

Financing for Delta Vision
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The Vision states that “beneficiaries must pay their appropriate share of investments...”

This is an important approach that has the following benefits:

- It is more equitable, and appears to be more equitable
- It helps evaluate which are the most important and most beneficial projects
- It assists in prioritizing and obtaining funding

Determining what the benefits are, and to whom they accrue is an important step whether or not it is undertaken for cost allocation. If it is going to be the basis of cost allocation, the issue gains the attention that it deserves. Expensive projects that provide little benefit may not be excluded without this analysis.

Methodologies for Allocating Costs

I was asked to address the methodologies that could be used to allocate costs. There is one widely-used approach to determining cost allocation for water supply and flood control projects - the Army Corps of Engineers SCRB approach - Separable Costs, Remaining Benefits. Other approaches were reviewed as part of the CALFED financing process – may have benefits, but not as widely used and accepted. All depend on an explicit statement of the benefits to be gained, and the value of those benefits. Valuation may be based on the cost of the next least expensive method for obtaining the benefits, or the cost of not obtaining the benefits. Two key aspects of cost allocation are:

- All similar projects or stakeholders must be evaluated using a common methodology, not “apples and oranges”. There is a danger of evolving into a “methodology war” which does not reach closure.
- Must cast a wide net – include all of the stakeholders. For example, for projects that protect the Delta from loss of water flows, not only Delta exporters should be included. The Delta Vision report had a telling figure (Figure 7b) showing the range of water users and their effect on reducing Delta flows. The situation under drought in 1976-77 and 1989-1991 is particularly interesting in this figure.

Cost Allocation is an Art, not a Science

There is not a readily available and accepted equation that can be used to allocate costs for Delta protection projects. These could cover water supply, flood control, and environmental protection, a broad range. There are also many difficulties associated with assigning benefits and costs:

- The data that can be used are often dated, questionable or non-existent.

- There are definitional problems. A project may protect fish from predation in the Delta. Is this an environmental program or a program to mitigate the environmental effects of water flow reductions? Each stakeholder group may have their own definitions. Once again, time and effort may be spent on issues which do not move the solution forward.
- Stakeholders must “buy in” to the benefits estimates. They will not agree to pay for a project unless they agree that the project will benefit them, and that the benefits will be more than the project will cost. It is necessary to create value that is understood and accepted by those who will be paying the bill. However, there may also be resistance if stakeholders feel the benefits to them are routinely overstated, or the benefits to others overlooked.

ANY ALLOCATION DEVELOPED SHOULD BE SEEN AS THE STARTING POINT FOR NEGOTIATIONS, NOT A DETERMINISTIC FORMULA

The best approach is a global or broad negotiation. Piecemeal settlements may leave some important projects as orphans if they do not have an obvious sponsor, yet stakeholders may accept responsibility if it is part of a package with significant benefits. And trade-offs between responsibilities for projects may be possible under a package deal – for example, a project with mainly water supply benefits but some environmental benefits may be paid for by the water agencies, if other projects with mainly environmental benefits but some water supply benefits are paid for by environmental interests.

There Are No Existing Analyses to Allocate Benefits

However, there are existing tools that could be used as starting points. DWR has an urban exporter reliability model (LCPSIM) which looks at benefits to urban agencies as a whole. This was designed to estimate whether statewide benefits of a proposed dam exceed statewide costs. It was not designed for cost allocation, and does not look at individual agency costs and benefits. It also only analyses benefits to the Exporting Projects (CVP and SWP). If individual agencies are going to agree to pay, benefits must be assigned on an agency-specific basis.

DWR is developing an approach for estimating ability to pay for flood control on Delta Islands. This could be used to estimate the benefits from Delta island flood control. However, this has not yet been approved, or applied to the many islands in the Delta. Finally, environmental benefits are difficult to measure; our understanding of fish ecology is growing, but not yet complete. As a result, developing an analytical approach to allocating benefits is going to take considerable time, and may still be controversial after it is completed.

The Ongoing Process is Important

As knowledge and conditions change, preferred actions will change. Particularly in the early years, there should be ongoing reviews of the plan of action (“adaptive management”). However, there must be clear decision points, with “Drop Dead” milestones clearly stated so that obligations are accepted before final commitment of funds, and to ensure that the process does not fail to reach decisions.

Additional thoughts

Both the Environmental Water Account and CVP Restoration Fund provide approaches to funding projects with environmental benefits.

The CVP Restoration Fund was a volumetric surcharge to water users to pay for mitigation projects. The drawback of this was its narrow focus – it only applied to CVP contractors. Fees to pay mitigation for reduced water flows should apply more widely. Fees for mitigation for Delta diversions could apply more narrowly. There is also a tradeoff between broad coverage and cost of fee collection and monitoring. At some low level of diversion, the cost of administering the fee may be greater than the fee collected.

The mitigation fee could also be ramped up to signal future price levels for water supply, so that water costs increase slowly, allowing time for implementation of conservation actions. Both the existence and the level of the fee should not be permanent, but reviewed from time to time. This review might be more often in the early years, to set an appropriate level.

The Environmental Water Account provided environmental stakeholders with water that could be used to benefit environmental values. Environmental stakeholders prioritized the use of this water. This assisted the evaluation of which actions were believed to be most important for the environment.

DWR has also used “bidding” to award bond funds for water supply projects. It has specified a goal for the project (such as, decreasing uses of surface water) and issued a request for proposals for agencies to provide descriptions of projects, size of benefits, and cost estimates. Low cost/high benefit projects are chosen to receive funding. This could be expanded, for example to have environmental stakeholders “bid” programs to obtain funding, or water supply agencies “bid” to pay for water supply or quality projects.