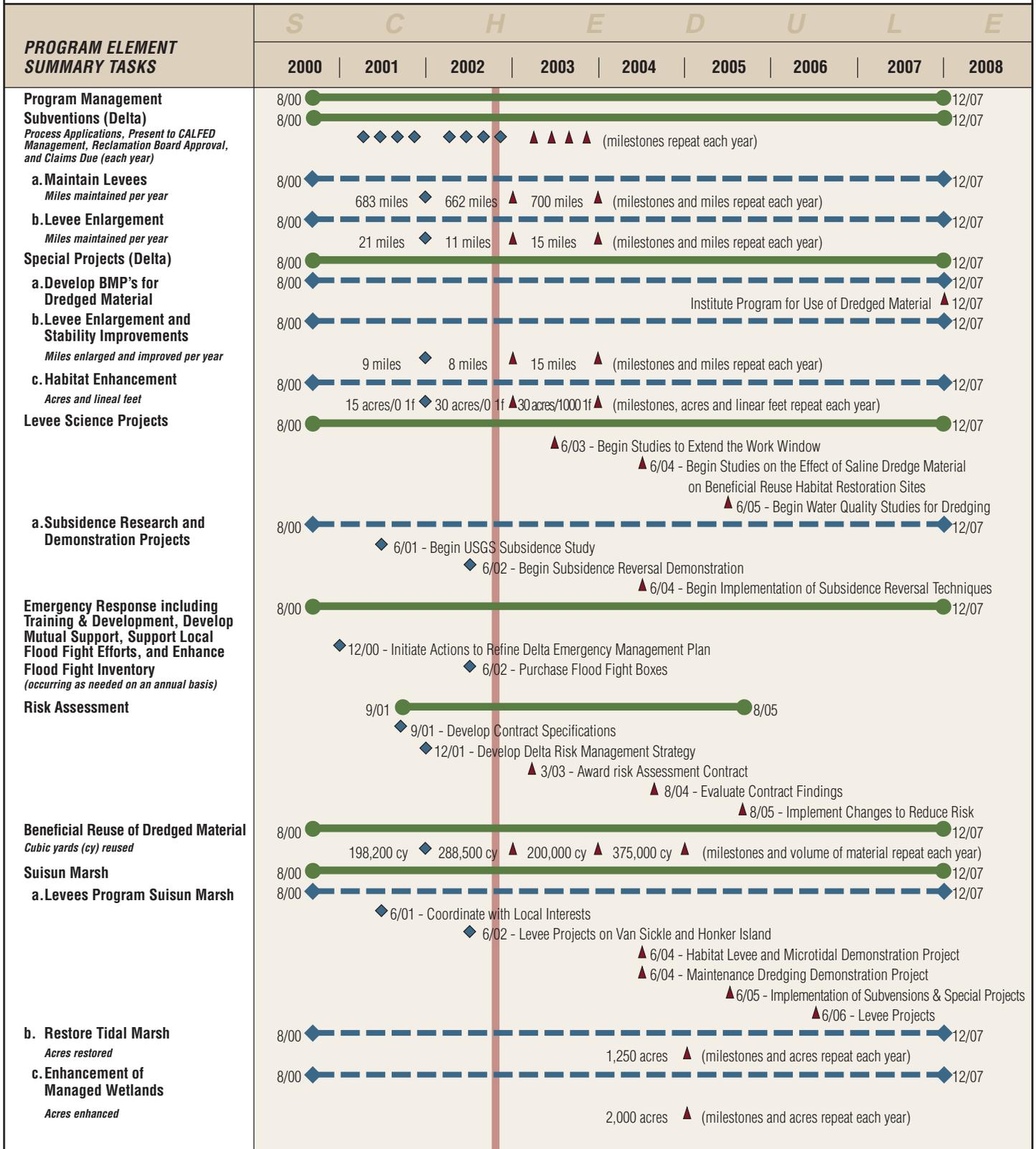
Contracts have been finalized and work initiated on 51 of 84 local watershed projects funded in the first two years of the program. The Year 3 grant funding process under development by the State Water Resources Control Board and will be completed in 2003. Contracting delays have put implementation of some projects behind schedule, and lack of authority for federal agencies to implement the watershed program has affected staffing, technical assistance, science and outreach efforts.

- ◆ Completed Milestone
- ▲ Remaining Milestone
- Present Schedule
- ◆ Sub-Tasks
- Date Reporting Period Ends



LEVEE SYSTEM INTEGRITY

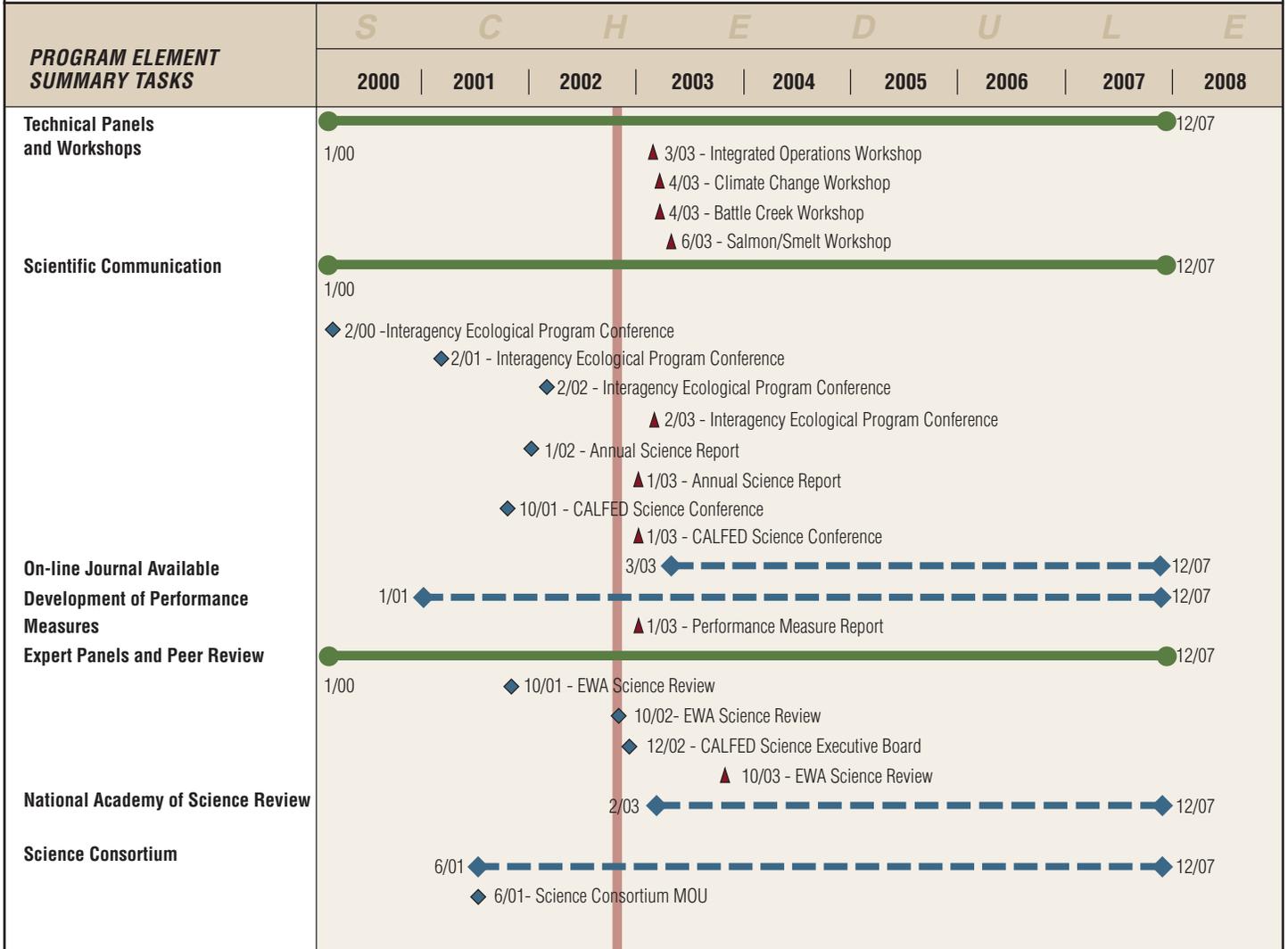
Year 2 projects improved 5.7 miles of Delta levees, and progress is being made on another 47 levee stability and habitat projects. Though requests totaling more than \$31 million were received, the program was able to fund only \$4.5 million in levee maintenance and repair projects in 2002. CALFED agencies improved emergency response capabilities in the Delta by enhancing coordination and acquiring flood fight materials. All aspects of the program have been delayed by funding reductions.



SCIENCE

Significant progress has been made in defining scientific issues associated with water project operations and the Bay-Delta environment. Peer review and technical assistance is being provided to each program element, and work continues to develop performance measures for program areas as well as CALFED as a whole. The Science Program, with the help of the Science Consortium, initiated a new on-line technical journal, and the Consortium is enhancing collaboration on Bay-Delta science activities. Though many projects and studies have been constrained by contracting and funding issues, passage of Proposition 50 will allow several key programs to move ahead.

- ◆ Completed Milestone
- ▲ Remaining Milestone
- Present Schedule
- ◆ Sub-Tasks
- Date Reporting Period Ends



ECOSYSTEM RESTORATION

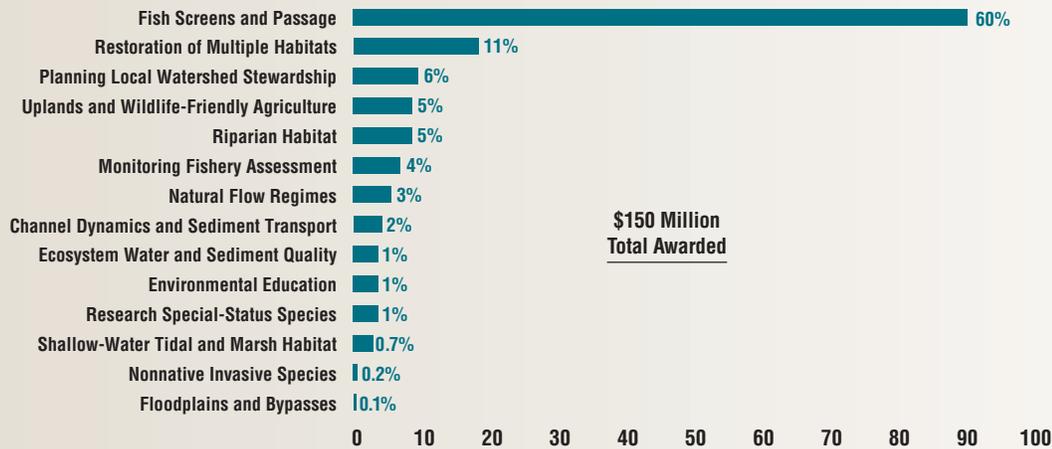
More than \$63 million in funding for ecosystem restoration projects was awarded in 2002. Progress is being made on the Environmental Water Program, Upper Yuba River Studies Program and other ongoing activities, but delays are expected in Year 3 due to funding and contracting issues. Resource and contracting constraints have delayed preparation of a Delta-wide Ecosystem Restoration Plan and the Single Blueprint for restoration activities.

HIGHLIGHTS OF ERP FUNDED ACCOMPLISHMENTS INCLUDE:

- 58,300 acres of habitat funded for protection, including 12,000 acres dedicated to wildlife friendly agriculture and 16,000 acres of floodplain;
- 39,000 acres of habitat funded for restoration, including 9,500 acres of shallow water tidal and marsh habitat;
- 63 miles of instream habitat funded for protection and/or restoration;
- 93 miles of riparian corridor funded for protection and/or restoration;
- 75 fish screens accounting for a total of 2,700 cfs of diversion capacity

REGIONAL SPENDING

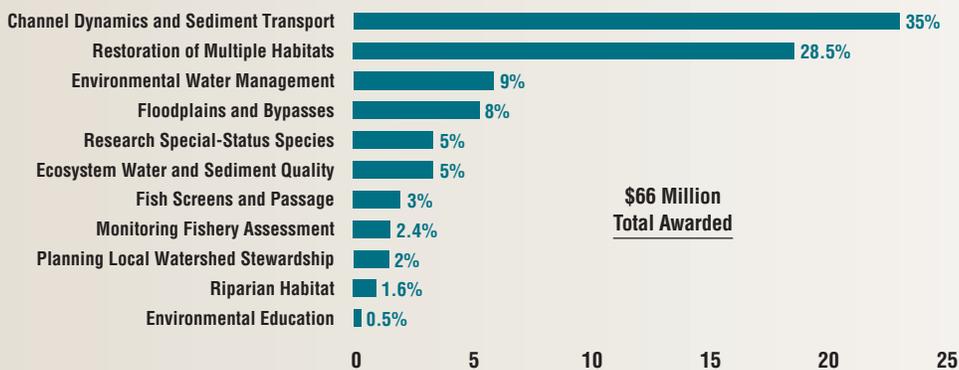
Percent of total spent on Sacramento Region ERP Actions



Percent of total spent on Delta and



Percent of total spent on San Joaquin Region ERP Actions

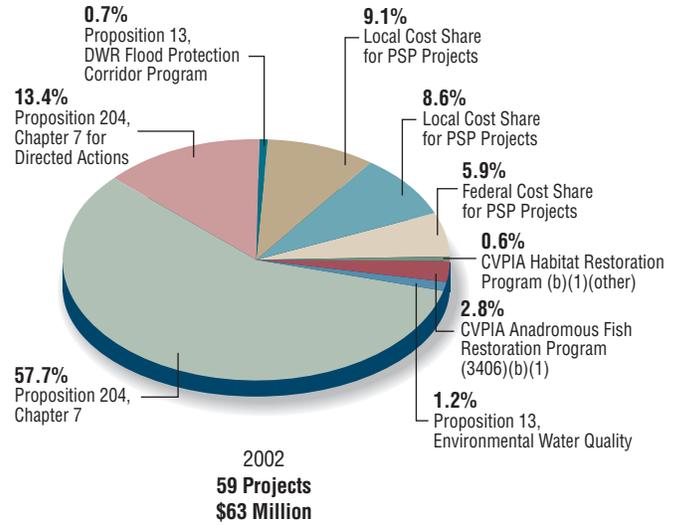


Percent of total spent on Bay Region

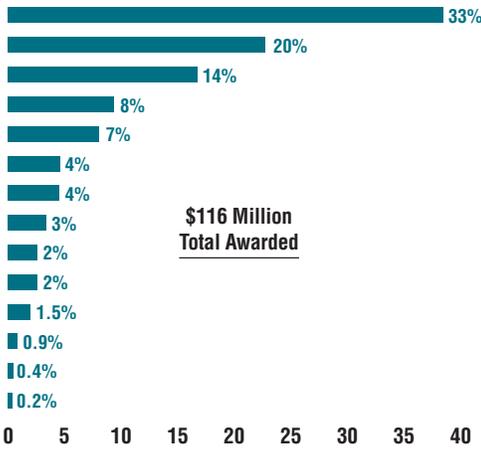




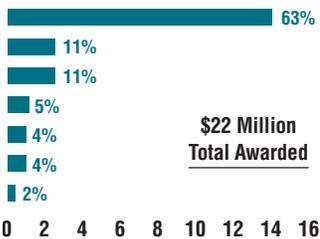
Fund sources and amount of funding to support the selection of projects through the 2002 PSP



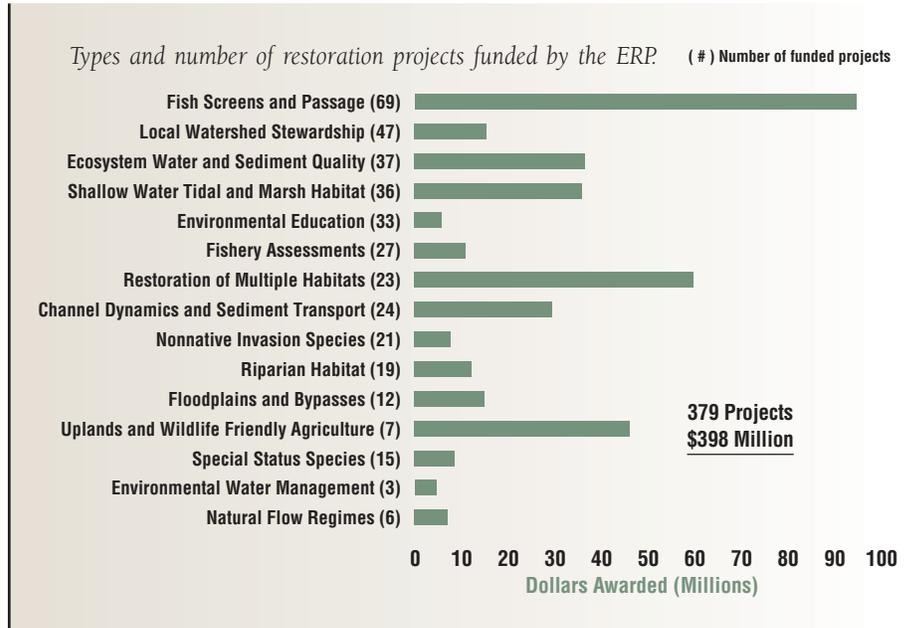
Eastside Tributaries Region ERP Actions



ERP Actions



TOTAL SPENDING





PUBLIC
INVOLVEMENT

The CALFED Bay-Delta Program is committed to shaping California's water solutions through extensive public involvement in every Program element.

The California Bay-Delta Public Advisory Committee is a cornerstone of CALFED's public involvement. Established in October 2001, the 30-member Committee is charged with advising state and federal CALFED agencies on all aspects of Program implementation.

With representation from an array of environmental, water, tribal and civic interest groups, the Committee provides a key link among CALFED agencies, stakeholders and the public. Nine subcommittees – formed over the past year – have emerged as an integral part of CALFED, providing oversight and input on specific program areas such as environmental justice and water use efficiency.

- Delta Levees and Habitat Subcommittee
- Drinking Water Subcommittee
- Ecosystem Restoration Subcommittee
- Environmental Justice Subcommittee
- Steering Committee
- Water Use Efficiency Subcommittee
- Watershed Subcommittee
- Water Supply Subcommittee
- Working Landscapes Subcommittee

CALIFORNIA BAY-DELTA PUBLIC ADVISORY COMMITTEE



Gary Hunt, California Bay-Delta Public Advisory Committee

As CALFED's principal advisory body, the Bay-Delta Public Advisory Committee and its members shaped many of the Program's success stories in 2002, from passage of Proposition 50 to the development of a new governance structure. These and other issues were vigorously debated, but always with a shared commitment to the future of the Program.

The Committee also charged its nine subcommittees with developing goals, workplans, and measures of success to guide their activities. These subcommittees are now actively engaged in shaping the direction of every program element. In particular, I want to thank Denny Bungarz, our vice-chair, and each of the subcommittee chairs, for their time, their patience, and their leadership.

In 2003, the Committee and its members will face the daunting task of providing advice on the transition to our new governance structure, Congressional reauthorization, and on meeting the milestones and commitments necessary to maintain balanced implementation. But between the energy and commitment of our members, and the continued strong support of Mary Nichols and Bennett Raley, I am confident that we can rise to the challenge.



Martha Guzman

ENVIRONMENTAL JUSTICE

The Environmental Justice Subcommittee was formed in December 2001, and is co-chaired by Martha Guzman and Leslie Lohse. Its purpose is to provide advice and guidance to the BDPAC to ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development and implementation of Program actions. The subcommittee is working to integrate environmental justice into all CALFED Program elements. Other activities include encouraging broad public participation, exchanging information, analyzing issues, and fact-finding, as appropriate, regarding the implementation of all CALFED Projects.

Regional workshops were hosted by the Program and the Environmental Justice Coalition for Water. In addition, the subcommittee hosted meetings with other subcommittees and project managers to identify issues and approaches for addressing them. As a result, the sub-



Ryan Broddrick

ECOSYSTEM RESTORATION

The Ecosystem Restoration Subcommittee represents a broad spectrum of stakeholders, including agency representatives. The group spent much of its time working on desired outcomes for the Ecosystem Restoration Program (ERP). A majority report on outcomes, along with a minority statement of concerns, was accepted by BDPAC for consideration by the CALFED Policy Group. Provided below is a review of the ERP.

As one of the nation's most ambitious attempts to reverse the degradation and restore the health of a unique environment – the San Francisco Bay-Delta Estuary— the ERP relies heavily on strategic planning, adaptive management and independent scientific review. Over the past year, the ERP has kept the momentum for this effort going by developing an implementation plan for the first seven years of CALFED (Stage 1). Over sixty projects were selected for funding using a competitive solicitation process that will help restore aquatic habitats, improve fish passage, promote wildlife friendly agricultural practices, and conduct needed re-



Tom Zuckerman

DELTA LEVEES AND HABITAT

The Delta Levee Subcommittee was authorized by the BDPAC on March 12, 2002, and is co-chaired by Marci Coglianese and Tom Zuckerman. The subcommittee adopted a mission statement, goals, and priorities for 2002.

The subcommittee meets with the existing Delta Levees and Habitat Advisory Committee that was created by the Secretary of Resources in the early 1990s to bring together federal, state, special district representatives and interested parties to address issues regarding the State's Levee Subvention Program.

On June 7, the Delta Levee Subcommittee adopted a report that was forwarded to BDPAC for the June 27 public meeting. The BDPAC adopted the recommendation and conveyed it to the CALFED Policy Group on December 4.

The primary issue of concern was short and long-term funding. The State's Levee Subvention Program has been brought under the umbrella of CALFED. Funds for the State's Levee Subventions Program were cut in 2002, and funds for the CALFED Levee Program were also cut in 2002.

committee drafted an Environmental Justice Work Plan that was accepted for consideration by BDPAC. The Program has begun to implement a number of tasks in the work plan and will continue with the tasks in the coming year.

The subcommittee also provided advice to the Program on qualities and expertise needed for an effective Environmental Justice Coordinator. After overcoming contracting and funding delays, the Program has now hired a Coordinator, Ken McGhee, to help integrate and advance environmental justice into the CALFED Program.

The subcommittee will continue efforts to advance environmental justice in the CALFED Program. Greater coordination with all Program elements and other subcommittees is needed to clearly identify environmental justice issues associated with actions and projects.



Leslie Lohse

search, planning and monitoring. In addition, a “look-back” exercise was initiated to better assess the efficacy of past restoration investments.

Significant challenges remain, however, that will need to be overcome. CALFED’s commitment to acquire water to improve in-stream flow conditions in Central Valley rivers continues to be delayed, and adequate funding has not yet been allocated to this critical restoration element. Restrictions on hiring staff and administering contracts have delayed implementing a number of ERP elements, such as disbursing funds to restoration projects and moving ahead with important regional planning activities.

Priorities for this coming year will include the need to secure adequate and continuing long-term funding for the ERP; improve its administrative capability; meet Bay-Delta Plan commitments for water and habitat acquisition; and increase efforts to build local partnerships and implement regional plans for each ecological zone in the estuary.



Gary Bobker

With the passage of Proposition 50, \$75 million is now available for funding the next three years of Levee Subventions Program and the CALFED Levee Program. The Proposition 50 funds are a major step towards meeting Bay-Delta Plan commitments over the next three years. However, there is no secure source of funding beyond the near-term. For the long-term, the Delta Levee Subcommittee has recommended that state and federal water contractors contribute funding for the Program according to the volume of water they divert from the Delta. This and other funding recommendations will be considered in the development of a long-term finance plan for the Program.

In 2003, the subcommittee will continue to coordinate the CALFED Levee Program with other CALFED programs, such as water quality and ecosystem restoration, and will review new research and data developed through the CALFED program, such as global warming and sea level rise, to determine emerging issues in relation to the Delta Levee Program.



Marci Coglianesi



Ryan Broddrick

WORKING LANDSCAPES

The Working Landscapes Subcommittee is working to promote conservation partnerships among CALFED agencies, private landowners, local governments and conservation groups. The subcommittee is working with the California Department of Food and Agriculture, Department of Conservation and other CALFED agencies and providing advice and recommendations on an approach that provides stakeholders with incentives and support, assists them with regulatory processes and minimizes adverse impacts on agricultural resources.

The committee was appointed by the BDPAC on June 27 and has held several meetings. The subcommittee has forwarded its recommended approval of the subcommittee mission statement, goals and objectives to BDPAC for consideration in Spring 2003. Agency staff is working on an action plan that will be forwarded to the subcommittee and BDPAC for later action.



Steve Hall

WATER SUPPLY

With its broad-based membership, the Water Supply Subcommittee continues to oversee implementation of the conveyance, storage and water transfers programs.

The committee played a key role in 2002 in developing the concept of using common assumptions for water management projects and actions. Common assumptions work will become part of the foundation for comparing and integrating projects, allocating and maximizing benefits, while minimizing costs, and developing defensible cost allocation criteria. The subcommittee reviewed and supported draft common assumptions work plans and will continue to serve as a forum for discussion of modeling and operational assumptions issues.

With respect to storage, the subcommittee forwarded a recommendation to the BDPAC requesting support for the staff work plan on In-Delta storage, with a goal of providing information for a decision in July 2003. That recommendation was adopted by the Committee. In October, several subcommittee members took part in a briefing on storage issues before the Assembly Water, Parks and Wildlife Committee. The subcommittee members represented individual stakeholder interests and also increased the visibility of the subcommittee's efforts on storage issues.



David Guy

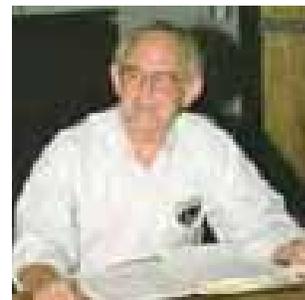
WATER USE EFFICIENCY

The Water Use Efficiency Subcommittee made tremendous strides in 2002 in guiding the Water Use Efficiency (WUE) Program toward achieving milestones in the Bay-Delta Plan. Specifically, the subcommittee has advanced proposals to the BDPAC on milestones for implementation of the Agricultural Water Use Efficiency Program as well as a framework for certification of best management practices in the Urban Memorandum of Understanding. The BDPAC accepted the recommendations that have been incorporated into the Year 3 workplan. These efforts continue to build upon the work already underway in the Agricultural Water Management Council (AB 3616) and the California Urban Water Conservation Council. The subcommittee and CALFED staff also have developed a foundation to advance a proposal on both agricultural and urban appropriate water measurement in 2003.

In addition, the subcommittee has helped foster unprecedented collaboration between diverse interests that will be essential to achieving the ambitious requirements in the Bay-Delta

Ground rules were developed that include a proposal that the subcommittee membership be open to those who participate and show up to the meetings, as is the case with BDPAC's Watershed and Environmental Justice subcommittees.

The subcommittee recommended goals and high priority actions for the Program's coming year. The BDPAC accepted the recommendations and the goals and priorities were incorporated in the Year 3 work plans. The subcommittee will continue to work with landowners and address their concerns related to the Program. The current priority is solidifying an action plan that includes the following overarching goals: supporting locally based collaborative initiatives; minimizing and mitigating adverse Program impacts on agricultural resources; and coordinating funding and outreach to rural communities.



Denny Bungarz

Funding remains a critical issue. There currently is not enough funding available to support progress on projects and achieve water management milestones within the time frames established in the Bay-Delta Plan. With the recent passage of Proposition 50 and assuming that no further General Fund spending cuts will be made to the storage program, the state's share of funding is expected to be secure for the next three years. However, without adequate federal funding and authority for federal agencies to participate in storage studies, it will be difficult to meet the expected Year 3 and 4 needs of the storage program.

In the coming year, the subcommittee will continue its work on the common assumptions program. It will focus attention on the need to adequately fund studies necessary to prioritize water supply projects, and will work with the Program and agency staff on a work plan designed to make decisions on water supply projects according to the timetable described in the Bay-Delta Plan.



Jerry Meral

Plan. The subcommittee also has been encouraged by the new forms of cooperation among CALFED agencies that will be necessary for successful implementation of the CALFED Program.

As in other program areas, funding remains the major challenge to keep the WUE program on schedule in 2003. The passage of Proposition 50 provides important state funds for the CALFED WUE program and particularly urban and agricultural water use efficiency measures and water recycling projects. Increased federal funding will also be necessary to advance this program.

The subcommittee, after completing the urban certification framework, still has additional technical work and policy-level discussions to complete before proceeding with legislation and regulation. Additional emphasis in 2003 will be placed on performance measures, water recycling, and desalination.



Frances Spivy-Weber



Marguerite Young

DRINKING WATER

Early in 2002, the Drinking Water Subcommittee identified the need to help CALFED achieve its Drinking Water Quality Program (DWQP) milestones by developing a strategic plan for the program by spring 2003. The plan will be a living document, centered around identified tools, with regular reviews to consider the most current information and to track the progress of the Program. Elements of this plan include:

- Adoption of an Equivalent Level of Public Health Protection Conceptual Framework. As a first step in the strategic plan, the subcommittee identified a conceptual framework that is essentially the complete set of tools available to assist the DWQP with prioritizing projects and tracking progress toward meeting the goals.
- Recommendation on Advanced Treatment Studies. The subcommittee also identified the need for the DWQP to immediately place the highest priority on advanced treatment studies to fill the knowledge gaps on the formation of the potentially carcinogenic, regulated disinfection by-products upon which the program targets are based.
- Recommendation on Waivers for Agricultural Discharges. The subcommittee identified the development of a drinking water policy for inclusion in the Sacramento-San Joaquin Rivers Basin Plan by the Central Valley Regional Water Quality Control



Martha Davis

WATERSHEDS

The emphasis for the Watershed Subcommittee in 2002 was forging connections between people and the CALFED Bay-Delta Program. Subcommittee members believe the “watershed approach” — using watersheds as a context for managing complex inter-relationships between people and use of land and water resources — is a vital component in achieving overall CALFED goals.

To that end, the Watershed Subcommittee went on the road in 2002, hosting subcommittee meetings in the San Joaquin Valley, Los Angeles basin, and West Sacramento Valley. These meetings provided opportunities to better inform the public about the Program, and to learn first hand of the outstanding local efforts underway to improve the functions and values of watersheds.

Providing financial and technical support to community-based watershed efforts is another way the Watershed Program is trying to promote and achieve improved management of watersheds. The subcommittee played a pivotal role in getting the Program’s first year set of 54 grants underway, and established the principles, priorities and criteria that guided the selection of 30 additional proposals in 2002.

Board as critical to the success of the DWQP. In addition to policy development, the subcommittee recommended that the CVRWQCB require monitoring of the impacts of agricultural discharges to drinking water constituents of concern.

- Recommendations on funding. The subcommittee recommended that the CALFED Program develop a funding plan for the next fiscal year focused on bond funds available from recent water quality initiatives and other sources. The subcommittee also recommended specific funding guidelines for use of those funds.

All of the above recommendations were either accepted or adopted by BDPAC.

- Drinking Water Quality Policy Framework. The DWQP needs to achieve integration and benefits across all Program areas. Because of its importance to other areas of the Program, the subcommittee is taking it in draft form to other BDPAC subcommittees prior to making a final recommendation.

The subcommittee also recognizes the need for the US. Environmental Protection Agency, State Water Resources Control Board and Department of Health Services to accept their agreed-upon roles for funding and overall management of the DWQP per the DWQP Management MOU and SB 1653.



Greg Gartrell

The subcommittee is keenly interested in the integration of program efforts within the CALFED family of programs, as well as other state and federal programs which may contribute toward our major goals and objectives. Subcommittee members are particularly interested in exploring the potential for better integrating the efforts of the Watershed, Drinking Water Quality, Ecosystem Restoration, and Water Use Efficiency programs, and the Environmental Justice Subcommittee. The Watershed Subcommittee will be working to organize a joint meeting of these groups to begin discussions.

Adequate funding for implementing the CALFED Watershed Program, as well as other programs, remains a key priority for the subcommittee. Funding levels, especially for program staff, have been inadequate to allow the Watershed Program to meet some of its Bay-Delta Plan objectives. The subcommittee will continue to work with CALFED staff, the Legislature, and the U.S. Bureau of Reclamation on this issue.



Robert Meacher

ENGAGING THE PUBLIC

Public outreach and partnerships continue to be a primary focus of the Program. Success for a Program of this diversity and magnitude hinges on the ability to form partnerships to combine resources, share knowledge and resolve problems at the local, regional, and state-wide level.

**HAMILTON CITY FLOOD PROTECTION
& ECOSYSTEM PROJECT**

“This is an immense boost for the local citizens in this area. We have tried for years to raise the revenue for the local cost share to have this study completed. With this assistance, we have a new beginning that we hope will lead to a long-term solution for the town of Hamilton City.”

- Jose Puente, General Manager of the Hamilton City Community Services District



Colonel Michael J. Conrad, Jr., Sacramento District Engineer for the U.S. Army Corps of Engineers, addresses a group gathered in Hamilton City to hear the announcement of \$420,000 in state funding to fund a study for flood protection and ecosystem restoration on the Sacramento River.

STATEN ISLAND WILDLIFE FRIENDLY AG

“The Nature Conservancy is delighted to have CALFED’s support for these partnership activities on Staten Island. The work will yield tangible and lasting benefits for Sandhill cranes, waterfowl, and the Staten farming operation.”

– Mike Eaton, Delta Project Director for The Nature Conservancy



CALFED Ecosystem Restoration staff hold a check for \$1.5 million presented to Ducks Unlimited, the Bureau of Land Management, and The Nature Conservancy to begin a new initiative on Staten Island to enhance wintering waterfowl habitat and demonstrate its compatibility with sustainable agriculture.

OUTREACH ACTIVITIES

- California Bay-Delta Public Advisory Committee and Related Subcommittees
- Public Meetings on Specific Projects
- Public Review of Technical Documents
- Science Consortium
- New “User-Friendly” Format for Comprehensive Web Site: <http://calfed.ca.gov>
- Annual Reports
- Briefing Materials
- Brochures
- Presentations to local, regional, and statewide groups
- Media Events
- New Monthly Electronic Newsletter
- Coordination with Local Groups
- Tribal Participation

ENVIRONMENTAL JUSTICE

The basic concept behind the term “environmental justice” is that all people – regardless of their race, color, nation of origin, or income – are able to enjoy equally high levels of environmental protection. The CALFED Program and agencies have made a firm commitment in the Bay-Delta Plan to addressing environmental justice issues and challenges related to ecosystem restoration and the management of water in the Bay-Delta and its tributary watersheds. The CALFED agencies are committed to seeking fair treatment of people of all races, cultures, and incomes, such that no segment of the population bears a disproportionately high and adverse health, environmental, social or economic impact resulting from CALFED’s programs, policies, or actions.

2002 ENVIRONMENTAL JUSTICE ACCOMPLISHMENTS

- Conducted five environmental justice workshops throughout the state to gain community input and understanding of environmental justice issues related to implementation of the Bay-Delta plan in coordination with various environmental justice stakeholders from the community.
- Developed a work plan to guide the CALFED agencies in addressing potential environmental justice issues and concerns.
- Integrated environmental justice criteria into the review process for several CALFED grant and loan programs.
- Launched a fish consumption study to assess the impacts of contaminated fish on disadvantaged communities in the Bay-Delta.
- Hired a full-time environmental justice coordinator to support the activities of the environmental justice subcommittee of the Bay-Delta Public Advisory Committee, and to integrate environmental justice into implementation of the Bay-Delta Plan.

PROGRAM
MANAGEMENT

Legislative support and continued funding are necessary to keep the Program's momentum going as progress continues to be made. The following section provides highlights of the state and federal legislative actions in 2002 and a snapshot of funding for the first three years of Program implementation.

The California Legislature enacted several bills affecting the CALFED program. In addition, the U.S. Congress considered two key federal authorization bills.

PROGRAM GOVERNANCE

SB 1653 (Costa) California Bay Delta Authority Act (Chapter 812) establishes in the Resources Agency the California Bay-Delta Authority, and prescribes its organization, powers, and purposes. The act requires the authority and the implementing agencies to carry out the programs, projects and activities necessary to implement the CALFED Bay-Delta Program. In follow-up legislation (AB 2683 – Canciamilla, Chapter 955), certain provisions of SB 1653 were revised relating to the proposed budgets of implementing agencies, the powers and duties of the authority, and the staff of the authority. The Act becomes effective January 1, 2003.



WATER MANAGEMENT

SB 1672 (Costa) Integrated Regional Water Management Planning Act (Chapter 767) authorizes regional water management groups, as defined, to adopt regional plans for specified purposes. The bill requires various state agencies to give priority to funding regional projects. A companion bill (AB 2469, Dickerson, Chapter 949) adds the construction of fish screens and fish passage improvements to the list of approved regional planning elements.

SB 1938 (Machado) Groundwater Management Planning (Chapter 603) requires a local agency that elects to write a groundwater management plan to provide the public with written information as to how interested parties may participate in development of the plan. The bill also requires the local agency, as a condition of receiving state funds, to include basin management objectives and monitoring protocols in the plan. It authorizes expenditures from the Local Groundwater Assistance Fund to assist local agencies to develop the management plans.

PROGRAM FINANCING

SB 278 (Machado) Public Works Projects (Chapter 892) requires an agency awarding any public works contract financed by bonds under the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Proposition 50), to adopt and enforce a labor compliance program relating to the general prevailing rate wages for application to that project.

SB 1473 (Machado) Regional Water Management Program Funding (Chapter 618) requires the Department of Water Resources and the State Water Resources Control Board to administer equally the regional water management funds available from the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Proposition 50) for grants for regional water management programs. The bill also provides that any project that modifies a river or stream channel must determine whether the environmental impacts resulting from the project will be fully mitigated by the consideration of certain factors. Any mitigation or enhancement costs may be included in the project costs eligible for funding. In addition, the

bill authorizes the expenditure of \$150 million to facilitate water transfers pursuant to the Quantification Settlement Agreement.

AB 425 (Oropeza) Budget Act of 2002 (Chapter 379) appropriates \$476.7 million (\$46 million General Fund) to various state agencies for CALFED programs.

AB 2534 (Pavley) Watershed, Clean Beaches, and Water Quality Act (Chapter 727) establishes a grant program (Proposition 40 funds) for public agencies and nonprofit organizations for projects to improve water quality at public beaches, improve water quality monitoring and sewer capability, protect water quality by reducing runoff pollution, and controlling nonpoint source water pollution.

FEDERAL LEGISLATION

Federal legislation reauthorizing the CALFED Bay-Delta Program is on hold as unresolved concerns over prevailing wage language on the House side and other issues on the Senate side prevented bills from moving to a floor vote this year. It is anticipated that the Program will continue to seek reauthorization in the new Congressional session of Congress.

S. 1768 (Feinstein) CALFED Bay-Delta Authorization Act would have approved the Record of Decision and authorized the Secretary to implement Stage 1 (projects and programs planned for the first seven years) subject to environmental review and approval under federal and state law and which has been certified by the CALFED Policy Group to be consistent with the Record of Decision. The bill authorized the expenditure of \$800 million for water supply, water management, ecosystem restoration and watershed management, water quality improvements, levee stability, the science program, and oversight and coordination. Federal agencies would have been required to: (1) coordinate their activities with the stage agencies; (2) cooperate with local and tribal governments and the public; and (3) implement the Program using the best available scientific information and scientific review. Directed the Secretary and the Federal agency heads to operate under the CALFED Bay-Delta Program Implementation MOU until a permanent governing structure is developed with California counterparts. Passed the Senate Energy and Natural Resources Committee 18–5 on 06/05/02.



H.R. 3208 (Calvert) Western Water Security Enhancement Act would have authorized funding through the Secretary of the Interior for the implementation of the CALFED Bay-Delta Program to achieve increased water yield and environmental benefits, as well as improved water system reliability, water quality, water use efficiency, watershed management, water transfers, and levee protection. The Federal share of CALFED program costs and expenses were specified. It also prescribed the process for authorizing appropriations for the Federal share of the costs of implementing program elements set forth in the Bay-Delta Plan in order to maintain balanced implementation in all program areas. The bill provided for the creation of the Water Security Board and directed the Secretary of the Interior and the State of California to develop a proposal to establish this Board to manage CALFED program operations and to otherwise provide for the long-term implementation of the program. Passed the Resources Committee 24–18 on 11/7/01.

OTHER TOPICS

SB 482 (Kuehl) Salton Sea (Chapter 617) makes legislative findings concerning the Salton Sea and the Quantification Settlement Agreement. The bill imposes certain time limits on actions or proceedings regarding state or local actions taken pursuant to the Quantification Settlement Agreement. It authorizes the Department of Fish and Game to approve the take of species resulting from specified environmental impacts attributable to the implementation of the agreement.



SB 1870 (Speier) San Francisco Bay Area Regional Water System (Chapter 849) creates the San Francisco Bay Area Regional Water System Financing Authority consisting of San Francisco, 23 public agencies that purchase water from the city, Stanford University and the California Water Service Company. The bill authorizes the authority to issue revenue bonds to improve the reliability of San Francisco's regional water system.

AB 1823 (Papan) Regional Water Systems (Chapter 841) enacts the Wholesale Regional Water System Security and Reliability Act. The City of San Francisco is required to adopt a capital improvement program and an emergency response plan for the Hetch Hetchy Water System. The system would distribute available water during any interruption to all customers on an equitable basis. The bill also requires the Department of Health Services to conduct an audit relating to the Bay Area regional water system and an audit of other regional water systems.

AB 2058 (Papan) Bay Area Water Supply and Conservation Agency (Chapter 844) enacts the Bay Area Water Supply and Conservation Agency Act. It provides for the formation of the Bay Area Water Supply and Conservation Agency by 26 public entities that purchase water from San Francisco. The bill requires the adoption of resolutions by those agencies as to whether to form and join the agency. Requires the Board of Supervisors of San Mateo County to determine whether or not resolutions to form and join the agency have been adopted.

SUMMARY OF CALIFORNIA BAY-DELTA AUTHORITY ACT (SB 1653)

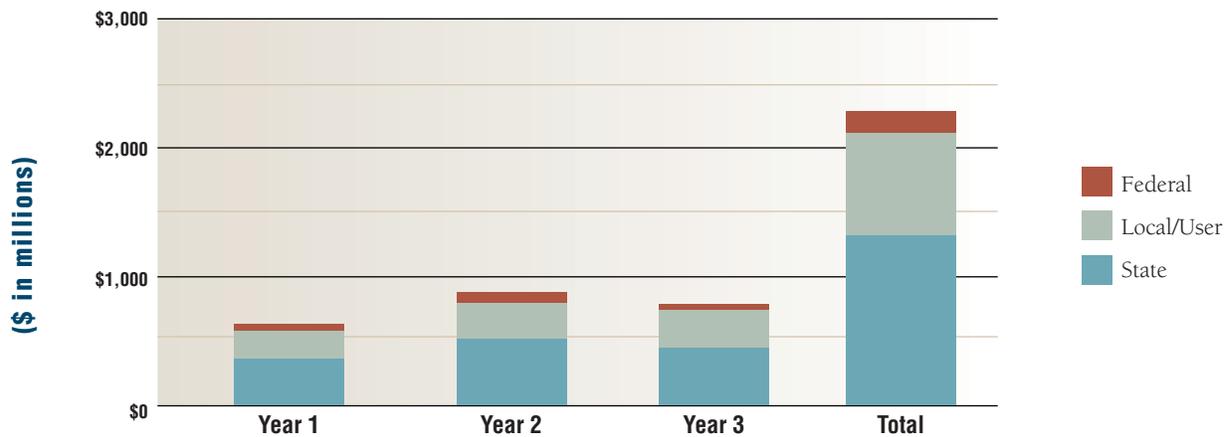
Governance Feature	Provision
Defines the California Bay-Delta Program	<ul style="list-style-type: none"> ■ Program consists of actions and commitments consistent with the goals and objectives described in the CALFED August 28, 2000 Record of Decision. ■ Divides the Program into 5 regions: Delta, Bay, Sacramento Valley, San Joaquin Valley, and Southern California.
Establishes the California Bay-Delta Authority and Defines the Authority's Role	<p>Authority created in the Resources Agency to:</p> <ul style="list-style-type: none"> ■ Provide accountability ■ Ensure balanced implementation ■ Develop and implement program tracking, monitoring & assessment. ■ Use sound science ■ Assure public involvement & outreach ■ Coordinate and integrate existing & future government programs
Membership	<p>Members of the Authority:</p> <p>State:</p> <ul style="list-style-type: none"> Secretary for Resources Secretary for Cal-EPA Secretary for Food and Agriculture Director of Water Resources Director of Fish & Game Director of Health Services <p>Federal:</p> <ul style="list-style-type: none"> Secretary, Dept. of Interior Reg. Admin. US EPA Fish & Wildlife Service Bureau of Reclamation Army Corps of Engineers Nat. Marine Fisheries Service <p>Public Members:</p> <ul style="list-style-type: none"> Five members representing each of the CALFED regions One member from the Bay-Delta Public Advisory Committee Two at large members appointed by the Senate and Assembly <p>Ex-Officio (non-voting):</p> <ul style="list-style-type: none"> The chair and vice-chair of the Senate and Assembly water policy committees.
Voting Rule	<p>Actions approved by the Authority require majority vote of the Authority members with voting powers.</p>
Annual Program Planning	<ul style="list-style-type: none"> ■ Annual program plans identify programs & funds to be managed & implemented consistent with the California Bay-Delta Program (Category A programs).

Annual Program Planning <i>continued...</i>	<ul style="list-style-type: none"> ■ Annual program plans include: <ul style="list-style-type: none"> -program priorities, work plans & budgets -tracking and performance measures -public involvement and outreach -science ■ Director integrates program plans, Authority reviews & approves program plans.
Annual Reporting	Provides report to Governor, Secretary of the Interior, Legislature and Congress by December 15 each year.
Program Management	<ul style="list-style-type: none"> ■ Defines the State and federal entities responsible for managing specific program elements: <ul style="list-style-type: none"> Levees – DWR, F&G, & USACE Water Quality – DHS, SWRCB & US EPA Storage & Conveyance – DWR & USBR Water Use Efficiency and Transfers – DWR, SWRCB & USBR Watershed— Res. Agency, SWRCB, DWR, F&G, NRCS, US EPA, & USFW. ■ Ecosystem Restoration – F&G, USFW, and NMFS ■ Science – the Authority ■ Environmental Water Acct – DWR, F&G, USBR, USFW & NMFS.
Director	Appointed by the Governor
Lead Scientist	Appointed by and reports to the Authority.
Science Program	<ul style="list-style-type: none"> ■ Review & improve scientific knowledge and understanding. ■ Use adaptive management & the best scientific information in implementing the program ■ Assure independent review of technical & scientific performance of the program.
Public Advisory Committee	Establishes a Public Advisory Committee, which represents a broad range of interests and perspectives.
Independent Science Board	Establishes an Independent Science Board to provide independent scientific review for the program.
Other Powers and Duties	<ul style="list-style-type: none"> ■ Receive and disburse funds. ■ Issue contracts. ■ Establish pilot program with state control agencies to increase administrative efficiencies. ■ Resolve conflicts and disputes between agencies relative to implementation of the Program
Sunset Provision	Authority expires 01/01/06 unless federal authorizing legislation has been enacted.

In the Bay-Delta Plan, CALFED projected expenditures for each program element over a seven year period (Stage 1). In many cases the funding actually appropriated has been less than the amount projected in the plan. The primary source of funding in the first three years of implementation has been state bond funds. State bond funds will continue to support critical components of the Program due to the passage in November 2002 of Proposition 50, The Water Security Clean Drinking Water, Coastal and Beach Protection Act of 2002. Proposition 50 funds will become available primarily in the state fiscal year 2003-2004, beginning July 1, 2003.

The following bar chart and tables summarize the Program's fiscal information. The bar chart shows the CALFED funding by state, federal, local and water users for the three years. The first three tables summarize the funding appropriated that supports the Program. The last table displays the original Stage 1 projected expenditures included in the Bay-Delta Plan.

CALFED PROGRAM FUNDING (cumulative to date)
 STATE, FEDERAL & LOCAL WATER USER



CALFED BAY-DELTA PROGRAM
YEAR 3 FUNDING BY SOURCE (\$ IN MILLIONS)

	TOTAL FUNDING	STATE FUNDING ¹					FEDERAL FUNDING ²					USER/LOCAL FUNDING ³			
		GF	PROP 204	PROP 13	PROP 50	OTHER STATE	SUBTOTAL	USBR/W&RR ⁴	USACE	OTHER FED	SUBTOTAL	SWP	CVPIA RF	LOCAL	SUBTOTAL
ECOSYSTEM RESTORATION	\$182.5	\$3.2	\$126.8	\$10.0			\$140.0	\$0.6	\$0.6		\$1.2	\$7.3	\$17.5	\$16.5	\$41.3
ENVIRONMENTAL WATER ACCOUNT	\$35.1	\$0.9	\$28.2				\$29.1	\$6.0			\$6.0				
WATER USE EFFICIENCY	\$302.1	\$4.2		\$44.9	\$10.0	\$1.9	\$61.0	\$18.1			\$18.1			\$223.0	\$223.0
WATER CONSERVATION	(\$46.7)	(\$4.2)		(\$27.4)		(\$1.9)	(\$33.5)	(\$2.2)			(\$2.2)			\$11.0	\$11.0
WATER RECYCLING	(\$255.4)			(\$17.5)	(\$10.0)		(\$27.5)	(\$15.9)			(\$15.9)			\$212.0	\$212.0
WATER TRANSFERS	\$0.6	\$0.6					\$0.6								
WATERSHED	\$33.1	\$2.5		\$10.0	\$20.6		\$33.1								
DRINKING WATER QUALITY	\$34.7	\$2.1		\$12.1	\$20.5		\$34.7								
LEVEES	\$7.3	\$3.9					\$3.9		\$0.1		\$0.1	\$0.3		\$3.0	\$3.3
STORAGE	\$108.6	\$12.4		\$89.7			\$102.1	\$6.5			\$6.5				
SURFACE	(\$15.2)	(\$8.7)					(\$8.7)	(\$6.5)			(\$6.5)				
GROUNDWATER & OTHER ACTIVITIES	(\$93.4)	(\$3.7)		(\$89.7)			(\$93.4)								
CONVEYANCE	\$48.3	\$2.5		\$19.9			\$22.4	\$2.0			\$2.0	\$18.9	\$5.0		\$23.9
SCIENCE	\$19.3	\$3.3		\$2.0		\$1.2	\$6.5	\$4.0		\$1.1	\$5.1	\$6.2	\$1.3	\$0.2	\$7.7
CALFED SCIENCE	(\$2.7)	(\$2.7)					(\$2.7)								
IEP	(\$14.6)	(\$0.3)				(\$1.2)	(\$1.5)	(\$4.0)		(\$1.1)	(\$5.1)	(\$6.2)	(\$1.3)	(\$0.2)	(\$7.7)
OVERSIGHT & COORDINATION	\$13.2	\$10.6					\$10.6	\$2.5	\$0.1		\$2.6				
SUBTOTAL	\$784.8	\$46.2	\$155.0	\$188.6	\$51.1	\$3.1	\$444.0	\$39.7	\$0.8	\$1.1	\$41.6	\$32.7	\$23.8	\$242.7	\$299.2

1 State funding includes General Fund (GF), bond funds (Proposition 204 & 13), and other State funds. A \$16.5 million GF reduction and a \$16 million increase in Prop 50 has been proposed by the Governor and will be considered by the Legislature in January 2003. Other State funds include Department of Water Resources funds for the Water Conservation Program, and Interagency Ecological Program (IEP) funding from various departments for the Science Program.

2 Federal Funding is still proposed and subject to federal appropriation. It includes U.S. Bureau of Reclamation Water and Related Resources (USBR W&RR), U.S. Army Corps of Engineers (USACE) appropriations, and other federal sources (Other Fed). Other Fed includes Interagency Ecological Funding from various federal departments for the Science Program.

3 User subtotal includes State Water Project Funds and CVPIA Restoration Funds that are collected from state water contractors and Central Valley Project water users, but are budgeted and appropriated through the federal and state governments. CVPIA restoration funds have not been approved and are subject to federal appropriation. ERP and WUE amounts include estimates for local cost sharing for grant projects. WUE amount also includes expected local cost sharing for federal Title XVI recycling projects. Levees amount includes local cost share for levee subventions. Science amount is SWP and other local contributions to the IEP. Additional local contributions in other program areas will be estimated as information is available.

4 Includes a proposed \$15 million for Bay-Delta activities

**CALFED BAY-DELTA PROGRAM
 YEAR 2 FUNDING BY SOURCE** (\$ IN MILLIONS)

	TOTAL FUNDING	STATE FUNDING ¹					FEDERAL FUNDING ²				USER/LOCAL FUNDING ³			
		GF	PROP 204	PROP 13	OTHER STATE	SUBTOTAL	USBR/W&RR ⁴	USACE	OTHER FED	SUBTOTAL	SWP	CVPIA RF	LOCAL	SUBTOTAL
ECOSYSTEM RESTORATION	\$206.8	\$3.9	\$141.5	\$2.4		\$147.8	\$1.7	\$0.4	\$2.0	\$4.1	\$7.3	\$31.1	\$16.5	\$54.9
ENVIRONMENTAL WATER ACCOUNT	\$41.9	\$0.8	\$28.2	\$0.0		\$29.0	\$12.9			\$12.9				
WATER USE EFFICIENCY	\$133.1	\$7.6		\$11.1	\$13.6	\$32.3	\$25.5		\$18.2	\$43.7			\$57.1	\$57.1
WATER CONSERVATION	(\$22.4)	(\$7.6)	\$141.5	(\$9.9)	(\$1.6)	(\$19.1)	(\$2.1)			\$2.1			(\$1.2)	(\$1.2)
WATER RECYCLING	(\$250.2)			(\$1.2)	(\$12.0)	(\$13.2)	(\$23.4)		(\$18.2)	\$41.6			\$55.9	\$55.9
WATER TRANSFERS	\$0.6	\$0.4				\$0.4	\$0.2			\$0.2				
WATERSHED	\$15.8	\$5.8		\$10.0		\$15.8								
DRINKING WATER QUALITY	\$15.1	\$3.1		\$12.0		\$15.1								
LEVEES	\$17.5	\$4.4	\$9.6			\$14.0		\$0.2		\$0.2	\$0.3		\$3.0	\$3.3
STORAGE	\$124.0	\$12.3		\$102.2		\$114.5	\$9.5			\$9.5				
SURFACE	(\$18.6)	(\$9.1)				(\$9.1)	(\$9.5)			\$9.5				
GROUNDWATER	(\$105.3)	(\$3.2)		(\$102.1)		(\$105.3)								
CONVEYANCE	\$54.6	\$3.3		\$28.2		\$31.5	\$2.3			\$2.3	\$17.3	\$3.5		\$20.8
SCIENCE	\$22.1	\$3.8			\$2.3	\$6.1	\$7.3		\$1.4	\$8.7	\$6.2	\$0.9	\$0.2	\$7.3
CALFED SCIENCE	(\$3.5)	(\$3.2)				(\$3.2)			(\$0.3)	\$0.3				
IEP	(\$18.6)	(\$0.6)			(\$2.3)	(\$2.9)	(\$7.3)		(\$1.1)	\$8.4	(\$6.2)	(\$0.9)	(\$0.2)	(\$7.3)
OVERSIGHT & COORDINATION	\$10.8	\$8.3				\$8.3	\$2.3	\$0.2		\$2.5				
SUBTOTAL	\$642.3	\$53.7	\$179.3	\$165.9	\$15.9	\$414.8	\$61.7	\$0.8	\$21.6	\$84.1	\$31.1	\$35.5	\$76.8	\$143.4

1 State funding includes General Fund (GF) and bond funds (Proposition 204 & 13). Other State includes State Revolving Funds (\$12.0m) from the State Water Resources Control Board for the Water Recycling Program, DWR funds (\$1.6m) that contribute to the Water Conservation Program, and Interagency Ecological Program (IEP) funding (\$2.3m) from various departments that contributes to the Science Program.

2 Federal Funding includes U.S. Bureau of Reclamation Water and Related Resources (USBR W&RR), U.S. Army Corps of Engineers appropriations (USACE), and other federal sources (Other Fed). Other Fed includes U.S.

Fish and Wildlife Service funding (\$1.2m) and National Marine Fisheries Service funding (\$0.81m) for the Ecosystem Restoration Program, U.S. Environmental Protection Agency funding (\$18.2m) for the Water Recycling Program, and IEP funding from various departments for the Science Program.

3 User/Local Funding subtotal includes State Water Project Funds (SWP) and CVPIA Restoration Funds that are collected from state water contractors and Central Valley Project water users, but are budgeted and appropriated through the state and federal governments. ERP and WUE amounts include estimates for local cost

sharing for grant projects. WUE amount also includes local cost sharing for federal Title XVI recycling projects. Levee amount includes local cost share for levee subventions. Science amount includes local contributions to the IEP.

4 Includes \$28 million for CALFED from PL. 107-66.

CALFED BAY-DELTA PROGRAM
YEAR 1 FUNDING BY SOURCE (\$ IN MILLIONS)

	TOTAL FUNDING	STATE FUNDING ¹					FEDERAL FUNDING ²				USER/LOCAL FUNDING ³			
		GF	PROP 204	PROP 13	OTHER STATE	SUBTOTAL	USBR/W&RR	USACE	OTHER FED ²	SUBTOTAL	SWP	CVPIA RF	LOCAL	SUBTOTAL
ECOSYSTEM RESTORATION	\$102.9	\$3.8	\$9.1	\$44.3	\$1.9	\$59.1	\$3.4		\$6.4	\$9.8	\$7.3	\$15.7	\$11.0	\$34.0
ENVIRONMENTAL WATER ACCOUNT	\$57.4	\$57.4				\$57.4								
WATER USE EFFICIENCY	\$195.0	\$15.4		\$3.2	\$1.6	\$20.2	\$26.0			\$26.0			\$148.8	\$148.0
WATER CONSERVATION	(\$31.2)	(\$15.4)		(\$3.2)	(\$1.6)	(\$20.2)	(\$1.9)			(\$1.9)			(\$9.1)	(\$9.1)
WATER RECYCLING	(\$163.8)						(\$24.1)			(\$24.1)			(\$139.7)	(\$139.7)
WATER TRANSFERS	\$0.5	\$0.5				\$0.5								
WATERSHED	\$33.0	\$20.3		\$1.0	\$21.3			\$2.3	\$2.3				\$9.5	\$9.5
DRINKING WATER QUALITY	\$37.9	\$13.9		\$24.0	\$37.9									
LEVEES	\$35.4	\$0.1	\$1.7	\$28.5	\$30.3					\$0.6			\$4.5	\$5.1
STORAGE	\$94.1	\$23.3		\$69.0	\$92.3	\$1.8			\$1.8					
SURFACE	(\$13.2)	(\$11.4)			(\$11.4)	(\$1.8)			(\$1.8)					
GROUNDWATER	(\$80.9)	(\$11.9)		(\$69.0)	(\$80.9)									
CONVEYANCE	\$23.7	\$5.5		\$4.8	\$10.3	\$2.6			\$2.6	\$9.7	\$1.0	\$1.0	\$10.7	
SCIENCE	\$29.2	\$14.3		\$1.9	\$16.2	\$4.0	\$0.2	\$1.9	\$6.1	\$6.2	\$0.2	\$0.2	\$6.6	
CALFED SCIENCE	(\$14.9)	\$14.1			(\$14.1)			(\$0.8)	(\$0.8)					
IEP	(\$14.0)	\$0.2		(\$1.9)	(\$2.1)	(\$4.0)	(\$0.2)	(\$1.1)	(\$5.3)	(\$6.2)	(\$0.2)	\$0.2	(\$6.6)	
OVERSIGHT & COORDINATION	\$14.5	\$14.2			\$14.2		\$0.3		\$0.3					
TOTAL	\$623.3	\$168.7	\$10.8	\$173.8	\$6.4	\$359.7	\$37.8	\$0.5	\$10.6	\$48.9	\$23.8	\$16.9	\$174.0	\$214.7

1 State funding sources include General Fund (GF), bond funds (Proposition 204 & Proposition 13), and other state funding sources (Other State). Other State includes state matching funds for projects funded through the ERP 2001 Proposal Solicitation Package (\$1.9m), Watershed 2001 PSP (\$1.0m), and includes DWR Funds (\$1.6m) for water conservation, and Interagency Ecological Program (IEP) funding (\$1.9m) from various departments for the Science Program.

2 Federal funding sources include U.S. Bureau of Reclamation Water and Related Resources (USBR W&RR), U.S. Army Corps of Engineers appropriations (USACE), and Other Federal

sources (Other Fed). Other Fed includes federal matching funds for projects funded through the ERP 2001 Proposal Solicitation Package (\$6.4m), Watershed 2001 PSP (\$2.3m), USGS funding for the Science Program (\$0.8), and IEP funding from U.S. Fish & Wildlife Service (\$0.231), U.S. Geological Survey (\$0.782), National Marine Fisheries Service (\$0.035), and U.S. Environmental Protection Agency (\$0.04) for the Science Program.

3 User/ Local Funding subtotal includes State Water Project Funds (SWP) and CVPIA Restoration Funds that are collected from state water contractors and Central Valley Project water users, but are budgeted and appropriated through the federal and state

governments. ERP amount includes local cost share for the proposals recommended for funding in Year 1 through the 2001 PSP. Water Use Efficiency and Watershed amounts include local cost sharing for grant projects funded through PSPs. Water Use Efficiency amount also includes funding for Title XVI water recycling programs/projects. Levees amount includes local cost share for levee subventions. Science amount is SWP and local contributions to the IEP.

CALFED BAY-DELTA PROGRAM

STAGE 1 PROJECTED EXPENDITURES (\$ IN MILLIONS)

PROGRAM ELEMENT	PROGRAM YEAR(S)								COST SHARING		
	1	2	3	4	5	6	7	TOTAL	FED	STATE	OTHER
ECOSYSTEM RESTORATION ¹	\$235	\$198	\$163	\$168	\$220	\$218	\$218	\$1,420	\$510	\$510	\$400
ENVIRONMENTAL WATER ACCOUNT	\$50	\$50	\$50	\$50				\$200	\$100	\$100	
WATER USE EFFICIENCY	\$31	\$62	\$299	\$641	\$641	\$641	\$641	\$2,956	\$759	\$759	\$1,438
WATER TRANSFERS	\$3	\$3	\$3	\$2	\$2	\$1	\$1	\$15	\$7.5	\$7.5	
WATERSHED ²	\$40	\$45	\$45	\$45	\$45	\$40	\$40	\$300	\$138	\$138	\$24
DRINKING WATER QUALITY ³	\$41	\$78	\$82	\$110	\$116	\$120	\$128	\$675	\$200	\$200	\$275
LEVEES ⁴	\$33	\$76	\$78	\$82	\$45	\$65	\$65	\$444	\$142	\$88	\$34
STORAGE ⁵	\$50	\$75	\$138	\$208	\$266	\$349	\$339	\$1,425	\$237	\$237	\$200
CONVEYANCE ⁶	\$29	\$66	\$150	\$198	\$220	\$160	\$98	\$921	\$188	\$381	\$193
SCIENCE	\$25	\$30	\$45	\$50	\$50	\$50	\$50	\$300	\$150	\$150	
TOTAL⁷	\$537	\$683	\$1,053	\$1,554	\$1,605	\$1,644	\$1,580	\$8,656	\$2,432	\$2,571	\$2,564

¹Proposed cost sharing for the ERP is a split between users (\$35 million per year from a new broad-based fee & \$15 million per year in CVPIA Restoration Funds), and public dollars (assumed split equally between federal and state sources of funding). This table assumes revenues from new broad based fees would become available beginning in 2003.

²Cost shares include a 10% contribution from locals for community based watershed activities, with the rest funded equally between federal and state sources.

³In general cost sharing is assumed to be 50/50 fed/state or 33/33/33 fed/state/user, depending on the action. Some water quality actions assume federal and state funding in the initial two years, with 100% of the funding in the later years from users.

⁴Total cost includes the Suisun Marsh Levee Program, which provides substantial ecosystem, water quality and flood protection benefits. Allocations of cost shares for this Program are not included in this table.

⁵Initial funding will be largely state and federal sources. The cost share for surface storage construction has not been determined. Final cost shares (including reimbursements by beneficiaries) will depend on allocation of costs and identification of beneficiaries for individual projects. Cost sharing for full-scale groundwater storage projects assumes a 50% local match.

⁶Total includes rough estimate for construction of the San Luis Reservoir Low Point Project, but cost sharing is not included because cost shares have not been determined.

⁷Cost sharing dollars do not total \$8.6 billion because allocation of cost shares have not been determined for all levee, storage and conveyance activities.

CALIFORNIA'S WATER FUTURE: A FRAMEWORK FOR ACTION – JUNE 9, 2000

***FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT/REPORT
(EIS/EIR) – JULY 21, 2000***

- Main Document (Impact Analysis) – 1,200 pages
- Executive Summary of EIS/EIR Main Document – 40 pages
- Phase II Report – 200 pages
- Implementation Plan – 190 pages
- Ecosystem Restoration Program Plan – 1,200 pages, four volumes
- Levee System Integrity Program Plan – 500 pages
- Water Quality Program Plan – 300 pages
- Water Use Efficiency Program Plan – 190 pages
- Water Transfer Program Plan – 100 pages
- Watershed Program Plan – 100 pages
- Multi-species Conservation Strategy – 500 pages
- Comprehensive Monitoring Assessment & Research Program Plan – 150 pages
- Response to Comments – 1,500 pages, three volumes

RECORD OF DECISION – AUGUST 28, 2000

ERP DRAFT STAGE 1 IMPLEMENTATION PLAN

These documents are available on CD or on our website.



The CALFED Bay-Delta Program is a collaborative effort among 23 state and federal agencies (CALFED agencies) to improve water supplies in California and the health of the San Francisco Bay-Sacramento-San Joaquin River Delta Watershed. Under the current governance structure, the CALFED agencies cooperatively implement the Program through their respective agency program authorities, e.g., Federal Central Valley Project Improvement Act, State Proposition 13, State Senate Bill 23, etc. and pertinent funding mechanisms.

In their totality, the individual actions of the CALFED agencies represent the projects and accomplishments shown throughout this report. Additionally, the report's accomplishments are in some instances cumulative in that actions and projects undertaken by CALFED agencies have been ongoing and often pre-date the formation of the CALFED Program.

A fundamental premise of the Program is that the agencies can best meet their individual responsibilities by sharing information and cooperating with each other. The Program relies on the continuous cooperation of each participating agency, exercising its own legal authority and discretion.