

# Yakima River Basin Water Resource Management Act & Next Steps

YRBWEP Workgroup Meeting  
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# Yakima River Basin Water Resource Management Act – SSSB 5367

## **Purpose**

- Improve States' ability to work with federal government and water users to meet the Yakima Basin's future needs

## **Ecology authorized to implement Integrated Plan**

- Protecting and enhancing of fish and wildlife
- Improving availability and reliability of water supplies as well as efficiency of use
- Establishing flexible operational enhancements to prepare for the uncertainties of climate change

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## Water supply provisions

- Water supplies developed through storage allocated for both instream and out-of-stream use
- “Water Supply Facility Permit and Funding Milestone” – Permitting and funding must be in place for one or more water supply facilities to provide at least 214,000 ac-ft of water supply by January 30, 2025
- If “Milestone” not met, Teanaway Valley Acquisition may be transferred from Community Forest Trust to Common School Trust

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## **Funding**

- State commits to 50% of the cost of Integrated Plan, remaining 50% non-state (federal, local, private)
- Funding ratio does not apply to individual projects
- Ecology and State Treasurer must prepare a cost estimate and financing plan by December 15, 2014

## **Reporting**

- Ecology must submit report to the Governor and Legislature every two years beginning December 1, 2015 and ending in 2045

## ***Legislation does not:***

- Pre-authorize any specific project
- Eliminate or reduce requirements for project related analyses or permits

<b>Integrated Plan Element</b>	<b>Preliminary Budget Allocation</b>	<b>2013-2015 Focus</b>
Habitat	\$99,344,000	Outright purchase Teanaway Valley lands. Implement numerous habitat projects*
Fish Passage	\$9,400,000	Cle Elum Reservoir Passage construction ready
Operational Modifications	\$650,000	Prepare K to K pipeline EIS
Surface Storage	\$18,800,000	Kachess Inactive Storage and Cle Elum Pool Raise construction ready
Aquifer Storage and Recovery	\$400,000	Regional siting study. Construct one project*
Water Conservation	\$2,500,000	Construct numerous projects*
Market Driven Reallocation	\$350,000	Develop banking and exchange programs
<b>Total State Contribution</b>	<b>\$131,444,000</b>	

\*Additional funding being sought through other sources

# Moving Forward 2013 - 2015



# Moving Forward 2013-2015

- 2012 Accomplishments
- Path Forward
- Resources
- Schedule



# Programmatic Documents

YRBWEP Phase III (Integrated Plan)

Programmatic Environmental Impact Statement  
FPEIS-March 2012, ROD-July 2013

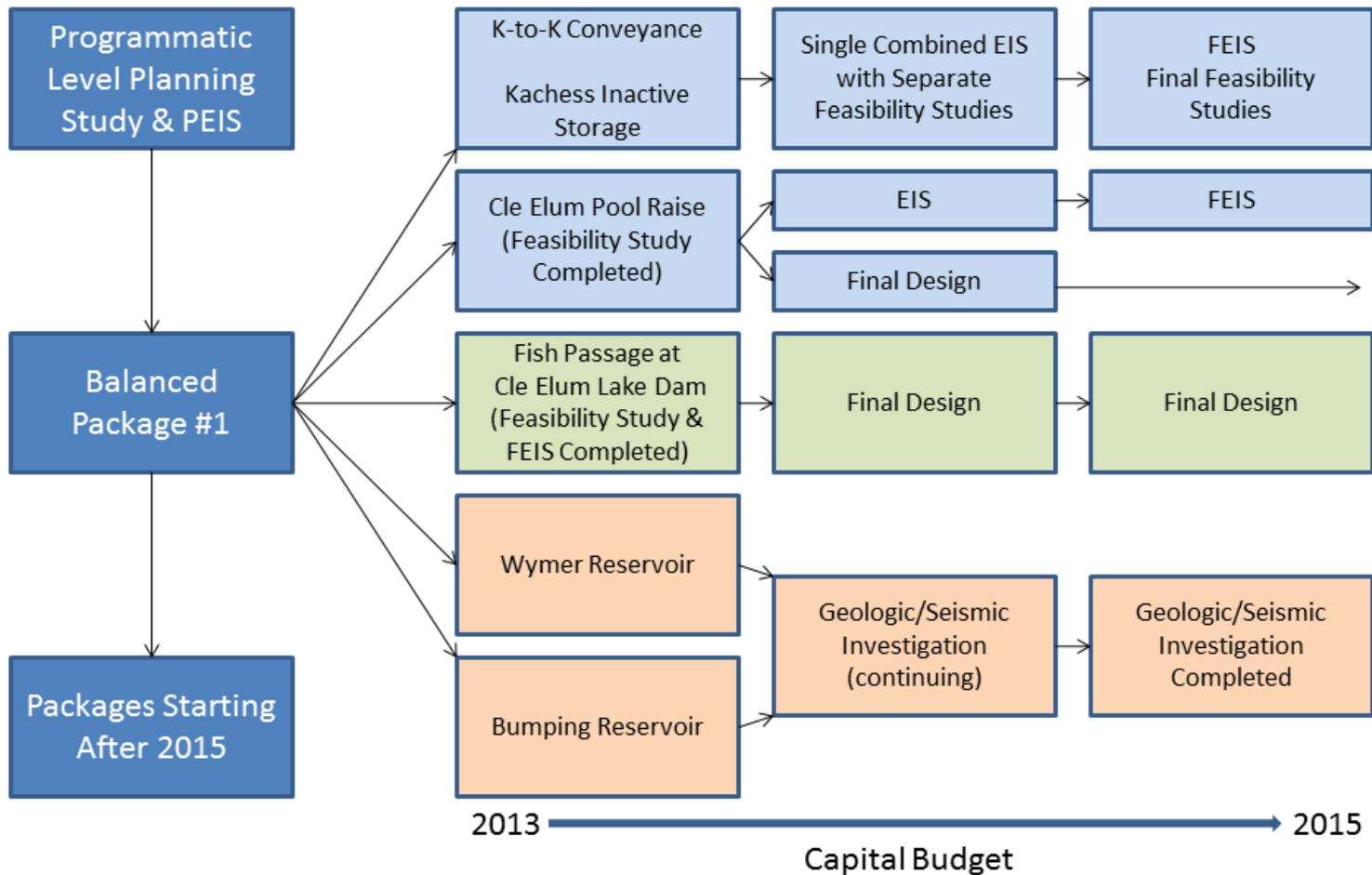
Programmatic Planning Document  
Framework for Implementation Document  
October 2012

Economics  
Four-Accounts Analysis of the Integrated Plan  
October 2012

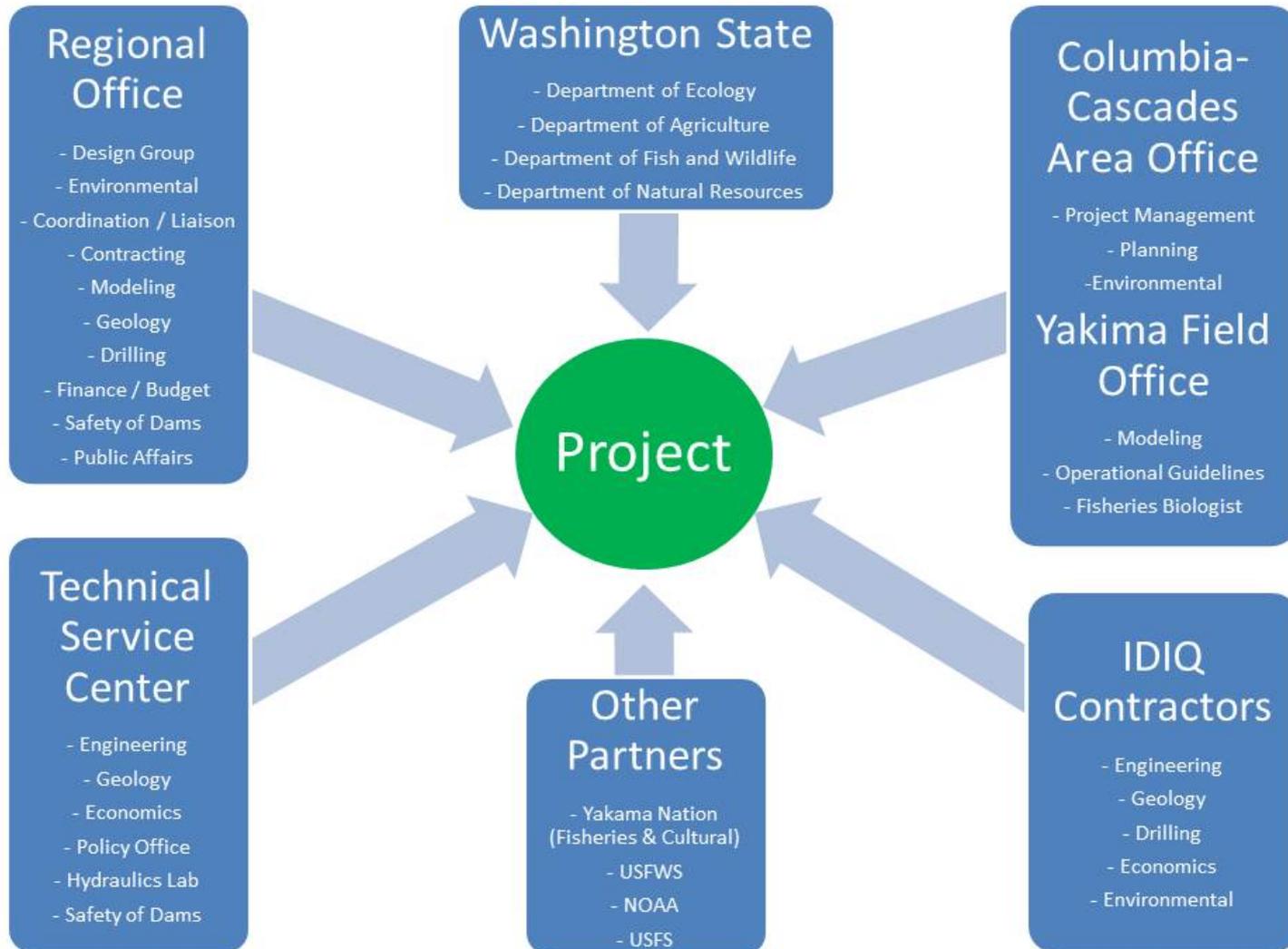


# Path Forward July 2013 to June 2015

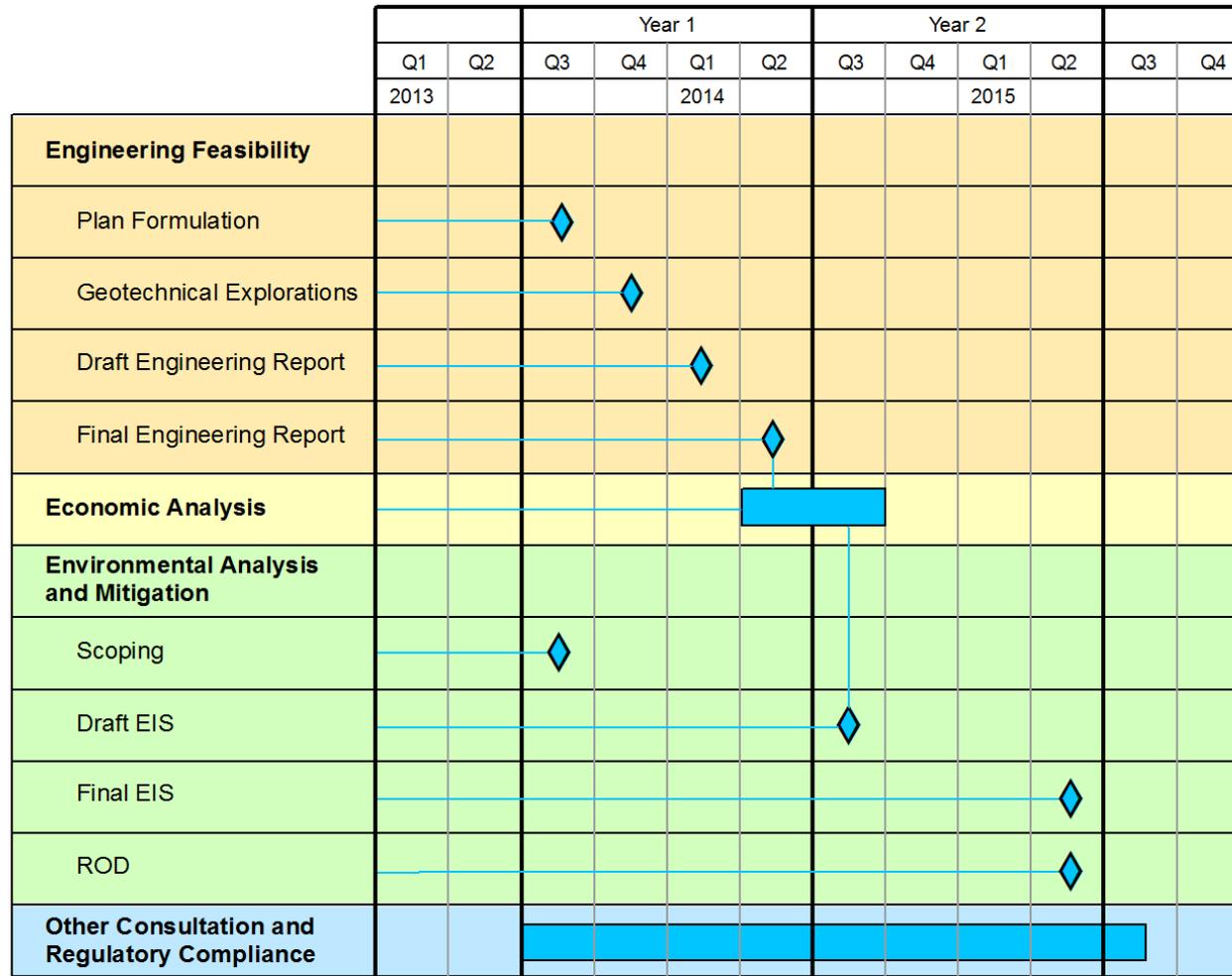
## YRBWEP Phase III (Integrated Plan) Balanced Package #1



# Resources



# 2-Year Milestone Schedule



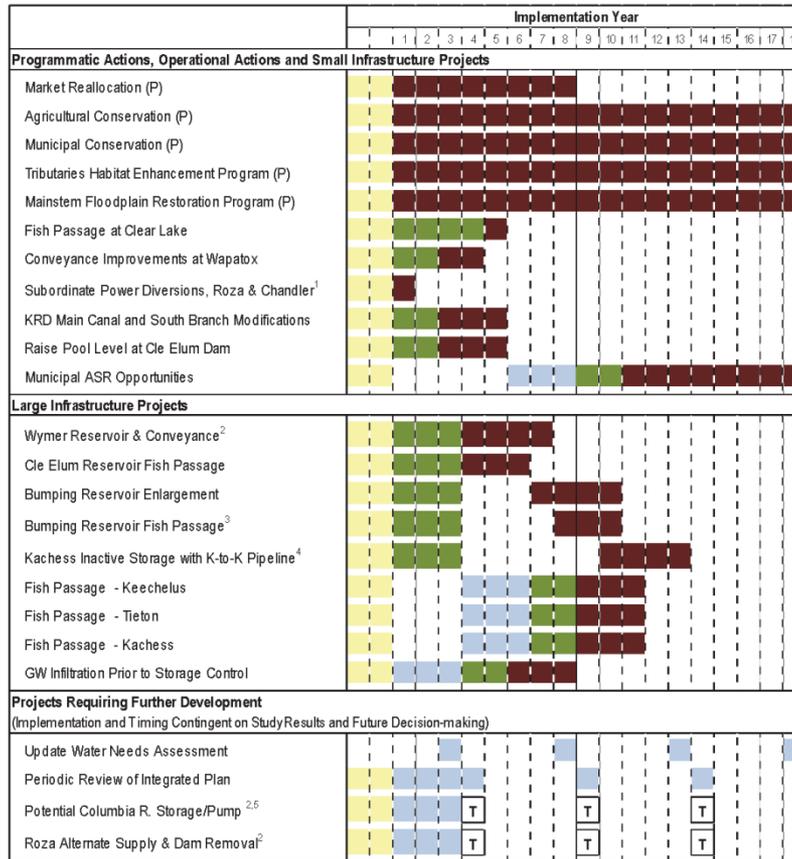
# Elements and Associated Actions

ACTION	DESCRIPTION
<b>Fish Passage</b>	
Clear Creek Dam Cle Elum Dam Bumping Lake Reservoir Dam Tieton Dam Keechelus Dam Kachess Dam	Improve upstream and downstream fish passage at Clear Lake  Add upstream and downstream fish passage facilities at other dam sites
<b>Structural and Operational Changes</b>	
Raise Pool at Cle Elum Dam KRD Canal Changes Keechelus-to-Kachess Conveyance Subordinate Power at Roza Dam and Chandler Power Plants Wapatox Canal Improvements	3-foot increase in storage pool elevation Reduce seepage and enhance tributary flows Optimize storage between two reservoirs Reduce water diversions to support fish migration Improve efficiency and consolidate diversions
<b>Surface Water Storage</b>	
Wymer Dam  Lake Kachess Inactive Storage Enlarged Bumping Lake Reservoir Columbia River Pump Exchange with Yakima Basin Storage	New off-channel reservoir (162,500 acre-feet). Also investigate removal of Roza Dam Tap inactive storage volume (up to 200,000 acre-feet) Enlarge reservoir to 190,000 acre-feet Conduct feasibility study; and periodically evaluate need for additional supplies
<b>Groundwater Storage</b>	
Shallow Aquifer Recharge Aquifer Storage and Recovery	Late winter/early spring infiltration prior to storage control Off-season recharge of municipal supplies
<b>Habitat Protection and Enhancement</b>	
Mainstem Floodplain Restoration Tributaries Habitat Enhancement Targeted Watershed Protection and Enhancements	Program to fund a range of fish habitat projects Program to fund a range of fish habitat projects Program to acquire and protect sensitive lands, including aquatic and terrestrial habitats
<b>Enhanced Water Conservation</b>	
Agricultural Water Conservation Municipal Water Conservation	Program to fund a range of projects Program to fund a range of projects and encourage conservation by residents
<b>Market Reallocation</b>	
Near-term Effort Long-term Effort	Reduce barriers to trading Additional steps to reduce barriers

KRD = Kittitas Reclamation District



# Preliminary Implementation Schedule



(P) = Programmatic Actions

T = Assessment of triggers for possible implementation.

<sup>1</sup> Further power subordination subject to approval by Reclamation, BPA, and either Roza or Kennewick Irrigation District, as applicable.

<sup>2</sup> Roza alternate supply to be considered as part of Wymer Project or storage/pump exchange projects such as Columbia River supply.

<sup>3</sup> Timing of fish passage at Bumping Lake could be advanced to an earlier date if an enlarged reservoir is not authorized.

<sup>4</sup> I-90 crossing of K-to-K Pipeline may be constructed in conjunction with Wash. Dept. of Transportation construction project.

<sup>5</sup> Step 1 in feasibility study of potential future storage/pump exchange projects.

**Color Codes:**

- PR / EIS and Authorization (for "trigger" projects, authorize studies)
- Studies
- Project environmental review, permitting & design
- Project Construction or Program Activation



Figure 4. Preliminary Implementation Schedule for the Integrated Plan

# Summary of Capital Costs

**Table 2. Summary of Capital Costs (2012 dollars)**

Project	Undiscounted Capital Cost (\$M)	Present Value (\$M)
Fish Passage at Lake Cle Elum Dam	87.0	71.5
Fish Passage at Bumping Lake Dam	28.4	20.0
Fish Passage at Clear Creek Dam	3.2	2.6
Fish Passage at Tieton Dam	105.2	71.1
Fish Passage at Kachess Dam	105.2	71.1
Fish Passage at Keechelus Dam	105.2	71.1
Wymer Reservoir and Adjacent Intake	1,138.0	918.1
Wymer Downstream Conveyance	289.0	233.1
Conveyance from Lake Keechelus to Lake Kachess	197.0	125.6
Lake Kachess Inactive Storage Alternative 1 - Tunnel	279.0	177.9
Fish Passage at Box Canyon Creek	1.3	0.8
Bumping Lake Reservoir Enlargement	571.0	409.5
Pool Level Increase at Cle Elum Dam	18.1	15.5
KRD Main Canal and South Branch Modifications	38.3	32.8
Wapatox Canal Conveyance - Alternative 2	87.7	76.4
Mainstem Floodplain Restoration Program	288.3	202.7
Tributaries Habitat Enhancement Program	192.2	135.2
Enhanced Agricultural Conservation	427.1	300.3
Municipal Conservation	0.0	0.0
Market Reallocation	2.1	1.9
Groundwater Infiltration (Pilot Plus Full Scale)	111.5	84.0
Municipal ASR Opportunities	5.3	3.0
Columbia River Pumping & Storage Feasibility Study	4.3	4.0
Land Acquisition Program	100.0	88.9
Update Water Needs Assessment	0.3	1.1
Periodic Review of Integrated Plan	0.2	0.5
Roza Alternate Supply & Dam Removal Feasibility Study	1.1	1.0
Other Mitigation (not broken out by individual project) <sup>1</sup>	2.5	1.9
<b>Total Construction Cost</b>	<b>4,188.2</b>	<b>3,121.7</b>

<sup>1</sup> Mitigation costs are included in the six projects analyzed using cost risk assessment in 2012. This row represents additional mitigation not included in the individual projects.

