



Integrated Water Resource Management Plan

Preliminary Cost Allocation

YRBWEP Work Group Meeting

September 26, 2012

What is Cost Allocation?

- Multi-purpose projects achieve cost savings compared with single-purpose projects
- Cost savings can be shared across the various purposes
- Cost allocation determines how costs (and savings) can be shared equitably

Why is it “Preliminary”?

- Integrated Plan will be considered for funding by State and federal governments
- Projects, designs and sequencing may change as funds are appropriated and projects are implemented
- Cost allocation to be updated as changes occur
- Final repayment obligations will be established based on final projects as constructed, cost-share arrangements and Reclamation law

Key Inputs

- **Primary Purposes**
 - Ecological Restoration
 - Agricultural Irrigation
 - Municipal and Domestic Water Supply
- **Value of Benefits** (from NED Account, Present Value)
 - Ecological Restoration: \$6.2 billion (midpoint of range)
 - Agricultural Restoration: \$0.8 billion
 - Municipal and Domestic: \$0.4 billion
- **Financial Costs**
 - Construction, OM&R, Interest During Construction

Step-by-Step Procedure

1. Establish “Justifiable Expenditure,” by Purpose
2. Define “Specific Costs,” by Purpose
3. Define “Joint Costs”
4. Allocate the Joint Costs by Purpose
5. For each Purpose, Add the Allocated Joint Costs to the Specific Costs

The result is an allocation to each purpose. The allocations sum to the total project cost.

Establish “Justifiable Expenditure” by Purpose

- Define a Single-Purpose Alternative (SPA)* for Each Purpose
- Estimate Cost of Each SPA
- Take the lesser of:
 - Benefit for a given Purpose
 - Cost of SPA for the same Purpose
- This is the “Justifiable Expenditure” for Each Purpose

*SPA’s are not proposed for construction: they are defined solely to support the cost allocation procedure.

Define “Specific Costs”

- Costs of Projects or Features needed for only one purpose, not two or more purposes
- These are allocated directly, by assigning them solely to the appropriate purpose

Examples

Fish Passage Costs	Assign to Ecological Restoration
Kachess Inactive Storage Costs	Assign to Irrigated Agriculture
Municipal Conservation Costs	Assign to Municipal/Domestic Supply

Define “Joint Costs”



Remaining Joint Costs need to be allocated by Purpose.

The percentages from the next slide are used to allocate them

Allocate the Joint Costs



Joint costs are allocated based on a percentage,
calculated as:

$$\text{(RJE by purpose)} / \text{(total RJE)}$$

Add Specific Costs and Joint Costs, by Purpose

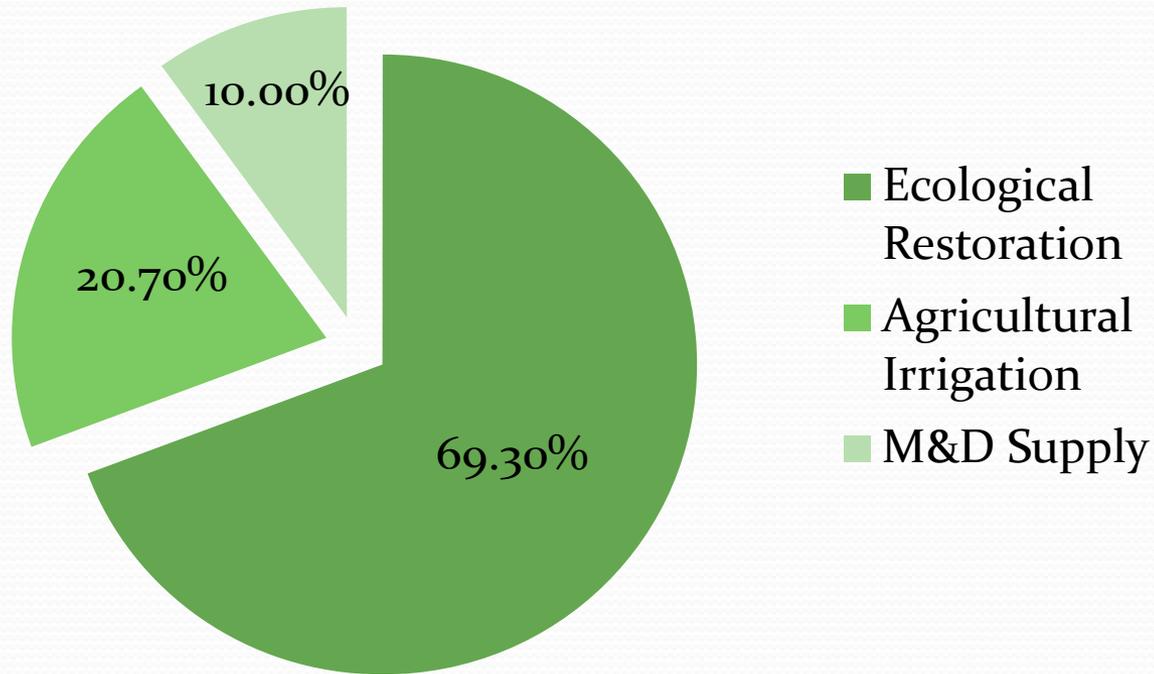
Ecological Restoration	Agricultural Irrigation	Municipal & Domestic Supply
Specific Costs Assigned	Specific Costs Assigned	Specific Costs Assigned
<u>+ Joint Costs Allocated</u>	<u>+ Joint Costs Allocated</u>	<u>+ Joint Costs Allocated</u>
= Cost Allocated to this Purpose	= Cost Allocated to this Purpose	= Cost Allocated to this Purpose

Preliminary Cost Allocation for the Integrated Plan

	Ecological Restoration	Agricultural Irrigation	Municipal & Domestic Supply
Specific Costs:	\$ 920 M	\$ 197 M	16 M
+ <u>Joint Cost:</u>	+ <u>1,520 M</u>	+ <u>532 M</u>	<u>335 M</u>
= Cost Allocated to Each Purpose	= 2,440 M	= 729 M	= 351 M

- Total cost is \$3,520 M (\$3.5 billion)
- This includes construction, IDC and OM&R.
- Results expressed as present value (discounted), in 2012 dollars.

Preliminary Cost Allocation in Percentages





Questions/Discussion

For Complete Analysis, see:

Technical Memorandum: *Preliminary Cost Allocation
for the Proposed Integrated Water Resource
Management Plan* (August 2012)