

**Contact: Wendy Christensen, Columbia-Cascades Area Office, (509) 575-5848, ext. 203
Tom Tebb, Washington State Department of Ecology, (509) 575-3989**

Meeting Notes

Yakima River Basin Water Enhancement Project Workgroup

March 8, 2017

Kittitas County Events Center, Ellensburg, WA

Welcome, Introductions, and Agenda Overview

Ben Floyd, Anchor QEA, welcomed the Yakima River Basin Water Enhancement Project (YRBWEP) Workgroup members and other attendees, led introductions, and provided an overview of the agenda. These notes summarize the YRBWEP Workgroup presentations and the public comments. For details, please see the full presentations available on the project website:
<http://www.usbr.gov/pn/programs/yrbwep/2011integratedplan/index.html>.

Ben introduced Jerrod MacPherson, Benton County Planning Manager, who is the alternate YRBWEP Workgroup representative for Commissioner Jerome Delvin.

Implementation Committee Update

Tom Tebb, Washington State Department of Ecology (Ecology), Office of Columbia River (OCR), provided the update. With the new U.S. Congress now in place, the Implementation Committee is renewing its effort to gain Congressional approval for Integrated Plan legislation. The State Legislature is also in session and considering funding in the 2017-2019 biennial budget. Committee members have met with legislators in Olympia. They are planning another trip to Washington DC and preparing to meet with regional managers of Federal agencies. With the new presidential administration, the Implementation Committee will also focus on providing involved agencies with current information on the Integrated Plan.

Public input on this agenda item: None

Rural Water Supply Update

Ecology, the Yakama Nation, and counties in the Yakima River basin have been working on ways mitigate adverse impacts on surface water from rural development and associated water uses. Solutions are being developed on a county-specific basis in Kittitas, Yakima, and Benton counties, respectively. Representatives from Ecology, the Yakama Nation, and Reclamation spoke briefly about the discussions held so far and the value of solutions being developed. The Washington State Supreme Court ruled in the recent Hirst decision (*Whatcom County vs. Hirst, Futurewise, et al.*) that water is not legally available if a new well would have an impact on a protected river, stream, or existing senior water right. The process in the Yakima River basin is ahead of the curve in addressing this issue.

Commissioner Paul Jewell (Kittitas County), Commissioner Mike Leita (Yakima County) and Planning Manager Jerrod MacPherson (Benton County) presented solutions being developed in their respective

counties, which generally aim at providing landowners an efficient means to mitigate their impacts. Kittitas County has adopted ordinances enacting its program. Yakima and Benton counties are in the process of developing programs. The Integrated Plan has provided working relationships that have been critical to developing solutions.

Workgroup Discussion:

Ron Van Gundy, Roza Irrigation District: This is an important contribution, and compliments the counties on their work. Will the Yakima County water bank be large enough to offset all domestic wells, whether new or existing? What will mitigation of one well cost in the Yakima and Kittitas counties programs?

- The first priority is to provide mitigation for new wells, but the eventual goal is to have sufficient water banked so that existing well owners could also choose to participate.
- In Yakima County, the program is still being developed, so the exact cost has not been determined but it will be affordable. In Kittitas County, the cost is \$3,080 for homes that use minimal water outdoors and \$3,995 for homes that use more. There may be permit processing and recording fees depending on circumstances.

Sid Morrison, Yakima Basin Storage Alliance (YBSA): YBSA has an interest in ensuring there is enough water for all uses in the basin. How much water is needed for fish?

- The first objective should be to avoid doing further harm to instream resources. These county programs prevent degradation as new rural development occurs. This integrates land use decision-making with fish protection objectives.
- There is not a simple number for how much water fish need in the basin, because their habitat requirements differ across the seasons and from one place to another, and because the Yakima River system has too much water in some reaches at certain times of year, while having too little water at others. Hydrologic modeling shows that the Integrated Plan projects will improve stream flow conditions in many reaches that are important for fish during various times of the year. In addition, the many on-the-ground habitat projects are improving conditions for fish from the mouth of the river to the headwaters.

Public input on this agenda item: None.

2015 Drought Impacts

Jaclyn Hancock, Washington State Department of Agriculture (Agriculture), summarized work done to quantify effects of the 2015 drought on gross value of agricultural products in Washington State. Agriculture recently issued a report presenting this study. Jaclyn presented methods, limitations, and results of the study. Effects were geographically widespread and involved many different crops. Total statewide impact was estimated to range from \$633 million to \$773 million. Focus areas included three irrigation districts/projects in the Yakima River basin, where gross value was reduced by \$11.4 million in Kittitas Reclamation District, \$32.7 million in Wapato Irrigation Project, and \$74.4 million (plus

another \$1.0 million spent on emergency wells) in Roza Irrigation District. Effects on subsequent growing seasons were not estimated.

The Washington State Academy of Sciences reviewed the report and provided recommendations for future work. These include basing the analysis on an economic model, using randomized statistical sampling, and performing a companion analysis on water rights.

This was the first study of its kind in Washington. Agriculture would like to carry out a similar study each time a drought occurs in order to develop effective comparisons from one drought to another.

Workgroup Discussion:

Sid Morrison, YBSA: 2015 was a 1-year drought. If a 2-year drought occurs, then losses will be far higher because orchard trees and vines will be lost.

Scott Revell, Roza Irrigation District: Uncertainty has a big effect. In 2015, the Total Water Supply Available (TWSA) rose slightly at the end of the irrigation season, which reduced Roza Irrigation District's losses. If TWSA, instead, had gone down by the same amount, losses would have been significantly greater.

Paul Jewell, Kittitas County: Is there a formula to estimate costs to end consumers, socioeconomic effects, and effects on food processors? Is the impact understated because those were not estimated?

- In the future, use of an economic model as recommended by the state Academy of Sciences may enable those aspects to be estimated. The National Agricultural Statistical Service excludes 20 percent of the State's farmland, and that includes some high-value crops. This suggests the report understates the effect of the drought.

Public input on this agenda item:

David Ortman, Sierra Club: (1) The Agriculture report says there is a need for more information on water rights. After all these years of studies, it is surprising that the Workgroup has not developed this information. (2) The Academy of Sciences report asks an excellent question: how do you reconcile that net farm income in 2015 was higher than in prior years? (3) Did they estimate impacts on Sunnyside Valley Irrigation District (SVID)?

- The statement about information on water rights is directed at the State as a whole, not the Yakima River basin.
- Agriculture chose to focus on gross income rather than net income. The Academy of Sciences noted that this choice depends on the goals of the study. Agriculture can reconsider this aspect of the analytical method the next time a drought occurs.
- Agriculture focused on areas where drought effects were most severe, and decided not to include SVID. Agriculture may use a randomized approach to select areas for estimating losses the next time a drought occurs.

General Public Comment:

Bill Campbell, Lake Kachess Homeowners Association: The presentation at the December Workgroup meeting on RiverWare modeling was useful. The Workgroup should use science and data to guide decision-making. Jay Schwartz and others have been looking at RiverWare information for the upper basin and have provided a written review. Bill would like that review to be discussed at a future Workgroup meeting and asks for time to provide a presentation on this topic. RiverWare shows the Keechelus to Kachess Conveyance (KKC) project falls short.

- Reclamation and Ecology are reviewing the information provided. The request for time at an upcoming meeting will be considered.

David Ortman, Sierra Club: Dave provided Ben Floyd with a report that reviews the Ecology OCR activity over the past ten years. Ecology OCR has reported 450,000 acre-feet of new water supply that in fact has not been developed yet. They are spending money studying dams that are not economical. The report recommends that no further funding be provided to Ecology OCR until a performance audit is done.

David said that notes from the September 2016 meeting regarding the YRBWEP Economic Subcommittee's selection of ECONorthwest need to be corrected; he will provide correction to Ben Floyd.

- General notes are prepared to capture Workgroup meeting content and discussion, and to provide responses to public comment. They are not intended to capture each meeting element in detail. The comment from David will be attached to the notes from the September meeting.

David said notes from the December 2016 meeting regarding Peter Dykstra's summary of how the legislation failed to pass at the end of 2016 should mention that the legislation was considered an earmark.

- General notes are prepared to capture Workgroup meeting content and discussion, and to provide responses to public comment. They are not intended to capture each meeting element in detail. The comment from David will be attached to the notes from the December meeting.

Ann Lewis, Yakima Basin Coalition: The hydrologic analysis that Bill Campbell mentioned contains vital information that this Workgroup should consider. It shows that the Kachess Drought Relief Pumping Plant project would supply only 50 percent of the water that has been stated.

Ann believes the Potter LLC study of land values at Kachess Reservoir is false, and should be removed from Ecology's website.

- Each agency uses its internal decision processes for posting materials to their web sites. In Ecology's judgment this material is relevant and should be available to the public.

Chuck Klarich, YBSA: YBSA was founded in 2004 in response to concerns of insufficient water for fish and irrigation in the valley. Since then, the YBSA provided input and information on projects that

could improve water supply. Their website has monthly reports and a wealth of information. He encourages people to visit YBSA.org.

Technical Work Updates

1 - Bumping Geologic Investigations and Geophysical Surveys

Douglas Bennett, Reclamation Geologist, and Richard Markiewicz, Reclamation Geophysicist, presented investigations of subsurface conditions along two potential alignments of the proposed new dam for the Bumping Reservoir enlargement project. Either alignment would enlarge capacity of Bumping Reservoir by approximately 160,000 acre-feet, using a dam 165 feet high. Alignment A is closer to the existing dam, and Alignment B is slightly further downstream from the existing dam. The work included review of prior studies of the dam site from the 1940s and 1950s. The work included new boreholes along each alignment and seismic refraction surveys to improve understanding of depth-to-bedrock and the types of sedimentary materials present between the ground surface and bedrock. Alignment B appears more favorable because the buried bedrock valley appears to be narrower and shallower at that location, and there is less fine-grained sediment. The volcanic bedrock includes andesite and dacite along Alignment A, and dacite only along Alignment B. Evidence of whether any geologic faults are present in the vicinity is inconclusive. There is no clear evidence of faults, but there are some data (presence of linear features and the dacite/andesite contact) that could be either indicative of ancient or inactive faults, or of other conditions that would not be problematic at a dam site. Both researchers recommend further data collection to improve understanding of site conditions relative to dam design.

Workgroup Discussion:

Mike Leita, Yakima County: Are the alluvial materials at the site suitable for dam construction?

- Yes, much of the alluvial material would be useable.

Public input on this agenda item:

Chuck Klarich, YBSA: What is the planned pool elevation associated with these alignments, and how would it affect the U.S. Forest Service road to Bumping Reservoir?

- Pool elevation would be approximately 3,500 feet above mean sea level. The U.S. Forest Service road would need to be relocated at least 75 feet higher in elevation than its current location.

Naydene Maykut, Friends of Bumping Lake: Which dam alignment matches with the analysis in the Programmatic Environmental Impact Statement (PEIS) on the Integrated Plan?

- The PEIS discussed Alignment A.

2 - Teanaway Community Forest

Mike Livingston, Washington Department of Fish and Wildlife, introduced members of the Teanaway Community Forest (TCF) Advisory Committee's Goal 5 Group. This group focuses on the community involvement goal established in the 2013 TCF legislation. Members who presented were Deborah Essman, Kittitas County Field and Stream Club; Martha Wyckoff, Teanaway basin resident and Trust for Public Land; and Darcy Batura, The Nature Conservancy. They summarized the group's activities to build a strong community partnership. Activities include campground restoration using volunteers, a community survey of recreational opportunities, exploration of establishing a trailhead at Roslyn that could connect to the TCF, and development of a communication strategy. Volunteer activities totaled 800 hours in 2016. The group also led a horseback tour of the TCF for legislators in October 2016 and has traveled to Olympia to advocate for ongoing funding of TCF restoration and stewardship.

Dr. Jim Huckabay, JLH and Associates, summarized the process used in 2016 to develop a sustainable grazing program for the TCF. A group of 18 people met 10 times during an 8-month period. Ten stakeholders also participated. They discussed a wide variety of needs and solutions, and developed an adaptive framework for riparian restoration and using fencing to protect sensitive areas.

Workgroup Discussion:

Jeff Tayer, Washington Department of Fish and Wildlife: Jeff thanked the entire Advisory Committee for its work on the TCF.

Sid Morrison, YBSA: Can a community forest this size be self-sustaining?

- Potentially yes, but it will take time and needs upfront investments. It was heavily harvested by the former landowner. It will take a long period before commercially viable timber harvests will be feasible. Grazing can be done now. The Nature Conservancy is studying models of community forests across the United States and may be able to put some of those ideas to work. In the meantime, this is a valuable recreational resource. Recreation activity doubled last year.
- **Paul Jewell, Kittitas County:** The TCF landscape is woven into the fabric of local people's lives. Paul is excited to see the progress being made. It is generating a lot of attention statewide and nationally. Also, grazing was a challenging issue. The group achieved a good result that is consistent with key objectives for the TCF.

Public input on this agenda item:

David Ortman, Sierra Club: David asked three questions: (1) What is the status of recreation planning in terms of off-road vehicles and snowmobiles? (2) Will grazing increase, decrease, or stay the same? (3) Will timber harvest increase, decrease, or stay the same?

- The Advisory Committee is currently working on a recreation plan, and this will take approximately 18 months to complete. In the interim, there is no change in recreational access from what the prior landowner allowed.

- The number of animal units permitted for grazing will stay the same for now. It may change in the future, under the adaptive management framework.
- Commercial harvesting of timber will not occur for a long time. The current priority is to restore forest health. There may be localized treatments to remove small amounts of timber in support of forest health and fire risk management.

3 - Regional Conservation Partnership Program Grant Update

Tom Elliott, Yakama Nation, and Anna Lael, Kittitas County Conservation District, described a 5-year grant awarded by the Natural Resources Conservation Service (NRCS). It provides matching funds to local landowners and operators for actions that support water quality, water supply, and fish habitat in tributaries in the upper basin of the Yakima River and on the Yakama Nation Reservation. NRCS will provide \$7.5 million. About 12 public and private partners have agreed to provide matching contributions totaling an additional \$7.6 million. Anna thanked the Yakama Nation for their willingness to partner in seeking this funding.

Workgroup Roundtable

Wendy Christensen, Reclamation: Reclamation will issue a contract for the secant pile installation for Cle Elum Dam fish passage in spring 2017, and a contract for work on U.S. Forest Service land associated with the Cle Elum Reservoir Pool Raise project in fall 2017.

Sid Morrison, YBSA: Sid would like to see a quantity of water identified for instream flow needs. Sid is glad to see work on storage facilities, represented by today's presentation on the proposed Bumping Reservoir enlargement. Sid would like to see a year identified for storage to be developed.

- The Cle Elum Reservoir Pool Raise project is partially complete, and scheduled to become operational within approximately five years. It will provide additional water for instream flows. Flow targets have been established as part of developing the Integrated Plan, and meeting these targets will be an objective for future water management as Integrated Plan projects are implemented.
- The most recent schedule for the Initial Development Phase of the Integrated Plan estimated completion of Kachess Drought Relief Pumping Plant (KDRPP) by the end of 2019. The schedule will be revised because the project depends on completion of environmental review, Congressional authorization, funding by Roza Irrigation District and its partners, and permitting activities. Additional storage projects are identified in each subsequent 10-year phase (Intermediate and Final) of the Integrated Plan.

Jason Kuiken, U.S. Forest Service: The Joint Chiefs are providing funding via NRCS and the U.S. Forest Service budgets. This includes analysis of conditions in the Manastash and Taneum creeks area, in conjunction with the Tapash Sustainable Forest Collaborative, and projects on wildfire risks and instream conditions.

Mike Leita, Yakima County: Mike sees a lot of work happening around the storage element of the Integrated Plan. If any one element fails, all of them will fail. We will all succeed by continuing to work together.

Urban Eberhart, Kittitas Reclamation District (KRD): Reclamation is forecasting prorationing of water supplies in 2017. KRD plans to renew its tributary supplementation program for the third year in a row.

Scott Revell, Roza Irrigation District: Funding from the Integrated Plan has been instrumental in achieving water conservation. Roza Irrigation District crews have been working since the fall shutoff on piping laterals and sealing concrete canals.

Upcoming Meetings

The next Workgroup meeting will be on June 21, 2017 at the Ecology office in Union Gap, Washington (1250 Alder Street).

Attendance

Workgroup Members:

Wendy Christensen, Bureau of Reclamation - Columbia-Cascades Area Office

Dave Brown, City of Yakima

Rick Dieker, Yakima-Tieton Irrigation District

Urban Eberhart, Kittitas Reclamation District

Jaclyn Hancock, Washington State Department of Agriculture

Paul Jewell, Kittitas County

Jason Kuiken, Okanogan-Wenatchee National Forest

Mike Leita, Yakima County

Mike Livingston, Washington State Department of Fish and Wildlife

Bill Lover, City of Yakima

Wendy McDermott, American Rivers

Jason McShane, Chair, YRBWEP Lower River Subgroup, Kennewick Irrigation District

Sid Morrison, Yakima Basin Storage Alliance

Scott Revell, Roza Irrigation District and Chair, YRBWEP Water Use Subcommittee

Phil Rigdon, Yakama Nation

Rick Roeder, Washington State Department of Natural Resources

Jeff Tayer, Chair, YRBWEP Habitat Subcommittee (Washington Department of Fish and Wildlife)

Tom Tebb, Washington State Department of Ecology - Office of Columbia River

Jeff Thomas, U.S. Fish & Wildlife Service, Mid-Columbia River Fishery Office

Ron Van Gundy, Roza Irrigation District

Other Attendees:

Darcy Batura, The Nature Conservancy

Douglas Bennett, Reclamation

Bill Campbell, Lake Kachess Homeowners Association

Stuart Crane, Yakama Nation

Jane Creech, Washington State Department of Ecology

Todd Damion, Citizen

Jeanne Demorest, Bureau of Reclamation - Columbia-Cascades Area Office
Karen Dera, Bureau of Reclamation - Columbia-Cascades Area Office
Jeff Deugel, Washington State Department of Fish and Wildlife
Sherrill Doran, CH2M-Hill
Deborah Essman, Kittitas County Field & Stream Club
John Easterbrooks, Washington State Department of Fish and Wildlife
Jack and Beneitta Eaton, Landowners
Tom Elliott, Yakama Nation
Kevin Eslinger, Kittitas Reclamation District
Deborah Essman, Kittitas County Field and Stream Club
Ben Floyd, Anchor QEA
Joel Freudenthal, Yakima County
Don Gatchalian, Yakima County
Andrew Graham, HDR Engineering, Inc.
Sean Gross, National Oceanic and Atmospheric Administration (NOAA) Fisheries
Tim Hill, Washington State Department of Ecology
Elayne Hovde, Reclamation
Joel Hubble, Bureau of Reclamation – Yakima Field Office
Jim Huckabay, JHL and Associates
Todd Huntziger, CH2M-Hill
Trevor Hutton, Washington State Department of Ecology – Central Regional Office
Brady Kent, Yakama Nation
Chuck Klarich, Yakima Basin Storage Alliance
Anna Lael, Kittitas County Conservation District
Walter Larrick, Citizen
Ann Lewis, Yakima Basin Coalition
Jerrod MacPherson, Benton County
Steve Malloch, Western Water Futures LLC (alternate for American Rivers)
Richard Markiewicz, Bureau of Reclamation
Naydene Maykut, Friends of Bumping Lake
Teresa Merriman, Bureau of Reclamation - Columbia-Cascades Area Office
Jim Milton, Yakima-Tieton Irrigation District
Bryan Myre, Yakama Reservation Irrigation District
Scott Nagel, U.S. Forest Service Naches Ranger District
Scott Nicolai, Yakima-Klickitat Fisheries Project
David Ortman, Sierra Club
Sage Park, Washington State Department of Ecology
Nicole Pasi, American Rivers and the Yakima Basin Integrated Plan
Colleen Rauert, Washington State Department of Ecology
David Reeploeg, Office of Senator Maria Cantwell
Tom Ring, Yakama Nation

Jill Scheffer, Fonterra
Danielle Squeochs, Ecology – Office of Columbia River
Chad Stuart, Bureau of Reclamation – Yakima Field Office
Arden Thomas, Washington Water Trust
Gary Torretta, U.S. Forest Service –Naches Ranger District
Richard Visser, Bureau of Reclamation - Columbia-Cascades Area Office
Rebecca Wassell, Mid-Columbia Fisheries Enhancement Group
Greg Wendt, Benton County
Chris Wright, Bureau of Reclamation
Martha Wyckoff, Trust for Public Land
Laine Young, Washington State Department of Ecology

Where to Find Workgroup Information

Meeting materials, notes, presentations, and materials submitted during public comment for each Workgroup meeting will be posted on Reclamation’s project website:

(<http://www.usbr.gov/pn/programs/yrbwep/2011integratedplan/index.html>). A list of information sources, many available online, is also posted on the website.

If you need help finding an information source, contact those listed at the top of page 1 of these notes or Ben Floyd at Anchor QEA, Kennewick office, (509) 491-3151 or bfloyd@anchorqea.com.