

**BASELINE**

Understanding the new direction that CALFED will pursue in water operations requires an understanding of water operations without CALFED. The "without CALFED" operations set the so-called baseline or default position for CALFED actions. This baseline includes a number of activities that already exist or law already requires. First, without a CALFED Bay-Delta Program, the State Water Quality Control Board (SWRCB) still would require all water users who use or divert water from the Delta or its tributaries to abide by the Delta's Water Quality Control Plan (WQCP), whose standards originated in the 1994 Accord. Although the SWRCB has not decided how best to implement the WQCP, its ultimate decision would form part of the CALFED baseline.

Second, a number of parties, including several CALFED agencies, have developed the San Joaquin River Agreement (SJRA) in order to implement the Vernalis Adaptive Management Plan (VAMP) during the spring period requiring a pulse flow at Vernalis. The parties anticipate that, by the time CALFED issues its Record of Decision, the SWRCB will have approved the SJRA and the parties will implement the agreement, regardless what CALFED decides. The SJRA/VAMP therefore fits within the baseline.

Third, the CVPIA requires the CVP to operate in a certain manner to promote fish and wildlife. The Department of the Interior (Interior) has developed, among other things, several actions that apply the 800,000 acre-feet of water dedicated to fish and wildlife purposes pursuant to CVPIA Section 3406(b)(2). Federal law requires the Interior to take those so-called "(b)(2) actions." Although both water user and environmental parties have filed lawsuits to overturn the (b)(2) actions, those actions as now provided by Interior now form a part of the CALFED baseline. If either lawsuit succeeds in overturning the (b)(2) actions, then the assurances based on improving from the baseline will disappear. The CALFED baseline therefore assumes that the current (b)(2) actions will proceed as planned.

Fourth, CVPIA requires Interior to take certain actions that may result in reducing the Trinity Basin's water contribution to the Delta's watershed. Taking those actions and the Secretary of the Interior deciding on the proper flow levels remaining in the Trinity River are not optional. Federal law requires them. Any resulting reductions in flow to the Delta therefore fall within the CALFED baseline in Stage 1.

**FLEXIBILITY AND SHARING**

With the baseline conditions firmly in place, CALFED plans to develop the maximum flexibility in water operations that still promotes all CALFED objectives, including both water supply reliability and fishery improvements. Achieving such flexibility requires both water users and fishery agencies to remain flexible while moving toward continuous improvement for both interests. To achieve the biological objectives, the CALFED agencies will employ adaptive management in order to respond to unexpected changes in fish populations that may or may not have resulted from CALFED actions. The export water users and water project operators will adjust export facilities and operations to achieve both improved water supply reliability and improved fishery survival.

This mutual flexibility also includes sharing in the costs and benefits from changes in export facilities and operations. They may, for example, share the benefits of expanded export or storage capacity, if such facilities are ultimately developed. One of the better ways to accomplish such sharing is the establishment of an "environmental water account," where water intended to benefit the environment can be allocated.

**Environmental Water Account Concept**

At this point, the environmental water account (EWA) remains in the concept stage. In concept, the EWA is a supply of water that fishery agencies may apply to benefit fish in any number of ways, based on the real-time needs of the fish. Like a bank account, the EWA would start with an initial deposit of water and financial resources that allow for the acquisition of additional water on the first day of Stage 1. The EWA may hold its water, options for water, and money in any number of locations. The account, however, would not include the water already applied in the baseline conditions. It would contain water above and beyond the baseline.

As time progresses, the EWA could receive deposits from actions that increase total water supplies and from appropriations or other financial sources. Such actions might include the EWA manager exercising regulatory flexibility in export standards. Alternatively, the EWA may grow by purchasing water or leveraging its water assets. At other times, the EWA's manager would be able to withdraw water to apply to fishery needs. Such withdrawals may arise from reducing exports beyond the existing baseline standards, increasing a pulse flow or enhancing habitat resources in particularly dry years.

Creating an environmental account may provide the flexibility the fish need in light of the unpredictable outcomes for the fishery resources from CALFED actions. With such flexibility, the need for regulatory controls over water operations can be minimized.

**Some Unique Advantages Posed by an EWA**

For a given quantity of environmental water, the EWA appropriately sized and constructed can be more protective than a classic standards approach for the following reasons:

- 1. **Protect fish other than those targeted by standards-** The operations decision making process, which is inherent in the EWA, can protect fish other than those for which standards would be set. The gaming analysis conducted to date has demonstrated that currently non-listed native species, such as splittail, could be protected from diversion effects under the EWA approach.
- 2. **Protect species when entrainment is a problem despite environmental conditions-** As an example, Delta smelt adults following a dry year are believed to be particularly vulnerable. Entrainment of such fish say in January or February

could be a population level problem, despite hydrologic conditions which would suggest that no problems should be expected.

**3. Focus on species that have the most risk-**It is impossible to predict which species will be at greatest entrainment risk at a given time in the future. EWA operations decisions provide the ability to tailor operations to protect the species that is most at risk in a given time and situation.

**4. Can apply the amount of water for circumstances at hand-**Because of the wide range of hydrologic and environmental conditions that can be encountered in the Delta, it is impossible to craft a standard that protects efficiently under all circumstances. EWA operations will allow decisions to be tailored to the specific circumstances at hand, thus minimizing over- or under-protection.

**5. Classic standards tend to be non-flexible-**The traditional approach to standards setting is to set minimum requirements under specified conditions, e.g. full closure of the Delta Cross Channel for a block of months or a specific E/I ratio for a given month. The flexibility to provide the greatest level of protection at a time when the fish are actually most threatened maybe difficult to craft as a fixed standard. EWA operations are a much more protective and efficient tool for handling such situations.

**6. Allows flexibility to add other methods of protection-**EWA operations would allow the use of additional methods of protection as circumstances dictated. For example, tools such as additional flow, structure operations and pumping reductions could be used in conjunction or tandem to deal with a severe entrainment risk when it occurred. Crafting a standard to handle the range of possible situations would be exceedingly difficult.

**7. Learn from previous operations-**Standards are usually based on the science at the time the standard is adopted. Revising the standard is normally the only means of incorporating new information. In contrast, an EWA approach would allow translation of new understandings and insights into improved operations very quickly. The information provided by CMARP will be critical for the success of this adaptive approach.

**8. Allows more easy experimental manipulations-**The opportunities to conduct experimental manipulations would be far greater under an EWA approach because anticipated impacts on other objectives could be managed or mitigated by EWA resources. This principle of having immediately available resources and information from CMARP to deal with problems is one of the greatest strengths of the EWA approach.

**9. Creates incentives to be more efficient for both water supplies and the environment-**The incentive for getting maximum benefit from a given resource

comes from having finite resources. Wasteful actions are not rationally consistent with a fixed budget.

**10. Allows better coordination of maximum benefits-**The classic standards approach does not provide opportunity to coordinate actions of others (ERP, CVPIA, etc). In contrast, an EWA operation decision could take into account diverse other events taking place at the same time, such as hatchery releases, large natural production of juveniles, unexpected toxicity events, etc.

#### EWA Management

Establishing an EWA may be accomplished by any one of a number of methods, which include: 1) a water account held by the projects; 2) a web of agreements (or contracts) with water agencies; or 3) environmental water rights established by the SWRCB. These options do not exhaust the procedural possibilities for the account's creation, but merely provide some illustrative examples.

The control of the EWA remains a significant unresolved issue. The EWA's manager may come from any number of sources, including fishery or water agencies. The manager may be an individual or a group. Either way, the manager must be able to make the timely and difficult decisions that may arise. It is possible that EWA management may start with the existing fishery agencies (i.e. FWS, NMFS and DFG) and move to a new Delta environmental agency, if one is ultimately created. Because the existing fishery agencies hold many of the regulatory levers, they may be in the best position to adjust regulatory standards to enhance the EWA's assets.

The EWA manager may use the assets for any number of activities. Those activities include:

#### [Insert bulleted list of possible uses.]

This list does not exhaust all the possible uses, which is a key reason for creating the EWA. The EWA manager cannot anticipate now what may happen after CALFED begins implementing the other program elements. The EWA manager may need to use the assets in ways that cannot be identified today.

Management of the EWA would necessarily require coordination with other elements of the CALFED Bay-Delta Program and with other CALFED agencies. The ERP and Interior's CVPIA actions, for example, would have a particularly significant impact on fishery resources, requiring close coordination with the EWA manager. As the EWA manager considers water purchases, it may also try to coordinate with others making water purchases, including purchases for the environmental, agricultural or urban uses. Relying on the CMARP to report on fishery conditions will also play a critical role in the effective management of the EWA.

While the EWA is in the conceptual stage, it is not possible to provide certainty that such an account will promote species recovery and provide the regulatory certainty sought by

water users. CALFED, however, believes that the EWA offers the best possibility for balancing competing demands from water users and the Delta's fishery resources. By the time of the Record of Decision, CALFED intends to move the EWA from concept to a specific proposal for how to make the concept work.