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Meeting Notes

June 5, 2013

Yakima Arboretum, Yakima WA

Yakima River Basin Water Enhancement Project (YRBWEP) Workgroup

Welcome/Introductions and Agenda Overview

Ben Floyd, Anchor QEA meeting facilitator, welcomed the Yakima River Basin Water Enhancement Project (YRBWEP) Workgroup members and public, led introductions, and provided an overview of the agenda.

Early Actions/Technical Work Update

Andrew Graham, HDR, Bob Montgomery, Anchor QEA, and Walt Larrick, Bureau of Reclamation, presented updates on the Integrated Plan's (IP) early actions items and technical work in progress. Highlights from the presentation and Workgroup comments are summarized below. For more detail, please see the full presentation which is available on the project website (<http://www.usbr.gov/pn/programs/yrbwep/index.html>).

The Keechelus-to-Kachess (K-to-K) Conveyance Project

After analyzing the three conveyance alternatives (one pipeline and two tunnel options), the two tunnel alternatives (T1 and T3) are recommended to be carried forward as viable alternatives. The pipeline alternative (P3) is not recommended as an alternative to carry forward due to several factors, including high cost, limited operational flexibility, and the higher potential for environmental impacts. The estimated cost for the pipeline alternative is \$225 million, which is upwards of 50% more costly than the tunnel alternatives. Geotechnical explorations will be advanced for the T1 and T3 alternatives.

Workgroup Comments

- John Easterbrooks – Were there other options that were discarded? *Yes, other pipeline options were considered but eliminated due to the length of the pipeline alignment.*
- Steve Malloch – What fisheries impact studies have been conducted to date? *Preliminary discussion has been focused on the study of fish impacts for the first 1.5 miles downstream of the Keechelus Reservoir, which is where fish would be affected if Alternative T3 is selected. Alternative T3 would move the diversion to a point 1.5 miles downstream from Keechelus Dam, so flow benefits would be lost in this portion of the 9-mile reach between Keechelus and Lake Easton. In addition, under Alternative T3, screened fish diversions would occur using a bottom-*



hinged diversion dam. The hinged dam would only be raised during diversions. The affected channel would be free flowing at other times. (The diversion site is at a point on the river where there is an island so there will always be a free-flowing channel on the other side of the island.)

- Mike Leita – How is the funding outlook for the K-to-K Conveyance Project? *We first need to proceed with an environmental analysis of the alternatives and conduct a feasibility study prior to securing additional funding for this project.*
- Mike Leita – Assuming that funding is available, when would water be transferred? There are mounting pressures in the basin for the limited water supply. *Following funding allocation, environmental review, and final design, a construction period of approximately 3 years would be likely. So water transfers could begin in 5 to 6 years from now.*

Kachess Inactive Storage

After analysis of the tunnel and pump station alternatives, the pump station alternative is recommended for advancement. While the pump station alternative is more costly from an operations and maintenance (O&M) perspective, it would cost much less in upfront capital cost than the tunnel option and less in terms of the total 100-year cost (in present value).

	Estimated O&M Cost	Capital Cost
Tunnel Alternative	\$300,000/year	\$279 million
Pump Station Alternative	\$970,000/year	\$205 million

Additionally, the pump station alternative has performance advantages (i.e., able to achieve the 1,000-cfs objective consistently) and less construction risks and impacts over the tunnel alternative.

Workgroup Comments

- Jeff Thomas – How are the operations and maintenance costs calculated for drought and non-drought years? *O&M costs were averaged across all drought and nondrought years.*
- Sid Morrison – What power rate drove the cost study? We could buy that power rate down if there is a value for fish. *A commercial power rate was used for the cost study. This particular project is aimed at meeting water supply needs for proratable irrigation districts in drought years. This project is not aimed to achieve specific fish habitat enhancement goals like many of the other projects in the IP.*

Wymer Reservoir Temperature Modeling

A working temperature modeling program has been developed to help predict temperature effects on the Yakima River from potential future Wymer Reservoir releases. Next steps include calibrating the model based on data from other reservoirs in the Pacific Northwest region and developing operational scenarios with the Washington State Department of Ecology and Reclamation. Running the operational scenarios through the model will help determine the effect on the Yakima River system from Wymer releases.

Workgroup Comments

- Mike Leita – Can releases from upstream reservoirs be coordinated with releases from the Wymer Reservoir to help control temperature and flow? *The Wymer Reservoir is subject to more water temperature heating than some of the upstream reservoirs. Coordinating with the upstream reservoirs to help control temperature could be a difficult task but probably worth further consideration.*
- Alex Conley – Are we considering the stratification and limnology aspects of the Wymer reservoir such as turnovers and dramatic temperature shifts? *Some stratification may occur in wet years and years where releases do not occur. Variable outlet points vertically placed on the reservoir may also be a consideration.*

Fish Passage at Cle Elum Lake Dam

A new design combining the helix conduit and inlet ramp designs has been developed to optimize the function for fish passage at the Cle Elum Lake Dam. This design was developed in a collaborative effort with WDFW, USFWS, NMFS, Yakama Nation, and Reclamation. The project is anticipated to cost \$80 to \$100 million. Next steps include final design and construction.

Other Early Action Items Updates

- The Roza Reach Smolt Survival Study will be presented at the Yakima Basin Science and Management Conference in Ellensburg in mid-June 2013.
- The Manastash Creek Enhancement Project will be ready for construction following this irrigation season and is anticipated to be completed by the next irrigation season (2014). Reclamation is continuing to work with the Kittitas Reclamation District (KRD) and the Kittitas County Conservation District to increase flow in Manastash Creek and remove fish barriers.
- Geotechnical exploration activities will be ongoing through this spring and summer for the following projects: Cle Elum Reservoir Fish Passage, Wymer Reservoir, Bumping Lake, K-to-K, and Kachess Inactive Storage.
- The First Annual Progress Report for the Clear Creek Dam Passage Assessment is available on the YRBWEP Phase II web page (<http://www.usbr.gov/pn/programs/yrbwep/phase2/index.html>).
- Groundwater infiltration in certain areas of Kittitas Valley is not looking feasible because near-surface geology is not suitable for infiltration. The City of Yakima would like to request consideration of their Aquifer Storage and Recovery (ASR) program as an early action.

Workgroup Comments

- Sid Morrison – There is a high interest in the geotechnical investigations. When will results become available? *It may take up to 2 years to conduct seismic analyses, compare results and issue a final report.*
- Dave Brown – When will the City of Yakima’s project be considered? *Wendy Christensen needs to review the various groundwater options with Tom Ring and will then be in a position to move forward.*

Operational Guidelines for Additional Storage–Charter and Mission Statement; Water Accounting Approach

Bob Montgomery and Ben Floyd, Anchor QEA, and Chris Lynch, Reclamation, provided updates on the Operational Guidelines Group’s efforts. The group has been continuing to meet to discuss operational issues and fine tune the group’s charter and mission statement.

Chris Lynch presented an overview of the accounting approach for IP water and Total Water Supply Available (TWSA). The presentation demonstrated how IP water and TWSA could be tracked within the irrigation and nonirrigation seasons of a year, and from year to year. Please see the full presentation which is available on the project website. Workgroup comments are summarized below.

Workgroup Comments

- Sid Morrison – It looks like the state will play a major role in funding. Would the source of funding affect how projects are implemented? *Reclamation will be managing all the projects and be in charge of water management; however, there will be open discussion on how the different IP objectives will be met.*
- Steve Malloch – If the historical benefit of Bumping Lake is 34,000 acre-feet, does that factor in to the maximum flood control amount? *We have accounted for the historically available storage into the IP enhanced storage values because we do not want to draft the storage down past the historical amount.*
- Alex Conley – The presentation was very helpful in understanding how carryover storage is determined, which will help as we discuss rules for operations and management of the projects. *The Operational Group will be developing guidelines but not defining rules. This presentation only considered irrigation and drought years. We still need to add elements to consider in non-drought years.*
- Sid Morrison – Climate change should be considered in accounting for IP water storage and TWSA.

Habitat Restoration and Agricultural Conservation Projects – Update per Out-of-Stream Water Needs and Habitat Subcommittees

Bob Montgomery and Ben Floyd provided updates on the Habitat Restoration and Out-of-Stream Water Needs Subcommittees, which were reconvened to identify and evaluate initial projects that can be implemented under these IP proposed programs. Both subcommittees developed a prioritized list of projects that benefit fish, water supply and water quality.

Funding is not yet available for these projects. As funding becomes available, the subcommittees will be re-engaged as necessary to further refine project funding recommendations. If funding is received, Ecology and Reclamation will make the final decision on what projects are funded. Updates on this and other topics will be communicated through the quarterly newsletters, with the next newsletter to be issued in late July.

Watershed Land Conservation Subcommittee Update

Jeff Tayer, WDFW, provided updates on the Watershed Land Conservation Subcommittee. The Teanaway land acquisition is in the legislative process. The proposed land acquisition is included in both a House and Senate Bill, under different funding strategies (i.e., partial or full payment plans). The Senate bill provides for Washington Department of Natural Resources (DNR) ownership and the House bill provides for Washington Department of Fish and Wildlife (WDFW) ownership. The parties have tentatively agreed that DNR will own the property and provide an easement to the WDFW.

The subcommittee has also drafted a letter to the US Forest Service (USFS) on the pending Forest Plan Revision for Okanogan-Wenatchee National Forest and how the Workgroup could work together with the USFS to achieve mutual goals. The Workgroup approved the subcommittee's recommendation to send the letter on behalf of the Workgroup.

Workgroup Comments

- Sid Morrison – It is important to reiterate that the Teanaway land acquisition is not a mitigation project. We should also note that the Bumping Lake project will likely require mitigation. *While the Teanaway land acquisition will result in benefits to fish habitat, the project cannot be designated as mitigation for projects that have not yet undergone the NEPA process. The NEPA process will help identify project impacts and proposed mitigation.*
- Jeff Tayer – Clint Kyhl gave a presentation to the subcommittee on how watershed protection also protect water supply. Jeff suggested that it would be beneficial if Clint made the same presentation to the Workgroup at a future meeting.

Implementation Committee and Executive Committee Updates

Members of the Implementation and Executive Committees and Dan Silver provided updates on their recent activities. The non-Federal members have been continuing with major work tasks and efforts to secure funding in the State legislature and rally community support. The Implementation Committee

plans to go to Washington, DC, in July and will meet with the DC Leadership Group, which has Federal agency staff from BIA, BLM, NRCS, Reclamation, USFS, FWS, and NOAA. The Assistant Secretary of the Interior's office is facilitating the DC Leadership Group to find funding through existing programs for IP projects.

Education and Outreach Update

Cynthia Wilkerson announced that a new logo has been created for the IP. Since the March Workgroup meeting, the Implementation Committee has given 16 presentations to rally IP support. As a result, we have 14 new organizations that have expressed support.

Additionally, the Implementation Committee was invited to present at a William D. Ruckleshaus Center meeting. The Ruckleshaus Center is made up of Washington State University and University of Washington academics to look at collaborative problem solving and conflict resolution in Washington State and the Pacific Northwest. Members of the committee presented on the history, conflict resolution, and leadership aspects involved in the history of the IP. Ruckleshaus Center applauded the achievements of the Workgroup and felt that the project embodies elements of the Center's goals for collaborative problem solving. The Center raised the question of how to institutionalize the work achievements of the Workgroup. This question merits further consideration.

Workgroup – Roundtable Discussion

Ben opened up the floor to Workgroup members. The general themes expressed by Workgroup members included appreciation for the hard work and efforts put forth by Wendy Christensen, Derek Sandison, and the subcommittees. Workgroup members are pleased with the functionality of the group. Additional Workgroup comments included:

- Alex Conley – It will be exciting to look further into the IP water accounting and what projects will come online as funding becomes available for habitat enhancement projects.
- Sid Morrison – It's nice to see progress. The Yakima Basin Storage Alliance continues to be concerned about supply for all end users and the effects of climate change on water supply.
- Paul Jewell – The Workgroup has been very supportive of Kittitas County's concerns. How property purchases are handled will set precedent as additional projects move forward. Paul thanked the Workgroup and Congressman Hastings' Office on their support.
- Wendy Christensen – As we move into new phases and implementation, it is important to continue to strengthen the relationships established within the Workgroup. Please call to express comments and concerns and Reclamation and Ecology will continue to coordinate efforts as topics are raised.
- Mike Livingston – I've been in this position 7 months; still learning; happy with what I've seen.
- Mike Leita – Recognize that we've come a long way and stayed together.

- Jeff Thomas –A lot of work has been done; would like to compliment the Watershed Lands and Implementation Subcommittees.
- Urban Eberhart – This is a refreshingly functional group; looking forward to legislation.
- Ron Van Gundy – Good presentations today.
- Scott Revell – Appreciate Derek and Wendy, all their hard work.
- Rick Dieker – Kudos for all the hard work. Recognized Sid Ottem (new Reclamation Yakima Field Office Manager) as a valuable resource.
- Dale Bambrick – Need to hold this coalition together. Pick up the phone!
- Jim Trull – Expressed appreciation for hard work.
- Dave Fast – Excellent reports. Come to Science Management Conference! Yakama Nation strongly supportive of passage at all the dams.
- Phil Rigdon –This is a critical time dealing with water. A lot of cool things happening; but we still have a long way to go. Stay strong.
- Steve Malloch – Stay strong.

Public Comment

- Chris Maykut, Friend of Bumping Lake, expressed appreciation for the efforts put forth by the Workgroup and general support for the IP; however, he expressed opposition to the Bumping Lake expansion project. See public comment submittal on the project website.
- Chuck Klarich, YBSA, asked what the total cost/benefit would be for the K-to-K project and the project's benefit to fish and agriculture.
- Naydine Maykut, Friend of Bumping Lake, expressed opposition to the Bumping Lake expansion project.

Workgroup Members in Attendance

Dale Bambrick, National Marine Fisheries Service

Dave Brown, City of Yakima

Alex Conley, Yakima Basin Fish & Wildlife Recovery Board

Jerome Delvin, Benton County

Rick Dieker, Yakima-Tieton Irrigation District

Urban Eberhart, Kittitas Reclamation District

David Fast, Yakama Nation

Paul Jewell, Kittitas County

Mike Leita, Yakima County

Mike Livingston, Washington State Department of Fish and Wildlife

Steven Malloch, National Wildlife Federation

Sid Morrison, Yakima Basin Storage Alliance

Scott Revell, Kennewick Irrigation District

Phil Rigdon, Yakama Nation

Derek Sandison, Washington State Department of Ecology
Jeff Thomas, U.S. Fish and Wildlife Service
Jim Trull, Sunnyside Valley Irrigation District
Ron VanGundy, Roza Irrigation District
Dawn Wiedmeier, Reclamation

Other Attendees

Susan Adams, Washington Water Trust
David Bowen, American Forest Land Co.
David Child, Yakima Basin Joint Board
Wendy Christensen, Reclamation
Marie Cobb, Intern
Stuart Crane, Yakama Nation
Warren Dickman, Yakima Basin Storage Alliance
Beneitta Eaton, Rancher
Jack Eaton, Rancher
Bill Eller, Washington State Conservation Commission
Bill Ferry, Reclamation
Ben Floyd, Anchor QEA
Joel Freudenthal, Yakima County
Chuck Garner, Reclamation
Andrew Graham, HDR Engineering
Raelene Gold, Seattle Audubon Society
Lynn Holt, Reclamation
Joel Hubble, Reclamation
Eleanor Hungate
Jerry Kelso, Reclamation
Robert King, HDR Engineering, Inc.
Chuck Klarich, Yakima Basin Storage Alliance
Paul La Riviere, Washington State Department of Fish and Wildlife
Walt Larrick, Reclamation
David Lester, Yakima Herald
Barb Lisk, Office of Representative Doc Hastings
Chris Lynch, Reclamation
Chris Maykut, Friends of Bumping Lake
Naydine Maykut, Friends of Bumping Lake
Tim McCoy, Reclamation
Keith McGowan, Reclamation
Candy McKinley, Reclamation
Jim Milton, Yakima-Tieton Irrigation District

Tom Monroe, Roza Irrigation District
Bob Montgomery, Anchor QEA
Bryan Myre, Wapato Irrigation District
Sid Otten, Reclamation
Elaine Packard, Sierra Club
Bob Partridge, Frank Coluccio Construction
Jim Peterson, HDR Engineering, Inc.
Tom Ring, Yakama Nation
Vivian Shin Erickson, Anchor QEA
Mike Shuttleworth, Benton County
Dan Silver, Facilitator
Elaine Smith, League of Women Voters
Rob Swedo, BPA
Jeff Tayer, WDFW
Tom Tebb, Department of Ecology
Cynthia Wilkerson, The Wilderness Society

Next Workgroup Meeting

The next meeting will be held September 4, 2013, at 9:30 a.m. at the Yakima Arboretum. A meeting notice and agenda will be distributed in advance of the meeting.

Where to Find Workgroup Information

Meeting materials, notes, presentations, and materials submitted during public comment for the Workgroup meetings will be posted on the project website (<http://www.usbr.gov/pn/programs/yrbwep/index.html>). A bibliography of information sources, many of which are available online, is also posted on the website.

If anyone needs help finding an information source, contact those listed at the top of page 1 of these notes or Ben Floyd at Anchor QEA, Richland office, (509) 392-4548, or bfloyd@anchoragea.com.