

DRAFT

California Bay-Delta Program

Environmental Water Account Program Plan Year 7

(State FY 2006-07; Federal FY 2007)

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

August 1, 2006



Priorities

Introduction

This Environmental Water Account (EWA) Program Plan identifies the CALFED Program activities that are scheduled to be completed during State Fiscal Year (FY) 2006-2007 and Federal FY 2007 (October 1, 2006 and September 30, 2007). The Plan also describes the accomplishments made during the previous year.

Readers familiar with past CALFED Program Plans will notice a difference between this plan and those prepared during previous years. The major variations are that the plan focuses on activities that will be undertaken in the upcoming year. Further, the plan does not contain the various sections found in previous plans such as "Performance Measures", "Integration of Science, Environmental Justice and Tribal Relations" and "Public Input and Outreach." However, a comprehensive discussion of the planned activities for the upcoming year can be found in the "Activity" section of this plan.

EWA's Purpose

The 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 beyond that provided by the projects' water users as their contribution towards a long-term EWA. 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.

EWA Operations

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 (NMFS) 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 implementing operational changes proposed by the management agencies, as appropriate.

The EWA provides protection for at-risk species of fish and helps to avoid reaching the re-consultation level of take for listed species by primarily reducing export pumping during periods of peak abundance of these species in the Delta. Prior to reaching the level of impact for listed species that necessitates formal re-consultation, the Project Agencies' and Management Agencies' staff discuss the extent of the take, the relative abundance and distribution of the particular species of concern, and any relevant information on in-stream and Delta conditions. Based on an evaluation of this information, the Agencies may implement a modification of Project operations or "fish action", usually a partial curtailment of project pumping. The cost of fish protection actions at the CVP Tracy Pumping Plant are typically charged against the Central Valley Project Improvement Act's (CVPIA) Section 3406 (b)(2), which

provides water for that environmentally beneficial purpose. The water cost of fish protection actions at the SWP Banks Pumping Plant are reimbursed with assets from the EWA. If there is no "(b)(2)" water available, then EWA water may be used for fish actions at the CVP.

The EWA Agencies estimate the need for fish actions (pumping curtailments in the Delta) and replacement water based on their experience since 2000 (EWA's first year of operation), 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, projected pumping rates at the project pumps, target pumping reductions, the Vernalis Adaptive Management Program, and other in-Delta actions. Estimates of water to be purchased as replacement water for the projects are developed from the projected costs of fish actions, the prior modeling and gaming analyses, estimates of water available from operational flexibility (variable assets), and budgetary constraints. In most years, the EWA agencies will typically purchase 200 thousand acre-feet (TAF) to 300 TAF of water per year from willing sellers, although there can be variations depending on actual fish behavior and hydrology. Also, not all of EWA's assets are water purchases. Some assets are services such as exchanges or deferring from taking delivery of project supplies a contractor has been allocated until a later time in the year to improve the projects' operations affected by EWA fish actions. EWA's water assets are acquired by purchasing water from willing sellers and by capturing surplus water from the Delta. Water purchases would be from existing non-project water storage reservoirs, groundwater substitution, and cropland idling or crop substitution. The EWA operates in accordance with California's water year (October 1 – September 30) and started in October 2000, the beginning of water year 2001.

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 multi-year contracts with willing sellers to ensure sufficient availability of EWA resources in the future, at mutually acceptable prices. Discussions between EWA and a few sellers willing to enter into such multi-year 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.

2007 Priorities

For water year 2007 (State FY 2006/07 and Federal FY 2007), 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 hydrology and fish behavior, various quantities of water are purchased from willing sellers and either used for fish actions if needed or stored to be used later 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 priorities for 2007 include:

- Provide an average of about 375 TAF of water for fish habitat actions (250-490 TAF, depending on type of hydrologic year; average assumes respective year types occur with equal frequency).
- Acquire fixed assets, ranging from 200 TAF to 300 TAF per year depending on hydrology and fish behavior, as measured in south-of-Delta equivalents (water used to compensate for Delta pumping curtailments must be returned to the SWP and CVP export services areas 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.
- Organize, with the CBDA Science Program's assistance, a biennial technical review of the EWA scheduled for fall 2006.

Accomplishments

Because the EWA operates on a water year (October 1- September 30) basis, accomplishments for water year 2006 will not be known until fall 2006. Therefore, summarized below are the program's accomplishments for water year 2005.

Water and Power Acquisitions

The EWA 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.

For the first time, EWA entered into a 50,000 acre-feet wet/dry year exchange arrangement, whereby the EWA obtained water in 2005 with the commitment to return the water to the willing provider in a future year when called upon.

In April 2005, DWR and Reclamation on behalf of all EWA Agencies, signed a Memorandum of Understanding (MOU) with the Yuba County Water Agency that included a pilot sale and transfer of up to 60,000 acre-feet of water in 2006 under the proposed Lower Yuba River Accord (Accord). The Accord consists of three important components (a Fisheries Agreement, a Conjunctive Use Agreement, and a Water Transfer Agreement) designed to settle fishery resources and water right issues of the Lower Yuba River, as required by the State Water Resources Control Board's Revised Water Right Decision 1644. Because WY 2006 is a wet year and present Delta conditions are not favorable for water transfers, it is likely that very little water, if any, from the pilot 2006 transfer will be available for the EWA. Also, because the schedule for EIR/EIS of the proposed Accord is delayed, another proposed pilot sale and transfer of up to 60,000 acre-feet of water to the EWA is planned for 2007. Pending completion of the EIR/EIS, which is scheduled for December 2007, and obtaining the SWRCB's approval of the Accord, the EWA will receive at least 60,000 acre-feet of water per year starting in 2008 and continuing thereafter for the next eight years.

Environmental Documentation

In February 2005, Reclamation and the USFWS, as co-lead agencies under the National Environmental Policy Act (NEPA), filed a Notice of Intent in the Federal Register, and DWR, as lead agency under the California Environmental Quality Act (CEQA), filed a Notice of Preparation with the State Clearinghouse, to initiate preparation of a Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the proposed long-term EWA. This EIS/EIR will provide environmental coverage for the EWA beyond 2007, until 2030.

The EWA agencies conducted a series of five Public Scoping Meetings in March 2005 to obtain public input into the preparation of a draft EIS/EIR for the proposed long-term EWA. Also, in early 2006, the EWA agencies conducted a public workshop with the California Farm Bureau to discuss the proposed No Crop Idling Alternative being analyzed in the EIS/EIR. The draft EIS/EIR, with its companion Action Specific Implementation Plan (ASIP), is expected to be released for public review in winter 2006.

Tier 3 Reserve

Since 2000 (EWA's first year of operation), the EWA Agencies have avoided the need for implementation of Tier 3. However, with delta smelt apparently at record-low abundance and the uncertainty that EWA water assets may not be sufficient, the EWA agencies have drafted a charge and engaged an expert panel in the event that Tier 3 assets are needed to protect delta smelt.

Oversight and Coordination

In December 2005, the CBDA and the EWA Agencies sponsored an informal public workshop, focusing on EWA's operations for 2006 and the high level of concern regarding the decline of pelagic organisms in the Delta. Participants at the workshop included four invited recognized outside experts in fish biology, each of whom provided an independent review and recommendations for EWA's operation in 2006.

The EWA agencies continued coordination between its Management Agencies (USFWS, NMFS, DFG) and Project Agencies (Reclamation and DWR) to maximize opportunities to obtain and use EWA assets for fish protection, while helping to ensure water supply reliability for CVP and SWP water users south of the Delta .

Activities

Presented below is a listing of the major EWA activities planned for water year 2007. Activities are grouped into the general categories of water and power acquisitions, environmental documentation, Tier 3 reserves, and oversight and coordination. It should be noted that adequate funds are essential in order to carry out the scheduled activities completely.

Water and Power Acquisitions

Activity: 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.

Deliverables: Fish protective actions, as needed.

Public Involvement/Outreach: An update of EWA activities is presented at the monthly meetings of the CALFED Operations Group (CALFED OPS). This group consists of agency (state and federal) and stakeholder (CVP/SWP contractors and environmental interests groups) representatives. At CALFED OPS meetings, CVP/SWP water operations (including EWA), fish monitoring studies and results, and related policy and technical issues are open for discussion by all participants. CALFED OPS provides a public forum for disclosing EWA activities.

Every week, stakeholders interested in EWA have an opportunity for involvement in the Data Assessment Team (DAT), which evaluates and discusses current fish monitoring results, and makes operational recommendations beneficial to fish to the Water Operations Management Team (WOMT). The DAT is a technical staff-level meeting while the WOMT is an agency management level meeting. An example operational decision is reducing pumping at the CVP/SWP export facilities when at-risk fish species are present. The DAT is a technical meeting consisting of fish biologists and stakeholders.

In addition, the Operations and Fish Forum (OFF), which reports to the CALFED OPS Group, is another way for stakeholders to provide input on EWA operations. OFF participants include stakeholders and CALFED agency representatives who develop consensus recommendations on operations of the Bay-Delta facilities to protect water quality and fish, and maintain water supply reliability.

Funding: DWR requested \$65 million (\$33 million for a 9-year water transfer agreement under the Lower Yuba River Accord, and \$32 million for 2007) from the State's Proposition 50 fund. The President's Budget contains \$10.8 million for EWA, subject to congressional approval and federal appropriations.

Schedule: Ongoing

Activity: 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 comprise a declining proportion of the total mix of purchased assets.

Deliverables: Replacement water for CVP and SWP users.

Linkage with Other Programs: The EWA Agencies seek to coordinate water acquisitions with other water acquisition programs, such as CBDA's Environmental Water Program and CVPIA Level 4 water purchases for state and federal wildlife refuges in the Central Valley. Also, the EWA Project Agencies work closely together to coordinate water transfers in the state, discussing the establishment of water transfer principles and fine-tuning the water acquisition and transfer process.

Public Involvement/Outreach: In all water purchases for the EWA, water districts' representatives (and in some cases environmental interests groups) are involved with contract negotiations. For some water purchase agreements, willing

sellers petition the State Water Resources Control Board (SWRCB) to obtain approval of a proposed water sale and transfer. Public review of the petition is required prior to the SWRCB's approval.

Tribal Interests: 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. The EWA has required monitoring of groundwater levels and an action plan should groundwater levels be impacted for groundwater substitution occurring away from Indian Trust lands. To date, the lowering of groundwater levels beneath ITAs resulting from groundwater extraction activities on adjacent lands for the EWA has not been evident. 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. 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 Water Quality Standards
Some tribes have USEPA approved Water Quality Standards (WQS's) and many are in the process of obtaining them. 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. EWA agencies anticipate that such information would be provided to the agencies by the tribe possessing such standards, should consultation commence for a specific EWA action.
- 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.

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 2007 and beyond, 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.

Funding: Same as above.

Schedule: Ongoing

Activity: 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 the acquisition strategy. An example multi-year purchase expected to be completed in 2007, is Yuba County Water Agency's commitment to sell and transfer water and the EWA Project Agencies commitment to purchase at least 60,000 acre-feet of water under the proposed Lower Yuba River Accord for 8 years. (See description provided above.)

Deliverables: Replacement water for CVP and SWP users.

Linkage with Other Programs: Same as above

Public Involvement/Outreach: Same as above.

Tribal Interests: Same as above.

Environmental Justice: Same as above.

Funding: Same as above.

Schedule: Ongoing

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

Deliverables: Agreements for the storage of EWA assets in groundwater banking programs.

Public Involvement/Outreach: Same as above.

Tribal Interests: Same as above.

Funding: Same as above.

Schedule: Ongoing

Potential Problems: The availability of full funding is necessary for EWA to carry out the above water and power acquisition 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 will adversely impact EWA operations in water year 2007. 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. 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.

Environmental Documentation

Activity: Complete the Long Term EWA EIS/EIR - Reclamation, on behalf of the EWA agencies, has entered into a contract with a consultant to complete the Long-term EWA EIS/EIR. DWR is the CEQA lead agency. Reclamation and the USFWS are the NEPA lead agencies. DFG is a trustee agency under CEQA. NMFS is a cooperating agency under NEPA. This EIS/EIR analyzes the effects of EWA operations through 2030. Acquisitions from new sources may require supplemental CEQA and/or NEPA compliance.

Deliverables: Final EIS/EIR

Public Involvement/Outreach: Upon release of the draft EIS/EIR in Fall 2006, the public will have 60 days to review and comment on the environmental analysis contained therein. In addition, there will be a series of public hearings during the 60 day review period at which the public can comment. All public comments received will be addressed in the final EIS/EIR.

Tribal Interests: 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. The EWA has required monitoring of groundwater levels and an action plan should groundwater levels be impacted for groundwater substitution occurring away from Indian Trust lands. To date, the lowering of groundwater levels beneath ITAs resulting from groundwater extraction activities on adjacent lands for the EWA has not been evident. However, in recognition that the issue could come up in future acquisitions, the EWA agencies will, in the process of preparing the EIS/EIR for the proposed long-term EWA, study it and develop protective environmental measures and mitigation 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. 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 Water Quality Standards
Some tribes have USEPA approved Water Quality Standards (WQS's) and many are in the process of obtaining them. 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. EWA agencies anticipate that such information would be provided to the agencies by the tribe possessing such standards, should consultation commence for a specific EWA action.
- 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. EWA agencies support such information releases to the tribes.
- 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. The BIA reviews and comments on EWA's environmental compliance documents, including the draft EIS/EIR due for public review in winter 2006.

Environmental Justice: In the process of preparing the EIS/EIR for the proposed long-term (beyond 2007) EWA program, the EWA agencies will be carrying out a detailed study of environmental justice concerns related to crop idling associated with EWA's water acquisitions (such as, limiting the amount of crop idling to no more than 20 percent in any one county). The study will include 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 will be provided in the draft EIS/EIR, which is scheduled for release for public review in winter 2006.

Funding: Sufficient federal FY 2004, 2005, and 2006 funds have been obligated for completing the EIS/EIR.

Schedule: Expected completion – Fall 2007

Tier 3 Reserve

Activity: Ensure Availability of Assets for Tier 3 – 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.

Deliverables: Replacement water for CVP and SWP users, if required.

Funding: Proposition 13 and Proposition 50 funds have been committed. Additional 2007 funds may be required.

Schedule: Ongoing

Potential Problems: It has not been necessary to implement Tier 3 protection since EWA's first year of operation in 2000. If, in water year 2007, 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

Activity: Development of Performance Measures – The EWA Agencies, with the CBDA, are committed to developing performance measures. Performance measures translate the EWA program's priorities into measurable benchmarks of success. Performance measures range from relatively simple metrics to complex cross-program assessments. As such, current work on Performance Measures includes counting the simple metrics and laying the technical and scientific groundwork that will allow us to perform more complex assessments at a later date. The Science Program and the EWA have been continuously working to design performance measures for the program. The Science Program has articulated the following three levels of Performance Measures:

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

The EWA Agencies have identified preliminary Performance Measures for the EWA. Some key Level 1 and 2 Performance Measures include: science-based fish action decision making, increase water supply reliability for CVP and SWP contractors, timely and successful completion of water purchase agreements, comprehensive and defensible environmental compliance documents, and a "balanced checkbook" regarding the ability of the EWA Agencies to obtain water assets and pay off debt owed to the Projects without incurring debt beyond that allowed (100 TAF) in the current EWA acquisition strategy. A crucial Level 3 Performance Measure yet to be adequately addressed is evidence of protection and recovery of at-risk native fish species.

Deliverables: Performance measures

Public Involvement/Outreach: The public is involved with the Bay-Delta Public Advisory Committee (BDPAC) as well as in its subcommittees. BDPAC meetings and subcommittees consist of state and federal agency managers and stakeholders representing water contractors and districts, environmental interests groups, Indian tribes, as well as others. At BDPAC meetings, key topics related to the EWA and other CALFED Program elements, such as performance measures, are disclosed and discussed. The BDPAC serves as a public venue for the entire CALFED Program. BDPAC meetings occur at least quarterly during the year.

Funding: Same as for Water and Power Acquisitions

Schedule: Ongoing.

Activity: 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 by obtaining conveyance capacity and storage rights in new or expanded reservoirs, as envisioned in the ROD. Several projects have been proposed, including the expansion of existing Los Vaqueros, Shasta and Folsom reservoirs; the Delta Wetlands Project; the Sites Reservoir; and the Westlake Farms Multi-Benefit Reservoir.

Deliverables: None required.

Linkage with Other CALFED Programs: CALFED Storage and Conveyance Programs

Funding: Costs for EWA Agencies' staff participation in the planning of CALFED Storage and Conveyance Programs are included in the amounts requested under "Water and Power Acquisitions", as noted above.

Schedule: Ongoing

Activity: EWA Science - The EWA agencies, in collaboration with the Science Program (including the Interagency Ecological Program) continue to pursue the collection, synthesis and application of scientific information relevant to the biological needs and population dynamics of the anadromous and Delta fish species and to pursue the factors affecting the health and function of the Bay-Delta ecosystem. Methods of estimating abundance and distribution have been improved. Decision making processes have been adapted based on new information. Increased involvement of the academic community and other scientists is expected to increase through the Science Program PSP and the Ecosystem Restoration Program Monitoring PSP, providing expertise that has been lacking. Workshops, seminars and other scientific discussions will continue to contribute to improved scientific understanding and more effective EWA management.

In Fall 2006 (beginning of water year 2007), the CALFED Science Program, with assistance by the EWA Agencies, will be

sponsoring a biennial (2005 and 2006) comprehensive technical review of the EWA. Technical reviews of EWA are instrumental to improving the management and operation of the EWA in fulfilling its goal: the protection and recovery of at-risk fish of the Bay-Delta. Scientific knowledge is continually being gained and influences the decisions of groups, such as the Environmental Water Account Team (EWAT) and the Data Assessment Team (DAT), on fish actions and EWA assets management. As more reliable information is obtained on the effects of exports and upstream actions taken for fish benefits, the operation and management of EWA are adjusted to optimize the effectiveness of the program.

Deliverables: Technical review, workshop, seminar, and other EWA science related materials, as needed.

Public Involvement/Outreach: The public is invited to attend technical workshops on specific EWA related issues such as Chinook salmon and delta smelt monitoring and population studies. In addition, the public has been involved and will continue to be involved with the EWA Technical Reviews conducted and sponsored by the CALFED Science Program in conjunction with the EWA Technical Review Panel. These technical reviews occurred annually during EWA's first four years of operation. In Fall 2006, a biennial (2005 and 2006) technical review of the EWA is planned; the public will be invited to participate in and attend this review.

Funding: Same as for Water and Power Acquisitions.

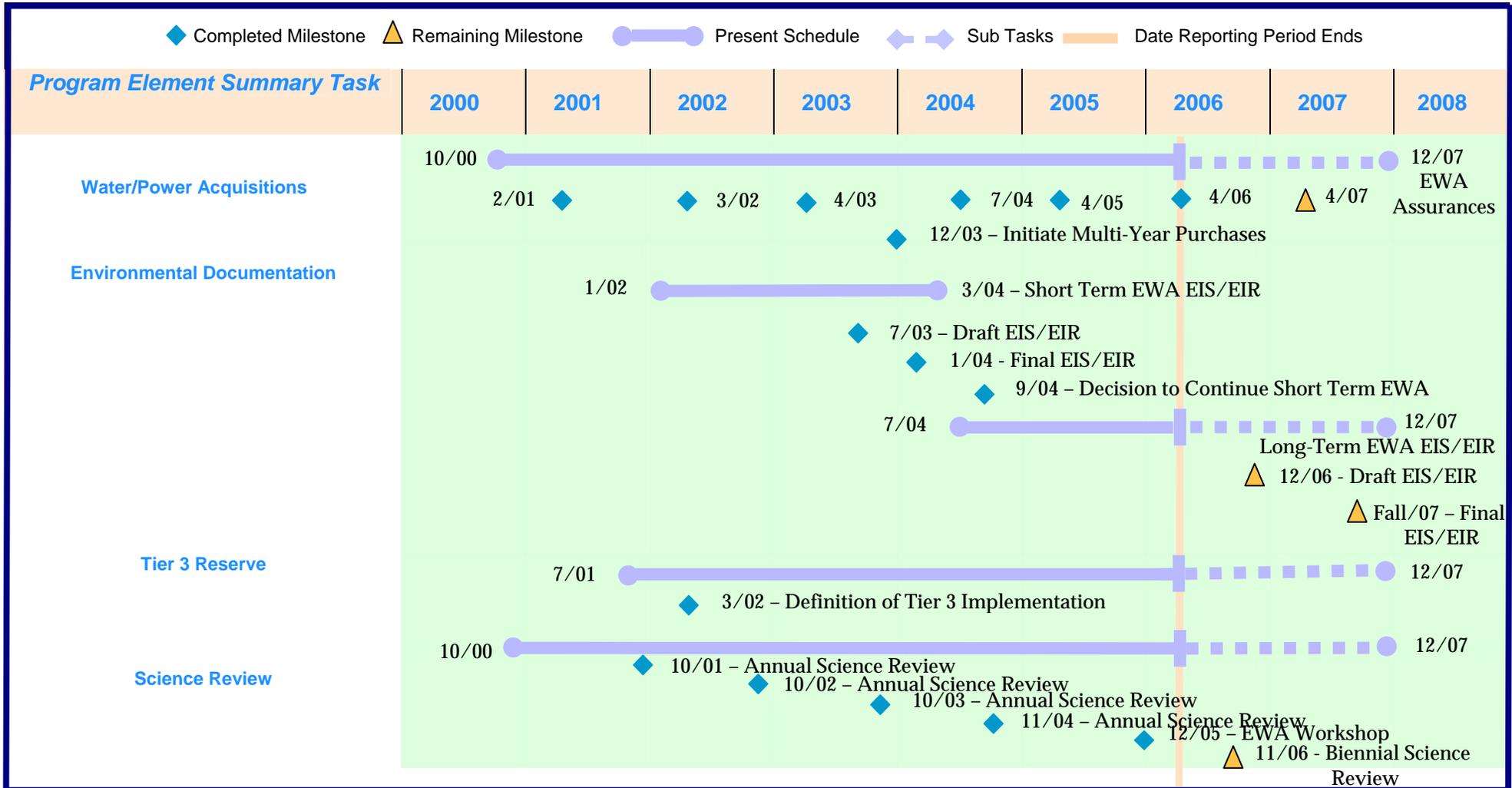
Schedule: Ongoing

Potential Problems: EWA's ability to obtain long-term water assets, and to providing a review of EWA's past performance and developing 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.

EWA Beyond 2007: The Bureau of Reclamation, U.S. Fish and Wildlife Service, and NMFS have received Congressional authorization to participate in the EWA at least through 2010. However, for these Federal agencies to continue participation in the EWA beyond 2010, additional authorization will be required. For the Department of Water Resources and the Department of Fish and Game to continue involvement in the EWA, beyond 2007, CEQA requirements must be met.

Schedule

Fish protection and water supply reliability benefits were achieved in 2005, which has been the wettest year thus far for the EWA. A workshop was held in early December that focused on EWA proposed operations for water year 2006 given the decline of pelagic fish populations in the Delta. A two-year (water years 2005 and 2006) comprehensive technical review of the EWA is planned for Fall 2006. Also, the Long-Term EWA EIS/EIR is scheduled for completion in Fall 2007.



Funding (Preliminary until final accounting is completed.)

Environmental Water Account ¹ (\$ in millions)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Grand Total
State ²	\$56.30	\$24.75	\$30.30	\$23.30 ⁶	\$32.30	\$9.02 ⁷	\$5.74	\$181.71 ⁸
Federal ³	\$0.10	\$13.00	\$2.54	\$2.10	\$1.20	\$5.20 ⁹	\$10.80	\$34.94
Actual Total Expenditures⁴	\$56.4	\$37.75	\$32.84	\$25.40	\$33.50	\$14.22	\$16.54	\$216.65
Projected Needs Estimate⁵	\$50.0	\$50.0	\$50.0	\$50.0	\$61.8	\$35.2	\$36.2	\$333.20
Original ROD Estimate (Aug, 2000)⁶	\$50.0	\$50.0	\$50.0	\$50.0				\$200.0

NOTES:

1. Funding for Years 1 - 5 reflect actual State, Federal and Local obligations, commitments, encumbrances and expenditures updated to reflect actual fund amounts for each task. State funds for Years 6 & 7 reflect the Governor's Budget May Revision. Federal funds are the Year 6 enacted and President's FY 2007 proposed budget.
2. The State budget includes funding for the California Bay-Delta Authority (Authority), Department of Water Resources (DWR), Department of Fish and Game (DFG), and the Resources Agency (RA).
3. The Federal budget includes funding for the U.S. Bureau of Reclamation (Reclamation) and the National Marine Fisheries Service (NMFS).
4. The Actual Total Expenditures are the actual annual costs incurred by the EWA Agencies to implement the program and meet its CALFED objectives to help protect at-risk native fish of the Bay-Delta and to help maintain water supply reliability for SWP and CVP water users.
5. The Projected Needs Estimate includes \$25.5 million in Year 5 for a bankroll fund. The Projected Needs Estimates are based on funding targets from the 10-year finance plan (December 2004).
6. Original ROD Estimate represents the original Stage 1 (Years 1-7) 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.
7. Unspent funds in Year 4 became the baseline State budget for EWA in Year 6.
8. Excludes \$9.02 million to avoid double counting in total.
9. Fiscal Year 2006 federal appropriations for EWA totaled \$8.2 million; however, the full amount was not required in 2006 due to wet hydrologic conditions. Of this total, \$3 million was re-aligned to help fund development of the proposed Bay-Delta Conservation Plan.

Funding by Task (Preliminary until final accounting is completed.)

Environmental Water Account ¹ (\$ in millions)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Grand Total
1) Water & Power Acquisitions	\$54.8	\$31.2	\$31.39	\$20.60	\$32.52	\$13.82 ⁵	\$16.27	\$200.58 ⁶
2) Tier 3 Water*		\$6.25		\$3.20				\$9.45
3) Environmental Documentation	\$1.60	\$0.30	\$1.45	\$1.60	\$1.00	\$0.40	\$0.27	\$6.62
4) CBDA Oversight and Coordination	\$0.40	\$0.50	\$0.30	\$0.20	\$0.20	\$0.03	\$0.03	\$1.66
Actual Total Expenditures²	\$56.8	\$38.25	\$33.14	\$25.60	\$33.70	\$14.25⁵	\$16.57	\$218.31⁶
Projected Needs Estimate³	\$50.0	\$50.0	\$50.0	\$50.0	\$61.8	\$35.2	\$36.2	\$333.2
Original ROD Estimate (Aug, 2000)⁴	\$50.0	\$50.0	\$50.0	\$50.0				\$200.0

NOTES:

1. Funding for Years 1 - 5 reflect actual State, Federal and Local obligations, commitments, encumbrances and expenditures updated to reflect actual fund amounts for each task. State funds for Years 6 & 7 reflect the Governor's Budget May Revision. Federal funds are the Year 6 enacted and President's FY 2007 proposed budget.

2. The Actual Total Expenditures are the actual annual costs incurred by the EWA Agencies to implement the program and meet its CALFED objectives to help protect at-risk native fish of the Bay-Delta and to help maintain water supply reliability for SWP and CVP water users.

3. The Projected Needs Estimate includes \$25.5 million in Year 5 for a bankroll fund. The Projected Needs Estimates are based on funding targets from the 10-year finance plan (July 2) and may change based on completion of the plan in November 2004.

4. Original ROD Estimate represents the original Stage 1 (Years 1-7) 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.

5. \$9.02 million of the \$13.82 million (\$14.25 million in Actual Total Expenditures) comes from Year 4.

6. Excludes \$9.02 million to avoid double counting in total