

RECLAMATION

Managing Water in the West

Central Valley Project Cost Allocation Study

Introductory Meeting: October 1, 2010



U.S. Department of the Interior
Bureau of Reclamation

CVP-CAS

Central Valley Project Cost Allocation Study

- Team Introduction
- Cost Allocation Process & Schedule
- Review CVP Project Purposes
- Cost Allocation Background
 - Methodology/Terminology
 - SCRIB Steps/Analysis
- Public Involvement
- Areas of Consideration



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CVP-CAS *Project Team*

Reclamation Mid-Pacific

- Project Management
- Benefit Analysis
- Cost Estimating
- Report Preparation

Reclamation Denver

- Policy Direction
- Benefit Analysis
- Modeling

U.S. Army Corps of Engineers

- Benefit Analysis:
 - Flood Control
 - Navigation

Other Partners

- Western Area Power Administration
- U.S. Fish & Wildlife Service
- Water & Power Customers

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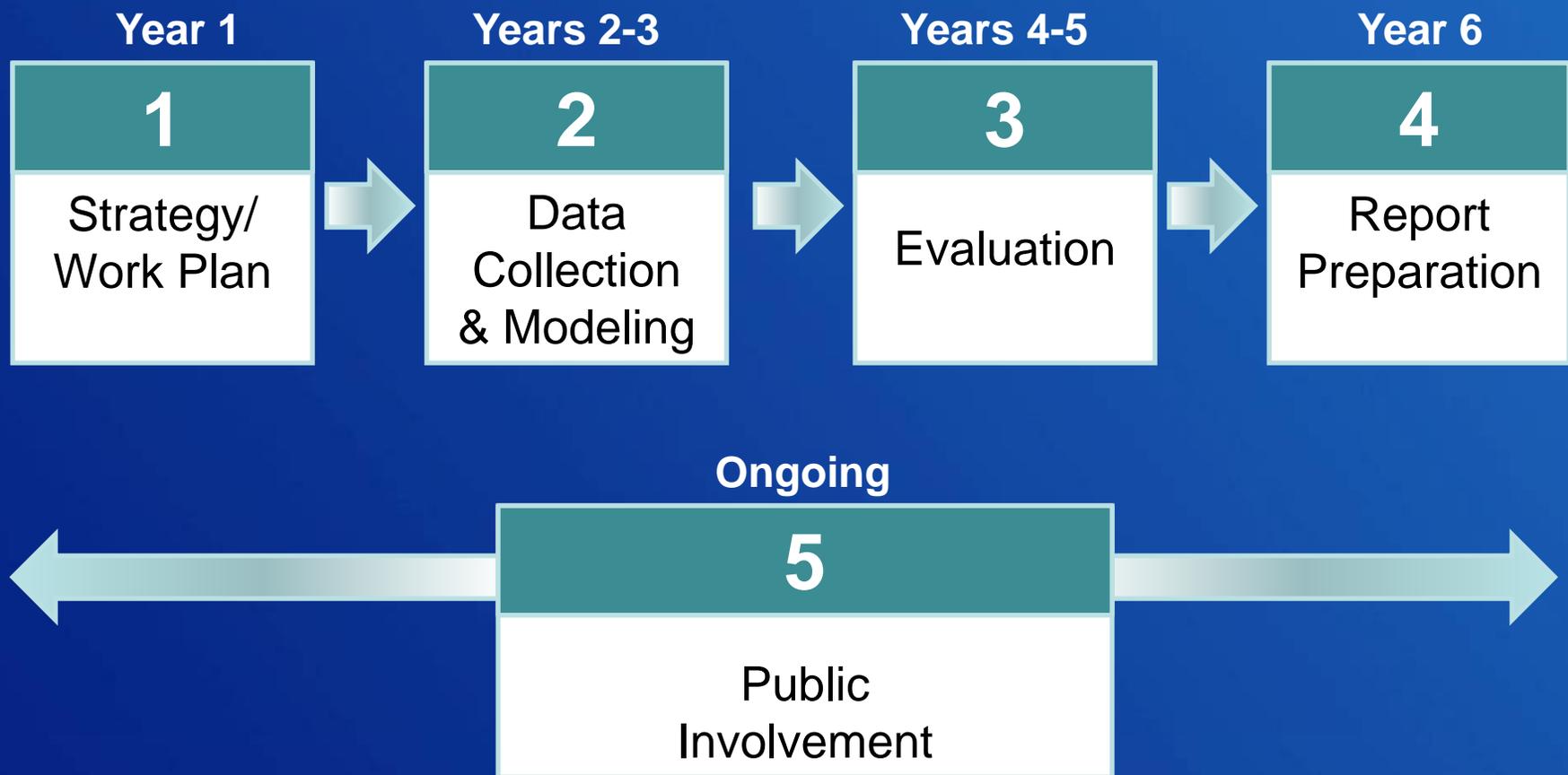
CVP-CAS *Purpose*

Reclamation Law (1902 Act as amended, specifically by the 1939 Act) requires the full repayment of actual costs, as assigned by the cost allocation process



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CVP-CAS *Process & Schedule*



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CVP-CAS *CVP Purpose*

- Authorized Purposes:

1. Water Supply
2. Power
3. Flood Control
4. Fish & Wildlife
5. Navigation
6. Recreation
7. Water Quality



- Over 250 Long-Term Water Contractors
- Over 70 Power Customers
- Financially & Operationally Integrated
- Composed of Single- & Multi-Purpose Facilities

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CVP-CAS *CVP Allocation*

(By Water & Power Contractors)

Non-Reimbursable

- Flood Control/Navigation
- Water Quality Improvement
- Fish & Wildlife Enhancement
- Recreation

Reimbursable (Full/Partial)

- Water Supply
- Power

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CVP-CAS *Cost Allocation Background*

History and Policy

- Initial Cost Allocation Study: 1946
- Last Major Allocation Update: 1970
- Last Minor Allocation Update: 1975
- Review of Allocation Methodology: 2001
- Allocation Classifications:
 - All classified as interim
 - CVP not viewed as “complete”

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CVP-CAS *Cost Allocation Background*

Methodology

- Separable Costs Remaining Benefits (SCRB)
- Allocation Method for Federal Water Resource Studies
 - 7-Step Process
 - Example Review

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CVP-CAS *Cost Allocation Background*

SCRB Terminology

- **Specific Costs** – Costs incurred to serve only one project purpose, i.e. powerplant
- **Joint Costs** – Costs which serve more than one purpose, i.e. a dam serves multiple purposes of water supply, power, recreation, and flood control
- **Separable Costs** – Costs of the multi-purpose project minus the cost of the project without the purpose
 - Both specific costs and some of the joint costs
 - Portion of multi-purpose facilities due to inclusion of the single purpose in question, i.e. higher dam embankment due to flood control purpose

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CVP-CAS *Cost Allocation Background*

SCRB Terminology (cont.)

- **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 Joint Costs** – Costs of joint use facilities that remain after all separable costs have been deducted from total project costs
- **Remaining Benefits** – The justifiable expenditure less the separable costs

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CVP-CAS *Cost Allocation Background*

SCRB 7-Step Process

1. Estimate the monetary benefits provided by each project purpose
2. Estimate single purpose alternative costs and determine justifiable expenditure (lesser of the Benefits or Single Purpose Alternative Costs)
3. Subtract separable costs to determine remaining justifiable expenditure
4. Calculate the proportionate share of remaining justifiable expenditure for each purpose

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CVP-CAS *Cost Allocation Background*

SCRB 7-Step Process (cont.)

5. Determine the remaining joint costs by subtracting all the separable costs from the total project costs
6. Allocate the remaining joint costs among the project purposes according to the percentages derived in Step 4
7. Calculate the total costs allocated to each purpose

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CVP-CAS *Example SCRB Analysis*

- Three project purposes assumed for example
- Money values hypothetical

Step 1: *Estimate Monetary Benefits Provided by Each Project Purpose*

Allocation	Project Purpose			
	Water Supply	Power	Flood Control	Total
Estimated Benefits	\$15	\$30	\$35	\$80

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CVP-CAS *Example SCRB Analysis*

Step 2: *Estimate Single Purpose Alternative (SPA) Costs and Determine Justifiable Expenditure (Lesser of Benefits or SPA Costs)*

Allocation	Project Purpose			
	Water Supply	Power	Flood Control	Total
Estimated Benefits	\$15	\$30	\$35	\$80
Estimated SPA Costs	\$25	\$20	\$40	\$85
Justifiable Expenditure	\$15	\$20	\$35	\$70

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CVP-CAS *Example SCRB Analysis*

Step 3: *Subtract Separable Costs to Determine Remaining Justifiable Expenditure*

Allocation	Project Purpose			
	Water Supply	Power	Flood Control	Total
Justifiable Expenditure	\$15	\$20	\$35	\$70
Separable Costs	\$5	\$5	\$10	\$20
Remaining Justifiable Expenditure	\$10	\$15	\$25	\$50

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CVP-CAS *Example SCRB Analysis*

Step 4: *Calculate Proportionate Share of Remaining Justifiable Expenditures for Each Purpose*

Allocation	Project Purpose			
	Water Supply	Power	Flood Control	Total
Remaining Justifiable Expenditure	\$10	\$15	\$25	\$50
Share of Remaining Justifiable Expenditure	= $\$10/\50 20%	= $\$15/\50 30%	= $\$25/\50 50%	100%

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CVP-CAS *Example SCRB Analysis*

Step 5: *Subtract All Separable Costs From Total Project Costs to Determine Remaining Joint Costs*

Allocation	Project Purpose			
	Water Supply	Power	Flood Control	Total
Total Project Costs				\$50
Separable Costs	\$5	\$5	\$10	\$20
Remaining Joint Costs				\$30

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CVP-CAS *Example SCRB Analysis*

Step 6: *Allocate Remaining Joint Costs Among Project Purposes According to the % Derived in Step 4*

Allocation	Project Purpose			
	Water Supply	Power	Flood Control	Total
Remaining Joint Costs	\$30			
Allocation Percent	20%	30%	50%	100%
Allocated Remaining Joint Costs	\$6	\$9	\$15	\$30

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CVP-CAS *Example SCRB Analysis*

Step 7: *Calculate Total Costs Allocated to Each Purpose by Adding Separable and Allocated Joint Costs*

Allocation	Project Purpose			
	Water Supply	Power	Flood Control	Total
Separable Costs	\$5	\$5	\$10	\$20
Allocated Joint Costs	\$6	\$9	\$15	\$30
Total Allocated Costs	\$11	\$14	\$25	\$50

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CVP-CAS *Benefit Analysis*

- **Benefits Evaluation**
 - 100-year period
 - Historical benefits brought forward to base year
 - Forecasted benefits present-worthed to base year
- **Historical Benefits**
 - Actual accomplishments
 - Historical value of those accomplishments
- **Forecasted Benefits**
 - Based on reasonably foreseeable conditions

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CVP-CAS *Public Involvement*

Public Involvement Plan

- Ongoing/Transparent Effort
- Regular Updates
- Topic-Specific Meetings
- Website:

www.usbr.gov/mp/cvp/cvp-cas/index.html



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CVP-CAS *Areas of Consideration*

- Final vs. Interim Cost Allocation
- Repayment
- Fish & Wildlife Costs
- Changes in Cost Allocation Percentages
- Others?

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CVP-CAS

www.usbr.gov/mp/cvp/cvp-cas/index.html

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