

Central Valley Project Cost Allocation Update Separable Costs-Remaining Benefits Method

The Mid-Pacific Region is updating the cost allocation study for the Central Valley Project (CVP) to determine the updated amount of project costs each project beneficiary must repay. The last major cost allocation completed for the CVP was in 1970. Since then, facility modifications and additions have occurred, as well as legislation enacted which has significantly changed CVP operations. These changes need to be incorporated into a new allocation.

Cost Allocation Process

A basic principle of cost allocation is that shared use of combined facilities constructed for multiple purposes results in costs savings which should be impartially shared among all of the purposes. The assignment of costs reflecting those savings to each purpose is the focus of the cost allocation process.

The Separable Costs-Remaining Benefits (SCRB) method for allocating costs was adopted for use by the Bureau of Reclamation in 1954 and was used in the 1956, 1960, 1970, and 1975 CVP cost allocations. Given the history of Reclamation policy supporting the SCRБ method for cost allocations, the SCRБ method will be used for the updated CVP cost allocation.

The SCRБ method is based on the justified investment for each project purpose. The maximum justified investment is the smaller of either:

1. The benefits ascribed to the purpose; or
2. The cost of the most economical single purpose alternative project which generates the same benefits as the multi-purpose project.

The quantification of justifiable expenditures is a means for allocating joint costs in proportion to benefits.

SCRБ Terminology

- **Specific Costs** – Costs of individual facilities that serve only a single purpose (i.e. power plant, which is used to generate power only and serves no other purpose).
- **Separable Costs** – Costs that have been added to a multi-purpose project to specifically serve a given function. This is the minimum allocation to any function. Separable costs are calculated by deducting the cost of the project without the function involved from the total costs of the multi-purpose project including all functions.
- **Joint Costs** - Costs of identifiable physical facilities which serve more than one, and often several, purposes (i.e. a dam which provides storage capacity for multiple purposes such as irrigation, flood control, recreation, etc.).
- **Remaining Joint Costs** – Costs of joint use facilities that remain after all separable costs have been deducted from total project costs.
- **Single-Purpose Alternative (SPA) Costs** – Costs of the most economical alternative which would likely be built as a Federal-type project to provide equivalent benefits for a single purpose.
- **Justifiable Expenditure** – Maximum amount of costs that can be allocated to a purpose and is determined by the lesser of benefits or SPA costs.
- **Remaining Benefits** – Amount of benefits (justifiable expenditure) associated with the remaining joint costs and used as the basis of allocating the remaining joint costs.



SCRB Method 8-Step Process

1. Estimate the monetary benefits (Benefits) provided by each project purpose.
2. Estimate the Single Purpose Alternative Costs (appraisal-level estimates).
3. Determine the Justifiable Expenditure (lesser of the Benefits or Single Purpose Alternative Costs).
4. Calculate Separable Costs by deducting the cost of the project without the function involved from the total costs of the multi-purpose project including all functions. Subtract Separable Costs to determine Remaining Justifiable Expenditure.
5. Calculate the proportionate share of Remaining Justifiable Expenditure for each purpose.
6. Determine the Remaining Joint Costs by subtracting all the Separable Costs from the total project costs.
7. Allocate the Remaining Joint Costs among the project purposes according to the percentages derived in Step 4.
8. Calculate the total costs allocated to each purpose.

SCRB Example

Steps	Flood Control	Water Supply	Power	Total
1 Estimate Benefits	\$40	\$25	\$10	\$75
2 Estimate Single Purpose Alternative Costs	\$15	\$20	\$15	\$50
3 Justifiable Expenditure (Lesser of #1 and #2)	\$15	\$20	\$10	\$45
4 Calculate and Subtract Separable Costs	\$(5)	\$(10)	\$(5)	\$(20)
5 Remaining Justifiable Expenditure	\$10	\$10	\$5	\$25
6 Joint Cost Distribution %	40%	40%	20%	100%
7 Joint Costs Allocated	\$4	\$4	\$1	\$9
8 Share of Total Project Costs (Separable Costs plus Joint Costs)	\$9	\$14	\$6	\$29

Notes:

- Total Project Costs: \$29
- Total Separable Costs: (\$20)
- Joint Costs to be Allocated: \$9

For more information:

MP Region Public Affairs
916-978-5100
www.usbr.gov/mp

October 2011