Cost Allocations

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Why Do a Cost Allocation?

- To divide the project financial costs among the purposes served
- Goal is to have all purposes share equitably in the savings realized from the multipurpose construction

When Do You Do a Cost Allocation?

- An allocation is made for projects serving multiple purposes
- A cost allocation is a key element of project formulation

Firm Cost Allocation

- A separate report
- Required at the time the first reimbursable purpose becomes operational
- Only allocates to authorized purposes
- Chief of Engineers approval
- Results in joint percentages by project purposes for O&M and construction

Definitions

- Cost Allocation is the process of equitably distributing project costs among project purposes.
- Cost Apportionment is the process of dividing the costs of a project between Federal and non-Federal interests.
- Cost Classification is the process of assigning costs to appropriate work categories.

More Definitions: Cost Allocation

- Specific costs costs serving only one purpose
- Joint costs the difference between the total project costs and the sum of all separable costs
- Separable costs costs incurred specifically to add a purpose to a project

Allocation Options

- None
- Additional Cost
- Alternative Justifiable Expenditure Method
- Use of Facilities Method
- Percent of Benefits
- Separable Cost-Remaining Benefits (SCRB)

SCRB Method

 Adopted by interagency agreement March 1954 as preferred method

 ER 1105-2-100 reaffirmed its preferred status – See Appendix E, Section IX, Multiple Purpose Projects

Formulation Requirements for SCRB Allocation

Cost allocation requires formulation of specific plans:

- Multipurpose plan
- Multipurpose plans less each purpose
- Most likely alternative single purpose plan

Allocation Equity

- Use of the SCRB method results in the following maximum and minimum cost limits for each purpose
- Maximum:
 - Benefits to each purpose
 - Cost of the least cost alternative for each purpose.
- Minimum: separable costs
- Most likely: proportional sharing of joint costs of multipurpose added to minimum

Review Points Again and Again

- Determine a method to allocate joint costs to the project purposes
- Understand the cost sharing percentages by purpose
- Multiply cost share percentages to allocated cost by purpose (cost apportionment)
- For water resource problems the SCRB method is used to allocate joint costs.

Separable Costs Remaining Benefits (SCRB) Example



SCRB Example

	Flood Damage Reduction	Water Supply	Recreation	Total
Average Annual Benefits				
Single Purpose Alternative Cost				
Limited Benefits/Costs				
Separable Costs				
Remaining Benefits				
Percent of Total				
Joint Costs	_	-	-	
Allocated joint cost				
Total allocation				

What Information Do You Need?

- Multipurpose Project Costs
 - Total Multi-purpose Project Cost = \$15M
 - FDR and Water Supply Project Cost = \$13M
 - FDR and Recreation Project Cost = \$13M
 - Water Supply and Recreation Project Cost = \$12M
- Single Purpose Project Costs
 - Single Purpose Recreation Project Cost = \$ 10M
 - Single Purpose Water Supply Project Cost = \$8M
 - Single Purpose FDR Project Cost = \$12M
- Benefits
 - Recreation Benefits = \$5M
 - Water Supply Benefits = \$8M
 - Flood Damage Reduction Benefits = \$6M

SCRB Example

	Flood Damage Reduction	Water Supply	Recreation	Total
Average Annual Benefits	6.0	8.0	5.0	19.0
Single Purpose Alternative Cost	12	8.0	10	30
Limited Benefits/Costs	6.0	8.0	5.0	19.0
Separable Costs	3.0	2.0	2.0	7.0
Remaining Benefits	3.0	6.0	3.0	12
Percent of Total	.25	.5	.25	100
Joint Costs	-	-	-	8.0
Allocated joint cost	2.0	4.0	2.0	8.0
Total allocation	5.0	6.0	4.0	15.0

Alternative Cost

- Single Purpose Alternative Cost The financial costs of achieving the same or equivalent benefits with a single purpose plan
- Requires appropriate level of detail of design and costs
- Can serve to limit benefits in the allocation

Remaining Benefits

- Computed by subtracting the Separable Costs from the Limit Benefits
- Think of this as the "Joint Benefits"
- Used to proportion the joint costs to each purpose

Cost Sharing

	Water Supply	Ecosystem Restoration	Total
Allocated	7.5M	2.5M	10M
Federal	OM	1.63M	1.63M
Non-Federal	7.5M	0.87M	8.37M
Total	7.50M	2.50M	10M

Cost Classifications

In accounting for costs, these terms are used:

Specific Costs: Costs for only one purpose
Joint-Use Costs: Cost serving all purposes

This step is a team effort with accountants, PM, economist, sponsor, PMA, etc.

Assigning Costs at Existing Projects

- Joint-use or Specific Cost
- O&M or Capital
- A Specific Project Purpose Driving Cost Occurrence
 - Example New fish screens needed because of new hydropower turbines

Water Supply Reallocation

- Typically reallocating a portion of storage from the conservation pool to Water Supply
- A simplified procedure (use of facilities) is used to adjust the cost allocation for the new water supply cost share.
- Payments for water supply are returned to the Treasury (not the Corps).
- The cost of lost hydropower can be mitigated through credits.

Perry Lake Cost Allocation

- Authorized in the 1954 Flood Control Act
- Authorized Purposes Flood Risk Mgmt, Water Supply, and Recreation
- Joint-use O&M percentages FRM 37.2%, WS 31.4%, and REC 31.4%
- Joint Use 1st Costs percentages FRM 60.4%, WS 19.8%, and REC 19.8%

John Redmond Cost Allocation

- Authorized in 1950 Flood Control Act
- Authorized Purposes Water Supply, Flood Risk Mgmt, Recreation, and Water Quality
- Joint-use O&M percentages WS 25.39%, FRM 38.31%, REC 6.33%, and WQ 29.97%
- Joint Use 1st Costs percentages WS 15.56%, FRM 62.19%, REC 3.88%, and WQ 18.37%

Take Away Points

- Cost allocation applies to purposes
- Cost apportionment applies to cost sharing
- The SCRB method is the accepted method of allocating joint costs
- The SCRB method requires the formulation of many plans
- Joint Costs are important for WS

Recapitalization

Projects getting old and need more repairs

- Use of the project has changed
- Under-funded projects

Water Supply Strengths & Issues

- 100% of costs are already borne by sponsor
- Water for drinking is vital
- Ability to influence funding (Kansas MOU)
- Ability to influence legislation
- WSA 1958 permanent right to storage
- Water Supply is a joint cost
- Federal funds are constrained