Yakima River Basin
Water Resource
Management Plan
Status

CRPAG
December 4, 2013

Presented by:
Derek Sandison, Ecology
Walter Larrick, Reclamation
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

Programmatic Documents

- K-to-K Conveyance
  - Kachess Drought Relief Pumping Plant
- Cle Elum Pool Raise
- Cle Elum Dam Fish Passage Facilities
- Wymer Reservoir
- Bumping Reservoir

2013

Washington State Capital Budget

2015

- Single Combined EIS with Separate Feasibility Studies
  - FEIS Final Feasibility Studies
- Final Design
- Final Design
- Geologic/Seismic Investigation (continuing)
  - Decision
Moving Forward 2013-2015

- Keechelus-to-Kachess Conveyance
- Kachess Drought Relief Pumping Plant
- Cle Elum Pool Raise
- Cle Elum Dam Fish Passage Facilities
- Wymer Dam and Reservoir
- Bumping Dam and Reservoir Enlargement
- Manastash Creek Conservation and Tributary Enhancements
Keechelus-to-Kachess Conveyance
Kachess Drought Relief Pumping Plant
Cle Elum Pool 3’ Raise

- Modify radial gates
- Shoreline protection / Embankments
- Land acquisition
Cle Elum Pool Raise – Shoreline Protection
Typical - Cross Section

- Proposed High Water (2243')
- Current High Water (2240')
- Fill Line @ 2H:1V
- Cut Line @ 1.5H:1V
- Excavate
- Excavate and Fill
- 18” Filter Layer
- Fill Area = 101 sq./ft
- Cut Area = 600 sq./ft
- 3’ Riprap
Cle Elum Fish Passage Facilities

Cle Elum Dam Fish Passage Project
Wymer Geotechnical Investigation

Wymer Dam and Reservoir
(Geotechnical Investigation - Potential Bore Hole Locations)

Legend
- Drill Hole Locations
- Test Pit Locations
- Dike and Dam Area
- Contours (10' spacing)

Potential Bore Hole and Test Pit Coordinates

Dike and Dam Footprint

Dike and Dam Area

Reported Point (Elevation 750')

Note:
Wymer Dam is an impoundment dam on the Yelm River in Thurston County, Washington. The project is designed to provide water storage for irrigation, municipal, and industrial use. The dam is located approximately 20 miles south of Olympia, the state capital, and is operated by the U.S. Bureau of Reclamation.

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Wymer Geotechnical Investigation

Track-mounted CME 850 drill rig set up on DH-13-2. This is an angle hole.
Bumping Reservoir Enlargement

Legend:
- Camerounes
- Summer Homes
- Haa
- Bridges (new)
- Trailheads
- Trails
- Lily Lake
- Aldhencei Boundary

Map Information:
- US Bureau of Reclamation - Columbia River Basin Office
- Date Prepared: March 2021
- Date Released: March 29, 2021

NOTE: This map does not conform to the national map accuracy standard.

Bumping Lake Enlargement
Yakima River Basin Integrated Water Resource Management Plan

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
Department of Ecology State of Washington
Manastash Creek Conservation & Tributary Enhancement

Governor Inslee and Yakama Nation Tribal Elder Johnson Meninick Signing Pipe
Manastash Creek Conservation & Tributary Enhancement

Pipe laid out for pipeline between sta. 95+00 to sta. 99-50 at site.
## Elements and Associated Actions

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

KRD = Kittitas Reclamation District
### Preliminary Implementation Schedule

#### Kachess Drought Relief Pumping Plant

| Implementation Year | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---------------------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|
| Programmatic Actions, Operational Actions and Small Infrastructure Projects |
| Market Reallocation (F) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Agricultural Conservation (P) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Municipal Conservation (P) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tributaries Habitat Enhancement Program (P) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mainstream Floodplain Restoration Program (P) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fish Passage at Clear Lake |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Conveyance Improvements at Wapatax |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Subordinate Power Diversions, Roza & Chandler |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| KRD Main Canal and South Branch Modifications |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Raise Pool Level at Cle Elum Dam |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Municipal ASR Opportunities |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

#### Large Infrastructure Projects

- Wymer Reservoir & Conveyance
- Cle Elum Reservoir Fish Passage
- Bumping Reservoir Enlargement
- Bumping Reservoir Fish Passage
- Kachess Drought
- Relief Pumping Plant with K-to-K Pipeline
- Fish Passage - Kachees
- Fish Passage - Tlebin
- Fish Passage - Kachees
- GW Infiltration Prior to Storage Control

#### Projects Requiring Further Development

- Update Water Needs Assessment
- Periodic Review of Integrated Plan
- Potential Columbia R. Storage Pump
- Roza Alternate Supply & Dam Removal

(P) = Programmatic Actions  
T = Assessment of triggers for possible implementation.

1. Further power subordination subject to approval by Reclamation BPA, and either Roza or Kachees Irrigation District, as applicable.
2. Roza alternate supply to be considered as part of Wymer Project or storage/pump exchange projects such as Columbia River supply.
3. Timing of fish passage at Bumping Lake could be advanced to an earlier date if an enlarged reservoir is not authorized.
4. I-90 crossing K-to-K Pipeline may be constructed in conjunction with Wash. Dept. of Transportation construction project.
5. Step 1 in feasibility study of potential future storage/pump exchange projects.

**Color Codes:**
- **Orange**: PR / EIS and Authorization (for “trigger” projects, authorize studies)
- **Green**: Studies
- **Light Green**: Project environmental review, permitting & design
- **Brown**: Project Construction or Program Activation

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**Figure 4. Preliminary Implementation Schedule for the Integrated Plan**
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
Yakima River Basin Water Resource Management Act – SSSB 5367

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
Yakima River Basin Water Resource Management Act – SSSB 5367

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

*Additional funding being sought through other sources