

Reason for Finance Options Report

- Status quo approach of relying on state funding unlikely in the future
- Existing funding gone after 2006-7
- Water user fee Budget Act requirement
- Benefits-based financing principle in ROD
- Coordinate financing among Program Elements

Objective of Finance Options Report

- Build an understanding of Program costs and benefits
- Provide reasonable and instructive finance options
- Provides tools to assist decision-makers
- Show how expected benefits translate into cost-sharing arrangements that support possible financing coalitions.

Process & Participants

- *Technical Team*
 - Consultants & BDA staff develop Finance Options Report
- *Ad Hoc work group*
 - 18 member work group (stakeholders, legislative reps, & agency managers) reviews report and serves as sounding board for Technical Team and provides input to Panel
- *Independent Review Panel*
 - 8 member panel made up of academics and practitioners who are experts in public financing provide advice on finance analysis and reasonableness of finance options

General findings

- Wide range in potential cost of CALFED Program
- Benefits-based analysis offers mixed potential
- Divergent views about environmental mitigation responsibilities
- Significant potential to broaden funding sources.
- Variety of finance tools available.
- Need for strategies for prioritizing public funds

Next Steps

Draft Report:

- Comments on Draft Report by July 15th
- Subcommittee comments to July BDPAC meeting
- BDA August meeting – Finalize Report

10-year finance plan:

- Cost estimates and Available Funding
- Proposed Allocations for Unmet Need

DWQP Costs

- The DWQP has cost about \$24 million per year during the first four years of the CALFED Program.
- State taxpayers have paid more than 90% of the costs of the DWQP so far. Local interests, water users, and U.S. taxpayers have paid the remainder.
- The DWQP cost estimates do not include hundreds of millions of dollars being spent by urban water users and other groups, such as dischargers, for new treatment technologies and regulatory compliance.
- The costs of the DWQP are expected to range from \$21 million to \$56 million annually.

Findings about DWQP Benefits and Beneficiaries

- Beneficiaries are urban water users, the public, and dischargers.
- A baseline issue involves responsibility for water quality costs.
- Wide variation in costs of Delta water quality among users depending on Delta water share, location of diversion, quality of other supplies, and treatment technology in place.
- Most affected urban water use located in the South Coast and Bay Area. CVP urban users in the Central Valley account for a small but growing portion of urban use of Delta water.
- Other water users benefit through hydrologic interdependence, generally incidental
- Economic benefits are obtained by improvements in water quality for end users, or by reductions in costs of water treatment, or by reduction in costs of managing discharges
- Economic benefits of salinity reductions may include reduced costs of wastewater treatment, reclamation, and groundwater management.

Quantification Issues

- The economic benefits of the DWQP are difficult to predict or measure.
- The primary impediment to quantifying benefits at this stage of the program's development is uncertainty about future program actions.
- There is some information regarding the costs of water treatment and end-user costs in relation to water quality.
- The quality of data available to quantify program benefits varies significantly by water quality constituent.

Three Implementation Examples

1. ROD Shares

Cost Allocation Shares for Each DWQP component – ROD Share Example			
Component Action	Federal	State	Other
Improving Delta Water	0	0	100
Improving Imported Water	33	33	33
Improving Local Sources	25	25	50
Treatment Options – low cost range	50	50	0
Treatment Options – high cost range	12.5	12.5	75

2. Drinking Water Share Emphasis

Cost Allocation Shares for Each DWQP component – Drinking Water Share Emphasis			
Component Action	Federal	State	Urban Delta Exports and In-Delta M&I
Improving Delta Water	0	0	100
Improving Imported Water	0	0	100
Improving Local Sources	0	0	100
Treatment Options	25	25	50

3. Water User Cost Share

Table DWQ-6.
Cost Allocation Shares for Each DWQP component – Water User Cost Share

Component Action	Federal	State	Urban Delta Exports and In-Delta M&I	All Bay-Delta Water Users
Improving Delta Water	0	0	80	20
Improving Imported Water	0	0	80	20
Improving Local Sources	0	0	80	20
Treatment Options	25	25	50	

Table DWQ-1
Drinking Water Quality Program Allocation Examples
(Costs in Million \$ per year)

	Allocation Examples					
	ROD Shares		Drinking Water Share Emphasis		Water User Cost-Share	
	%	\$	%	\$	%	\$
General Public						
CA Taxpayers	13%-21%	\$4.5 - \$7	6% - 9%	\$1 - \$5	6% - 9%	\$1 - \$5
Fed. Taxpayers	13%-21%	\$4.5 - \$7	6% - 9%	\$1 - \$5	6% - 9%	\$1 - \$5
<i>Subtotal: Gen. Public</i>	26% - 42%	\$9 - \$14	12% - 18%	\$2.5 - \$10	12% - 18%	\$2.5 - \$10
Bay-Delta Users						
CVP			9%	\$2 - \$5	10% - 11%	\$2 - \$6
SWP			73% - 79%	\$17 - \$41	61% - 65%	\$14 - \$34
Other Water Users					11% - 12%	\$3 - \$6
Local (could be CVP, SWP or other)	58% - 74%	\$12 - \$42				
<i>Subtotal: Bay-Delta Users</i>	58% - 74%	\$12 - \$42	82% - 88%	\$19 - \$46	82% - 88%	\$19 - \$46
Total	100%	\$21 - \$56	100%	\$21 - \$56	100%	\$21 - \$56

Note: Numbers may not add to 100% due to rounding.

What about DBPs?

- DWQP's source water quality actions will produce incremental gains in average source water quality, but will not eliminate the much larger seasonal and yearly variability in quality.
- DWQP's source water quality improvements will not affect the water treatment technology upgrades expected to occur over the next decade.
- To the extent that the effectiveness of source protection investments is uncertain, risk-averse public drinking water providers are more likely to invest in best-available treatment technologies to meet drinking water regulatory requirements.
- The timing, magnitude, and duration of benefit of source water treatment will depend on the amount, effectiveness, and rate of adoption of treatment technologies that avoid production of hazardous disinfection byproducts.
- With new treatment technologies in place, changes in source water quality may have limited effect on the levels of hazardous disinfection by-products at the tap.
- Some measurable public health benefits might be obtained from reduced concentrations of disinfection by-product precursors

Other Findings

- Factors that affect drinking water quality economics are changing rapidly. These factors include regulations, technology, information about health effects, and facilities in place.
- The DWQP will need to be flexible to accommodate this changing environment.
- Costs of salinity may increase in the future as urban areas strive to achieve more use of groundwater and reclaimed water.
- Improvements in source water quality may reduce concentrations of numerous undesirable water quality constituents that are not targeted by the program.
- Water users or the public may be willing to pay substantial amounts for better water quality even when public health guidelines are met.
- Studies of public willingness to pay for water quality improvements would be helpful