

Update on Framework for Implementation Report Yakima River Basin Integrated Water Resource Management Plan

June 20, 2012

Overall Purpose

Provide information needed by Reclamation, Ecology and the federal Office of Management and Budget in order to request authorizations and appropriations needed to implement the Integrated Plan.

New Analyses

Cost Risk Analysis (HDR Methodology)

Purpose: Improve information on costs, to support funding requests to Congress and State Legislature

- Six projects reviewed: Wymer Reservoir, Bumping Reservoir, Kachess Inactive Storage, K-to-K Pipeline, Cle Elum Fish Passage, Wymer Downstream Conveyance
- Detailed review of construction costs and adjust for inflation
- Replaced standardized contingency costs with specific risk elements affecting each project.
- Monte Carlo simulation of risk and uncertainty yields new, statistical cost ranges
- Draft Results:
 - Biggest decrease is elimination of Thorp Pump Station and Conveyance
 - Biggest increase is in cost of Bumping Reservoir
 - Total cost of Integrated Plan overall similar to 2011 results (<3% change, including inflation)
- Draft results under review at TSC (Reclamation Technical Service Center)
- Cost risk analysis should be updated periodically as additional investigations, design and risk-mitigation provide new information.

Preliminary Cost Allocation (federal methodology for water and power projects)

Purpose: Preliminary review of how costs should be allocated to different purposes, to support eventual determination of reimbursable/non-reimbursable costs, and repayment formulas for the reimbursable costs.

- Preliminary Cost Allocation Analysis (in progress)
 - Three purposes of Integrated Plan:
 - Ecological Restoration
 - Agricultural Irrigation
 - Municipal and Domestic Water Supply
 - Allocation of specific costs to these three purposes
 - Equitable distribution of remaining joint costs among the three purposes
- Financial Feasibility Analysis (pending)
 - Analysis of payment capacity using farm-level data on costs and revenues.
 - Analysis of ability-to-pay aggregated to irrigation-district level.

Four Accounts Analysis (federal Principles & Guidelines)

- National Economic Development (analysis in progress)
 - Updates economic analysis performed in 2010.
 - Looks at costs and benefits from a national perspective.
 - Results from Cost Risk Analysis used to update costs.
 - Benefits assessed in three categories:
 - Predicted increase in fish populations
 - Predicted increase in farm revenues from improved reliability
 - Additional supply for municipal and domestic uses
- Regional Economic Development (analysis pending)
 - Regional income
 - Regional employment
- Environmental Quality (analysis pending)
 - Ecological, aesthetic and cultural resources.
 - Effects of proposed alternative on significant resources
- Other Social Effects (analysis pending)
 - Effects not included in the other three accounts. E.g. energy needs; community effects, health and safety effects

Outline of Framework for Implementation Report (Draft)

1.0 Introduction and Purpose

- 1.1 The Yakima River Basin Integrated Water Resource Management Plan
- 1.2 Previous Activities and Studies
- 1.3 Programmatic Environmental Impact Statement
- 1.4 Purpose and Content of Framework for Implementation

2.0 Construction Cost Estimates

- 2.1 Summary of Construction Cost Estimates
- 2.2 Development of Construction Cost Estimates

3.0 Four Account Analysis

- 3.1 Purpose and Background
- 3.2 National Economic Development (NED) Account
- 3.3 Regional Economic Development (RED) Account
- 3.4 Environmental Quality (EQ) Account
- 3.5 Other Social Effects (OSE) Account

4.0 Preliminary Cost Allocation

- 4.1 Purpose
- 4.2 Identification of Benefits (Project Purposes) for Cost Allocation
- 4.3 Summarize Results and Cite Technical Memorandum
- 4.4 Methodology

5.0 Financial Feasibility Analysis

- 5.1 Purpose
- 5.2 Summarize Results and Cite Technical Memorandum
- 5.3 Methodology

6.0 References

7.0 List of Preparers

Appendices