

DRAFT

California Bay-Delta Program

Environmental Water Account Multi-Year Program Plan (Years 5-8)

Implementing Agencies:

Department of Water Resources

Department of Fish and Game

United States Bureau of Reclamation

United States Fish and Wildlife Service

United States National Marine Fisheries Service

April, 2004



Goals, Objectives, and Targets

Goals and Objectives:

The Environmental Water Account (EWA) has been established to provide water for the protection and recovery of at-risk fish species beyond water available through existing regulatory actions related to the operations of the State Water Project (SWP) and the Central Valley Project (CVP). EWA's purpose is to provide protection to the at-risk fish species of the Bay-Delta estuary through environmentally beneficial changes in SWP/CVP operations at no uncompensated water cost to the projects' water users. This approach to fish protection requires the acquisition of alternative sources of project water supply, called "EWA assets," that are to be used to augment streamflows, Delta outflows, to modify exports, to provide fishery benefits, and to replace the regular project water supply interrupted by the changes to project operations for EWA purposes.

The CALFED Record of Decision (ROD) provided a commitment, subject to specified conditions and legal requirements, that for the first four years of Stage 1, there will be no uncompensated water supply reductions, beyond existing regulatory levels, in CVP or SWP deliveries to project water users resulting from measures to protect fish under Federal or State endangered species acts. This commitment is based on the availability of three tiers of protection:

- Tier 1 is baseline water. The regulatory baseline consists of the biological opinions on winter-run salmon and delta smelt, 1995 Delta Water Quality Control Plan, and 800 TAF of CVP Yield pursuant to CVPIA Section 3406(b)(2).
- Tier 2 consists of the assets in the EWA combined with the benefits of the ERP and is an insurance mechanism that will allow water to be provided for fish protection and recovery when needed, without reducing deliveries to water users.
- Tier 3 is based upon the commitment and ability of the State and Federal Agencies to make additional water available should it be needed. In March 2002, the State and Federal Agencies prepared an implementation strategy for Tier 3, establishing a timely scientific panel process and identifying tools and funding should implementation of Tier 3 prove needed.

Targets:

The EWA plans to manage a mixture of purchased water (fixed assets), operational flexibility (variable assets), storage and exchange agreements, and deferral of scheduled delivery of water allocations by willing participants (source shifting). Depending on year-type, specific quantities of water are purchased from willing sellers and used for fish actions when needed, or purchased and stored to be used at a later time for fish actions. Variable quantities of assets are provided primarily through operational agreements and flexibility that allow EWA to take advantage of water and the pumping capacity that becomes available in the Delta. The Program's proposed targets (as of October, 2003) would:

- Provide an average of 374 TAF of water for fish habitat actions (250-490 TAF, depending on year type).
- Acquire fixed assets of 210 TAF in critical, 230 TAF in dry, and 250 TAF in other year types, measured in south-of- Delta equivalents (water used to compensate for Delta pumping curtailments must be returned to the projects south of Delta). That water may be purchased and/or stored upstream of the Delta. In such cases, additional water is usually required to offset conveyance and Delta losses. (The phrase "south of Delta equivalents" indicates the net volume required after accounting for such losses).
- Acquire south-of-Delta water storage capability and/or its functional equivalent to bridge high-demand periods for the EWA. Functional equivalents may include additional purchases, agreements with the projects to carry debt, or other comparable arrangements.
- Use multi-year wet/dry year exchanges and wet year uneven exchanges to augment assets and manage EWA assets.

Water is acquired through purchases from willing sellers and by capture of surplus water. Water purchases would be from existing non-project water storage reservoirs, groundwater substitution, and cropland idling or crop substitution.

Four Year Program Evaluation:

EWA's Yearly Targets

The EWA Agencies estimate the need for fish actions (pumping curtailments in the Delta) and replacement water based on their experience over the last three years, modeling studies, and gaming studies that simulate the EWA's operations in a wide variety of hydrologic conditions. Placeholders for pumping curtailments are estimated from review of the life stages of fish, their presence over time near the Delta pumps, probable pumping rates at the project pumps, target pumping reductions, the Vernalis Adaptive Management Program, and other in-Delta actions.

Estimates of water that must be purchased as replacement water for the projects are developed from the estimates of fish actions, the prior modeling and gaming analyses, estimates of water available from operational flexibility (variable assets), and budgetary constraints. These purchase targets are estimated at 210 TAF-250 TAF depending on hydrologic year type, although there can be variations depending on actual fish behavior and hydrology. These targets for purchased water are the targets that will be used for Year 5.

Summary of EWA Activity, 2001 through 2003

Through the first three years of its operation (2001 - 2003), the concept of the EWA as presented in the CALFED ROD has implemented to provide additional protection to at-risk Bay/Delta fish species and maintain the regulatory commitments to prevent additional losses to the water supplies of the SWP and CVP contractors as a result of fish protection actions. Through the first three years of its operation EWA was able to fulfill all of its goals with the funds made available for the program by negotiating a series of annual agreements for acquiring assets from willing sellers located to the north as well as south of the Delta. The first two years of EWA, 2001 and 2002, were classified as dry, which made cross-Delta conveyance capacity available, enabling purchase of more water from upstream-of-Delta sources (where the spot-market price of water is lower than from south-of-Delta sources) and convey the water through the Delta for return to the SWP and CVP. However, due to the late spring rain in 2002, both SWP and CVP allocations to contractors getting water from the Delta increased to at least 70 percent of requests. 2003, the third year of EWA's operation, was classified as an above-normal year, and cross-Delta conveyance capacity to transfer EWA assets from the north to the south of the Delta was limited to the increment of capacity dedicated for EWA use. As a result, a substantial quantity of EWA's assets in 2003 had to be acquired from south-of-Delta sources at high spot-market prices.

The specific accomplishments of the EWA program through the first three years of operation are provided at a later section in this report, titled "Accomplishments."

Future Considerations

With the statewide demand for water for municipal and industrial use on the rise, the availability of water in the future for purchase from the spot-market on short notice is expected to decrease over time, although transfers overall will increase as more long-term agreements between buyers and sellers are enacted. The cost of spot market water is expected to rise. It is thus critically important for the EWA Agencies to pursue, as soon as possible, long-term contracts with willing sellers to ensure sufficient availability of EWA resources in the future, at mutually acceptable prices. Discussions between EWA and several sellers willing to enter into such long-term contracts are currently under way. It is imperative that funding sources be identified and sufficient funds be earmarked at this time to support the acquisition of assets from these sources in the future.

Accomplishments

The specific accomplishments of the EWA program through the years 2001 -2003 are summarized in the table below.

Water and Power Acquisitions

The Environmental Water Account obtained water through purchases and operational arrangements and used it to replace project supplies lost during pumping curtailments for fish, thus preserving water supply reliability. (2001, 2003, 2003)

Stream habitat was improved when release of EWA water from an upstream reservoir coincided with a habitat need (2001, 2002, 2003)

Water was released from river level outlets, bypassing the powerhouse at Folsom Dam to improve salmon spawning conditions and provide suitable water temperature for over-summering juvenile steelhead in the lower American River; EWA compensated for the lost generation. (2001 and 2002)

ESA-related commitments for continued operation of the CVP and SWP were provided based on a functional EWA and \$150 million in Ecosystem Restoration Program funding. (2001, 2002, 2003)

EWA Partnered with the State Water Project contractors in a 2:1 Exchange Agreement to protect some EWA assets in San Luis Reservoir that would have been lost due to the reservoir filling. The contractors received water to augment their supplies in March and returned half of this amount to the EWA after the high point in San Luis Reservoir storage in April, thus preserving the returned EWA water for fish protection actions. (2002)

EWA assets were carried over from 2002 into 2003 through a mutually beneficial three-way exchange that reduced cost for one party, provided better water quality for another party, and returned EWA water to EWA after San Luis high point when threat of losing the EWA water is negligible. (2003)

Environmental Documentation

Wherever applicable, detailed environmental review of the individual water acquisitions was undertaken by the EWA agencies, to ascertain whether the proposed acquisitions would have any negative impact on any aspect of the environment. The findings of each environmental review were detailed in a report, which was filed with the State Clearinghouse. (2001, 2002, 2003)

The Notice of Determination of the EWA Short Term EIR/EIS, pertaining to EWA transactions and operations between 2004 and 2007 (inclusive), was signed by the Department of Water Resources on March 18, 2004.

Tier 3 Reserve

The first three years of operation of EWA avoided the need for implementation of Tier 3.

Oversight and Coordination

EWA continued coordination between the Management Agencies (USFWS, NOAA Fisheries, DFG) and Project Agencies (Reclamation and DWR) to maximize opportunities to obtain and use EWA assets for fishery benefits, while helping to ensure water supply reliability to CVP and SWP water users south of the Delta . (2001, 2002, 2003)

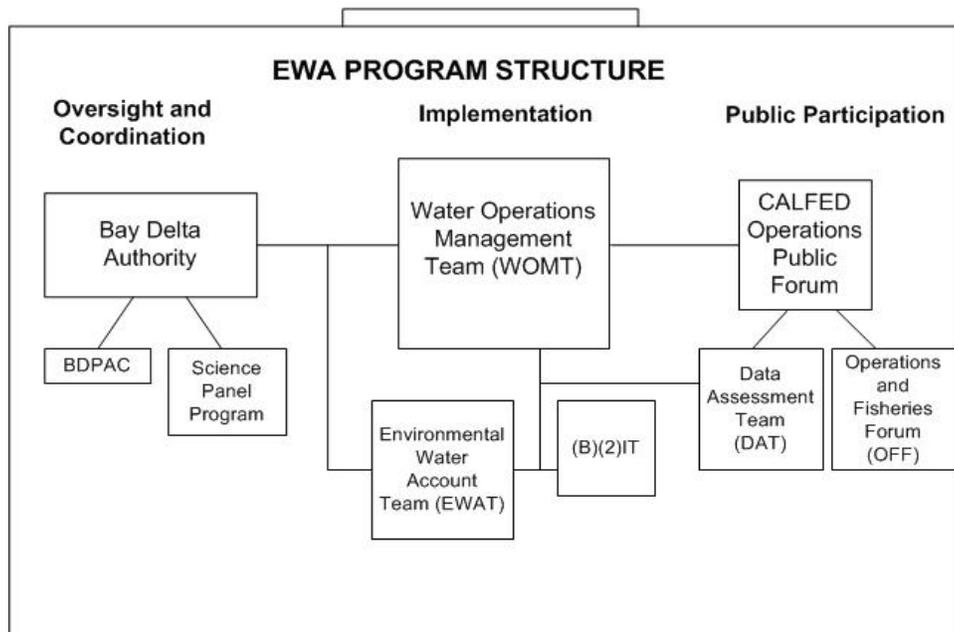
An increase in the allocation to south-of-Delta agricultural CVP contractors was made possible through coordinated management of EWA and (b)(2) water that ultimately resulted in a 70 percent allocation. (2002)

Program Structure

EWA is cooperatively implemented by three management agencies and two project agencies. The management agencies are the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NOAA Fisheries) and the California Department of Fish and Game (DFG), and the project agencies are the United States Bureau of Reclamation (Reclamation) and the California Department Water Resources (DWR). The management agencies are responsible for managing EWA assets and recommending SWP/CVP operational changes beneficial to the Bay-Delta ecosystem and/or the long-term survival of fish species, while the project agencies cooperate with the management agencies in administering the EWA and implement operational changes proposed by the management agencies, as appropriate.

The five participating agencies meet twice weekly, once at staff level through a team called the Environmental Water Account Team (EWAT) and once at management level as a group called the Water Operations Management Team (WOMT), to discuss the program and decide on program actions. Both of these teams are comprised of members from the five participating agencies. EWA activities are coordinated with the CVPIA (B)(2) Interagency Team and the WOMT, and are an integral part of the annual operating plan for the CVP and SWP. A multi-year EWA water acquisition strategy is developed as part of the annual operating plan.

In addition, various other entities work together with the participating agencies in the EWA program, through activities like coordination and oversight, review, providing information, and organizing public participation. The following chart and table illustrate the inter-relationships among these entities.



Agency	Roles and Responsibilities
California Bay-Delta Authority	<ul style="list-style-type: none"> Oversight and coordination
Department of Water Resources	<ul style="list-style-type: none"> Acquisition of water Accounting of EWA assets Approval of use of SWP facilities Implementation of EWA actions Approval of transfers by SWP contractors and other non-SWP entities
U. S. Bureau of Reclamation	<ul style="list-style-type: none"> Acquisition of water Approval of use of CVP Facilities Implementation of EWA actions Approval of federal contractor and settlement Agreement holder transfers
Department of Fish and Game	<ul style="list-style-type: none"> Manage EWA assets Coordinate EWA with CVPIA 3406 (b)(2) assets Recommend Fish Actions
U. S. Fish and Wildlife Service	<ul style="list-style-type: none"> Manage EWA assets Coordinate EWA with CVPIA 3406 (b)(2) assets Recommend Fish Actions
National Marine Fisheries Service	<ul style="list-style-type: none"> Manage EWA assets Coordinate EWA with CVPIA 3406 (b)(2) assets Recommend Fish Actions

Major Activities

This section provides a summary of the major activities scheduled during years 5 through 7 of the operation of the EWA program. It should be noted that in order to carry out the scheduled activities completely, adequate funds are essential. The following table illustrates EWA's planned activities for years 5 through 7 of operation, as well as how these activities would be impacted by the lack of sufficient funds.

Water and Power Acquisitions

Continue to Provide Protection to the Fish of the Bay-Delta Through Changes in SWP/CVP Operations – The EWA will continue its primary objective—fish protection in the Bay-Delta ecosystem through changes in SWP/CVP operations and providing water supply reliability.

Schedule: Ongoing

Short-Term Purchases from Established and New Water Sources – The EWA's strategy will continue to include short-term purchases from existing and new providers, although the volume of water acquired in this manner will provide a declining proportion of total resources.

Schedule: Ongoing

Multi-Year Purchases from Established and New Water Sources – Multi-year purchases provide some important advantages to the EWA, including increased certainty of the availability of assets and reduced unit cost. Multi-year agreements are expected to be a core part of acquisition strategy.

Schedule: Ongoing

Assess SWP/CVP Demand Buy Down – Explore ways for the EWA to pay SWP/CVP contractors to forego a portion of their requested project water in return for compensation from EWA. This option would allow the EWA to receive credit toward SWP/CVP water debt by this compensated reduction in use by some SWP water contractors.

Schedule: Ongoing

Evaluate the Potential for Land Retirement and Drainage Mitigation for EWA Assets – Conduct discussions with parties in the San Joaquin Valley outside the Westlands Water District that desire to retire drainage-impacted lands, thereby potentially making the water supply available to the EWA. The EWA Team plans to review this option as a means to address depletion of banked groundwater supplies in the San Joaquin Valley available for the EWA purchase in future years.

Schedule: Ongoing

Explore Coordination of New Bullards Bar and Oroville Reservoir Operations – Explore operational coordination of existing non-SWP/CVP reservoirs with the SWP/CVP flood control and water supply systems to develop contractual agreements for additional long-term EWA water supply benefits.

Schedule: Ongoing

Investigate Groundwater Banking Capability – Initiate consideration of storage proposals south of the Delta to provide in-ground storage for EWA assets.

Schedule: Ongoing

Funding Issues: The availability of full funding is necessary for EWA to carry out the above activities in their entirety. All of these activities are directly or indirectly related to protecting the at-risk fish of the Bay-Delta and precluding any water supply losses to the SWP and CVP water users. In the event full funding is not available, one or more of these activities will have to be curtailed or discontinued, which would adversely impact current and/or future EWA operation. For example, if sufficient funds are not available for the acquisition of water and power assets through short and long-term contracts with willing sellers, the EWA fishery agencies will be unable to continue providing regulatory commitments, which could result in uncompensated cuts in SWP and CVP pumping. Similarly, lack of sufficient funds would hamper efforts to explore other means of enhancing the cost-effectiveness of the EWA program – e.g., through SWP/CVP demand buydown, land retirement and drainage mitigation for EWA assets, coordinated reservoir operations, and increased water banking capability. The loss of such assets will reduce the ability of the EWA agencies to provide the fish protections, water supply assurances, and implement the EWA program in an effective manner, and is likely to decrease the asset diversity and increase the cost of acquired assets well beyond the level obtainable through long-term agreements.

Environmental Documentation

Complete the EWA Short Term EIR/EIS – USBR is the lead for the completion of the EWA EIR/EIS contract; DWR is the CEQA lead agency and USBR is the NEPA lead agency. DFG, USFWS and NOAA Fisheries are cooperating agencies. This EIR/EIS covers EWA operations, using existing facilities through 2007. Acquisition from new sources may require supplemental CEQA and/or NEPA coverage. Schedule: Completed, March 2004.

Complete the EWA Long Term EIR/EIS - USBR is the lead for the completion of the EWA EIR/EIS contract; DWR is the CEQA lead agency and USBR is the NEPA lead agency. DFG, USFWS and NOAA Fisheries are cooperating agencies. This EIR/EIS covers EWA operations for the long-term EWA. Acquisition from new sources may require supplemental CEQA and/or NEPA coverage. Schedule: Expected completion - November 2005

Funding Issues: The EWA program cannot function without environmental coverage of its operation. The recently-completed EWA EIR/EIS will cover EWA operations through 2007. The EWA Long Term EIR/EIS is intended for EWA operations beyond 2007, incorporating a broader range of assets and management strategies. Prior to the continuation of EWA beyond 2007, the EWA Long Term EIR/EIS must be completed. The absence of adequate funds could adversely impact the quality and integrity of the EWA Long Term EIR/EIS, which, in turn, could hamper EWA operation beyond 2007

Tier 3 Reserve

Ensure Availability of Assets for Tier 3 if needed–While negotiating contracts for acquisition of EWA (Tier 2) assets, ensure that options and/or assets are acquired sufficient to cover Tier 3 water purchases as well, if needed. Schedule: Ongoing

Funding Issues: It has not been necessary to implement Tier 3 protection during the 3 years since the CALFED ROD. If, in the future, EWA assets are exhausted and a pumping curtailment is necessary to avoid jeopardy to a listed species, and Tier 3 cannot be implemented due to lack of sufficient funds, the resulting uncompensated cuts in SWP and CVP pumping could lead to water losses to the SWP and CVP contractors, and increased conflict over Delta operations.

Oversight and Coordination

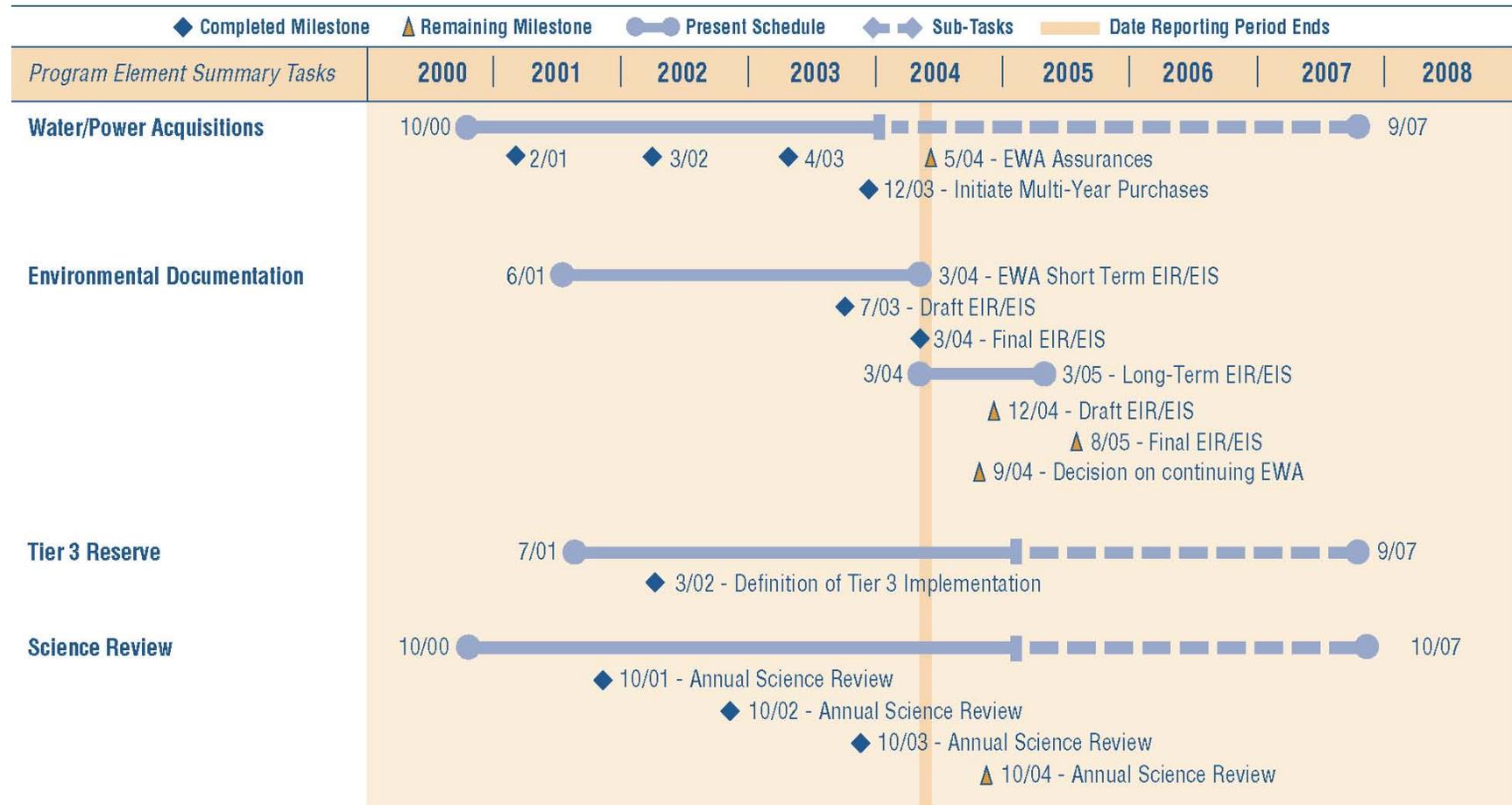
Make a decision on continuation of EWA beyond September 30, 2004 – The ROD specifies that the EWA and the program-level commitments expire September 30, 2004, unless extended by written agreement among the five EWA agencies. Schedule: To be completed by September 2004

Continue Participation in the Planning of California Bay-Delta Program Storage and Conveyance Programs – An important way the EWA can obtain some of the long-term water assets needed to assure fishery protection and water supply reliability is obtaining conveyance capacity and storage rights in new or expanded reservoirs, as envisioned in the ROD. Several projects have been proposed, including the expanding the existing Los Vaqueros, Shasta and Folsom reservoirs; the Delta Wetlands Project; the Sites Reservoir; and the Westlake Farms Multi-Benefit Reservoir. Schedule: Ongoing

Science Review - The Science Program Sponsored EWA Technical Review Panel will evaluate EWA program performance. Schedule: Ongoing

Funding Issues: The oversight and coordination tasks listed above pertain to EWA's continuance beyond 2004, EWA's ability to obtain long-term water assets, and providing a review of EWA's past performance and guidelines for future performance – i.e., collectively, these tasks are directly related to enhancing and optimizing EWA's operation in the future. The absence of adequate funds to fully carry out these tasks would impair the efficiency of future EWA operation.

Schedule



Integrating Science, Environmental Justice, and Tribal Relations

Science:

The EWA program operates on a water year basis. During the fall of each year, the year's activities are reviewed by the Science Program Sponsored EWA Technical Review Panel (Panel) which looks at the overall concept of EWA and its plans, EWA actions (uses of water and actions to protect fish), and the technical basis for actions that took place during the year.

The EWA program was initiated in August 2000, and the first Panel review was conducted in October 2001. The Panel recommended that State and Federal agencies provide sufficient agency staff time to support the development of the EWA. The Panel also provided various recommendations aimed at increasing scientific credibility by enhancing the data reliability and improving flexibility in EWA management by considering a wider set of management objectives. To accommodate these recommendations, EWA prepared Budget Change Proposals to request five more positions for Year 4.

The second Panel review, conducted in October 2002, recommended incorporating flexibility to carry over program funds from one year to the next. \$10 million of EWA's Proposition 204 funds were carried over from 2002 to 2003 and over \$7 million of Proposition 204 funds were carried over from 2003 to 2004, which allowed the program to continue even though Federal funds were less than needed.

The third Panel review was conducted in October 2003. The Panel recommended that the EWA agencies formally review and summarize the accomplishments and lessons learned from the current four-year experiment and to do a program wide review of EWA every 4 to 5 years thereafter. Another Panel recommendation was to continue coordination with other CalFed programs for upstream flow action and Delta action benefits. The Panel will review Year 4 program performance and the first four years of EWA implementation relative to continuance of EWA, in the fall of 2004. The review will be coordinated with the Science Program work plan.

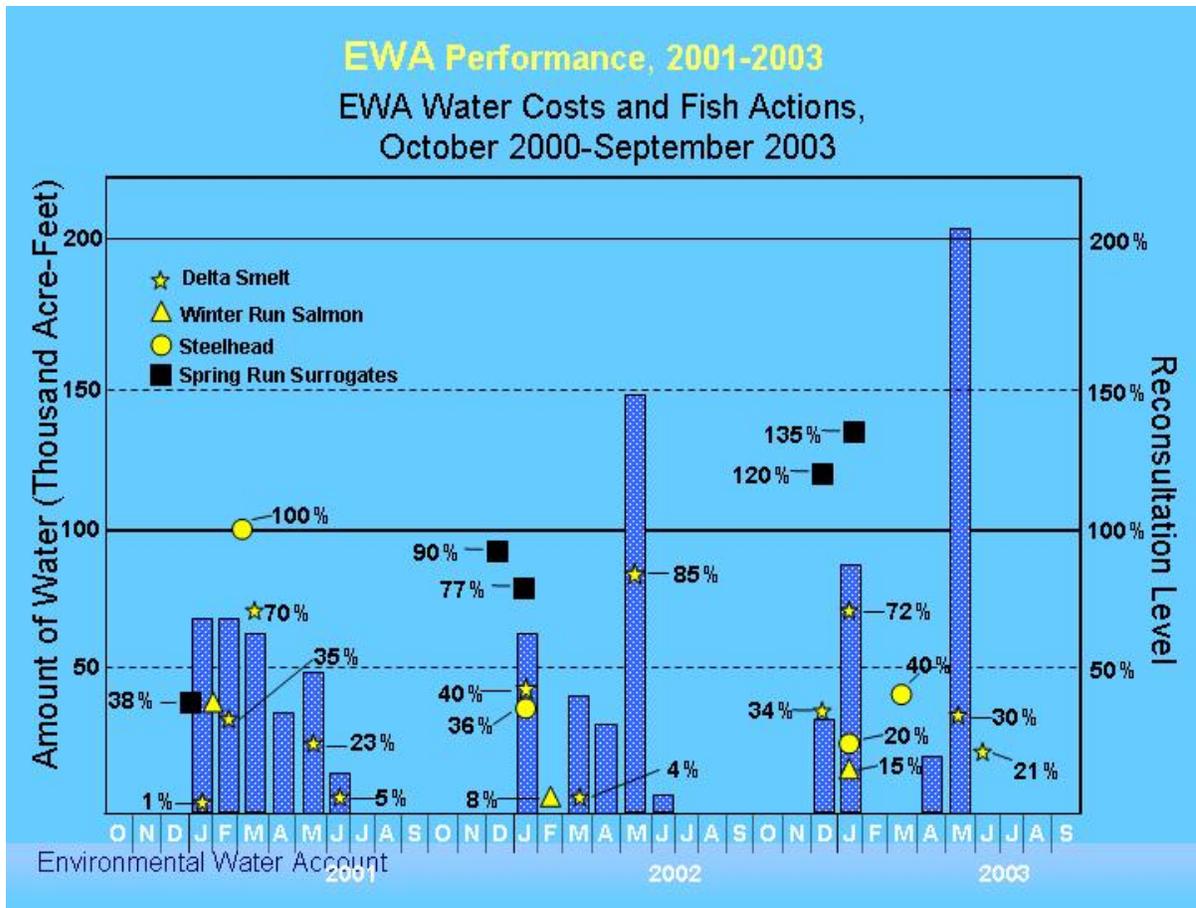
The technical review of EWA is instrumental to improving the management and operation of the EWA, to fulfill its goals. Knowledge from science is continually being gained and influences the decisions of groups, such as the EWAT and the DAT on fishery actions and EWA assets management. As more reliable information is obtained on the effects of exports at key times for fish, the operation and management of EWA are adjusted to optimize the effectiveness of EWA actions.

EWA Performance Measures

To date, EWA's performance has been assessed yearly, on the basis of the following factors:

- total quantity of water acquired by EWA for the year
- quantity of water utilized to compensate for pumping curtailments due to fish actions
- whether the goal of no uncompensated reductions in project water supplies was met each year
- whether regulatory commitments were obtained from the fishery agencies each year
- estimate of fish losses for the year – i.e., whether fish losses, after implementation of EWA, stayed below the reconsultation level for the year
- where feasible, estimated reduction in juvenile salmon entrainment
- where feasible, estimated increase in juvenile salmon survival

EWA's yearly performance for the 3 years of operation (2001, 2002, and 2003) is illustrated on the following chart. The chart shows the take level for the various listed fish at the time EWA operation curtailments were instituted. The take level of the target species was below the reconsultation level when most fish actions were taken. Except for winter run in 2001 (estimate later revised) and spring run Chinook (surrogates for yearlings) in 2003, SWP/CVP take of listed fish in the Delta remained at or below reconsultation levels in these years. EWA actions were not necessary to avoid exceeding reconsultation levels of take in every case, but were targeted at reducing pumping impacts and improving fish survival in the Delta.



Environmental Justice:

To date, EWA agencies have acquired water from willing sellers through groundwater substitution, as well as from stored reservoir water and through extraction of stored groundwater. In the future, EWA may also acquire water made available by willing sellers through crop idling; an action that could potentially affect farm laborers and other individuals associated with farming activities (including farm supply companies, custom operators and other related businesses). The agribusiness industry employs wage earners of all income levels and ethnic backgrounds. The concern for environmental justice is that minority and low-income individuals could be disproportionately affected.

In the process of preparing the EWA Short Term EIR/EIS, the EWA agencies carried out a detailed study of environmental justice concerns related to crop idling associated with EWA's water acquisition (such as, limiting the amount of crop idling to no more than 20 percent in any one county). The study included analysis of the impacts and consequences of crop idling that are related to environmental justice, as well as formulation of actions to minimize these impacts/consequences. The findings of the study are detailed in the EIR/EIS.

Tribal Relations:

Groundwater extraction via groundwater substitution actions near Indian Trust Assets (ITAs) has the potential to lower groundwater levels beneath the ITAs, thereby impacting tribal water rights and water supplies. This issue has not come up in EWA's water acquisitions to date. However, in recognition that the issue could come up in future acquisitions, the EWA agencies have, in the process of preparing the EWA Short Term EIR/EIS, studied it in some detail and come up with protective environmental measures and mitigative actions (such as, requiring monitoring plans for all groundwater pumping for EWA) to minimize the impacts of such an operation to a less than significant level. In the event an impact on tribal water supplies/rights is identified, consultation between the affected federally recognized tribal governments and the EWA agencies will be initiated. This may be expanded to include the Bureau of Indian Affairs, the Office of the Solicitor and the Office of the American Indian Trust, will be initiated.

In addition, the following items should help foster more meaningful tribal input and participation on issues or concerns of the tribes.

- Tribal Water Programs (Clean Water Act 106, 319H, etc.)
The majority of California Tribes have developed USEPA Tribal Environmental Programs that have extensive water protection and water quality programs that should be taken into consideration during environmental water account planning and implementation.
- Tribal input re: Adopted resolutions
Outside of the consultation process, tribes lack input on specific CALFED resolutions pertaining to projects that may affect them due to: timeframes, concerns, funding, etc.
- Tribal Water Quality Standards
Some tribes have USEPA approved Water Quality Standards (WQS's) and many are in the process. The exchange and sharing of such documents are necessary when it comes to upstream and downstream impacts and/or cumulative impacts that affect the tribes.

- Tribal Representatives on BDPAC decision-makers available
The tribes have been involved with some aspects of CALFED for a number of years. There are currently two tribal BDPAC members. The input of these members serving on the BDPAC should be made available to all tribes, with the assistance of the CBDA's Tribal Coordinator.
- Role of the Bureau of Indian Affairs (BIA)
Although the BIA is not a CALFED member agency, it is the lead federal agency for the protection of Indian Trust Assets. Within the context of the EWA, BIA reviews and comments on EWA environmental compliance documents, including the EWA EIS/EIR Draft Record of Decision.

BIA is currently a "cooperating agency" for the North Delta Off-Stream Storage. Also, BIA has commented for the record on the protection of Indian Trust Assets in the development of CALFED programs

Cross-Program Relationships

Conveyance Program-The parties are discussing an increase in the average permitted Clifton Court intake rate from 6,680 cfs to 8,500 cfs. The proposal has generated discussions on the ability for the EWA to provide continued fish protection, and the impact of current EWA operations on the water supply benefits that SWP and CVP contractors would receive from the proposed increase to 8,500 cfs. The issue focuses on whether the EWA would be responsible for the increased quantity of replacement water required when operational curtailments are measured against the 6,680 cfs benchmark (current conditions) or the 8,500 cfs benchmark (proposed).

Storage Program – The proposed storage projects - expansion of the Shasta and Los Vaqueros Reservoirs and construction of new storage facilities such as Delta Wetlands, Sites Reservoir and Westlake Farms Multi-Benefit Reservoir offer potentially significant yield and storage benefits to the EWA, should these projects be able to attract the necessary participation and funding.

Ecosystem Restoration Program – The parties are discussing the potential to purchase water jointly to provide instream flows needed for ERP, including the Environmental Water Program (EWP), and EWA assets once the water reaches the Delta. The potential exists to reduce costs and provide more environmental benefits with the water purchased for both programs. To enhance cross-program coordination, the EWP meetings are attended by an EWA team member who provides feedback to the EWA team.

Water Transfer Program – The parties are discussing coordination of water acquisitions and establishment of water transfer principles, to fine-tune the water acquisition and transfer process.

Funding

Environmental Water Account (\$ in millions)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Subtotal	Yr 8	Grand Total
State	\$65.1	\$19.2	\$26.7	\$41.8	\$32.6	\$3.8	\$0.2	\$189.4	\$0.2	\$189.6
Federal	\$0.1	\$13.0	\$2.7	\$1.1	\$8.0			\$24.9		\$24.9
Program Funding Total	\$65.2	\$32.2	\$29.4	\$43.0	\$40.6	\$3.8	\$0.2	\$214.3	\$0.2	\$214.5
Projected Needs Estimate										
Original ROD Estimate (Aug, 2000)	\$50.0	\$50.0	\$50.0	\$50.0				\$200.0		\$200.0
NOTES:										
1. Original ROD Estimate represents the original Stage 1 funding estimates from the Record of Decision (Aug 2000). The ROD included estimates for water acquisitions for the first 4 years only. Cost estimates were not included in the ROD for staff, power, or Tier III water.										
2. Funding for Years 1 - 3 reflect actual State, Federal and Local obligations, commitments, encumbrances and expenditures updated to reflect actual fund amounts for each task. State funds for Years 4 & 5 reflect the April 1st Governor's budget. Federal funds are the Year 4 enacted and President's FY 2005 proposed budget. Projected funding shown in Years 6 - 8 includes remaining state bond funds that have been scheduled for future years and ongoing State base funding, plus estimates for local matching to grants for years where bond funding is available. Federal appropriations beyond Year 5 are unknown.										
3. The State budget includes funding for the California Bay-Delta Authority, Department of Water Resources, Department of Fish and Game, and the Resources Agency.										
4. The Federal budget includes funding for the U.S. Bureau of Reclamation (Reclamation) and the National Marine Fisheries Service.										

Funding by Task

Environmental Water Account (\$ in millions)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Subtotal	Yr 8	Grand Total
1) Water & Power Acquisitions	\$57.2	\$31.5	\$28.8	\$39.4	\$40.3	\$3.8	\$0.2	\$201.1	\$0.2	\$201.3
2) Tier 3 Water*	\$6.3			\$3.2				\$9.5		\$9.5
3) Environmental Documentation	\$1.4	\$0.2	\$0.2	\$0.2	\$0.2			\$2.2		\$2.2
4) Oversight and Coordination	\$0.4	\$0.5	\$0.3	\$0.2	\$0.1	\$0.1	\$0.1	\$1.5	\$0.1	\$1.6
Program Funding Total	\$65.2	\$32.2	\$29.4	\$43.0	\$40.6	\$3.8	\$0.2	\$214.3	\$0.2	\$214.5
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3. The State budget includes funding for the California Bay-Delta Authority, Department of Water Resources, Department of Fish and Game, and the Resources Agency.										
4. The Federal budget includes funding for the U.S. Bureau of Reclamation (Reclamation) and the National Marine Fisheries Service.										

Geographical Distribution of Activities

The following table summarizes the geographical distribution, and the extent of EWA purchases and operational assets that were obtained in 2001, 2002, and 2003 respectively. In the first three years, the EWA has implemented over 880 TAF of actions to better protect fish and improve habitat and purchased over 740 TAF of water and obtained over 160 TAF of operational assets to replace the water used to implement these actions.

EWA ASSETS ACQUIRED IN 2001, 2002 AND 2003

Assets Acquired	2001 (Dry Year) (TAF)	2002 (Dry Year) (TAF)	2003 (Above Normal Year) (TAF)
Purchases Upstream Of Delta			
State	+105	+135	+ 70
Federal	0	+ 8	0
Conveyance and Carriage Costs	- 17	- 32	0
Purchases South Of Delta			
State	+159	+ 37	+145
Federal (in kind in 2001)	+ 72	+ 60	0
Subtotal	=319	=208	=215
Operational	+ 55	+18 (Net)	+ 91
Total	=374	=226	=306
Fish Actions	- <u>290</u>	- <u>248</u>	- <u>348</u>
	(290 State/ 0 Fed)	(176 State/ 72 Fed)	(322 State/ 26Fed)
Carryover to 2002	= 84	+84	
Carryover to 2003		=62	+ 42 (Net)
Carryover to 2004			= 0
Source Shift Activation	50 of 100	0 of 100	0 of 100