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Meeting Notes

Yakima River Basin Water Enhancement Project Workgroup

March 12, 2025
In-person and Teams Virtual Meeting

Welcome, Introductions, and Agenda Overview

Anna Marandi with HDR Engineering, Inc. (HDR) welcomed the Yakima River Basin Water Enhancement Project (YRBWEP) Workgroup members and other attendees participating virtually and in-person. The following notes summarize the YRBWEP Workgroup presentations and public comments. For more information, please see the full presentations on the Yakima Basin Integrated Plan (YBIP) website: [Yakima Basin Integrated Plan](#).

Executive and Implementation Committee Updates

Presenters: *Wendy Christensen, Reclamation; Larry Mattson, OCR/ Ecology; Joe Blodgett, Yakama Nation*

Wendy Christensen provided an update on Reclamation and staffing for YRBWEP. In addition to the hiring freeze and travel restrictions, a new staff person that started in January to manage YRBWEP lands was probationary and was laid off in February (note: Reclamation was able to have Brian Schmidt report back to work on March 24). Reclamation is under a Continuing Resolution (CR) and is working with partners on grant funding that might be delayed by the new process to get approval from DC office. Reclamation remains committed to implementing the Integrated Plan and will let partners know as soon as funding is available. CR will end March 14, 2025 and Reclamation will know more after that about this years appropriated funding, YRBWEP received \$44M in FY24 in appropriated funding. Wendy appreciates all the support she has received from partners regarding the challenges the federal partners are currently experiencing.

Larry Mattson, new director of Ecology's Office of Columbia River, introduced himself to the group and shared his thoughts and vision for the OCR. He shared his background across sectors, and working with groups that have conflicting interests and finding a way to get projects done despite that. He recapped updates on new federal and state leadership, emphasized the need for internal stability, and confirmed there will be no major staffing changes in his department for at least the next 6 months. Additionally, the state is currently under a hiring and travel freeze.

Joe Blodgett discussed emerging challenges and impacts from recent changes. He explained that funding was paused even though much of it had already been allocated and spent, but that funding has now been made available again so the Yakama Nation will move forward on its projects. He emphasized

the utility of statewide partnerships and felt encouraged at the progress on these important projects. Without the Integrated Plan, he said that the tribe would be struggling a lot more to get through this uncertain time.

Chad Stuart, Reclamation shared that we are headed into another drought year based on the water measurements so far this year. The current prorationing level for this year is 48%.

Water Conservation Updates

Presenters: *Sage Park, Chair, Water Use Subcommittee, Roza Irrigation District; Justin Harter, Naches-Selah Irrigation District; Nathan Draper, Selah-Moxee Irrigation District,*

Wendy Christensen, Reclamation shared that water conservation is important to the ongoing success of the Yakima Basin Integrated Plan and welcomed the presentations of two senior districts to present on their conservation plans.

Sage Park, Chair of the Water Use Subcommittee, Roza Irrigation District introduced senior irrigation district managers **Justin Harter and Nathan Draper** to discuss conservation measures and drought plans as we enter a third drought year in a row. Sage noted that last March at the Workgroup meeting Sunnyside Valley Irrigation District, Kittitas Reclamation District, Wapato Irrigation Project and Kennewick Irrigation District presented on their conservation plans and we wanted to give some of the other districts an opportunity to share their successes.

Justin Harter presented on Naches-Selah Irrigation District's (NSID) history and modernization process in the Yakima Basin. The history of NSID predates statehood. After the water trestle collapsed during the hot summer of 1992, NSID initiated a modernization plan. Phase 1 began in 2005 with the replacement of some wooden pipelines. Since then, NSID has seen a reduction in energy costs with a more efficient system. Automation became a part of the system in 2007. In 2015, during a severe drought year, they took advantage of weather that winter to replace over a mile of canal. Justin explained that NSID tries to get these projects done in a timely fashion during the winter months. In the last 30 years they have invested over \$22 million in systems improvements, including \$1.5 million in grants from the state. NSID took on debt including municipal bonds to fund the improvements. NSID is replacing 14.5 miles of canal, 47 miles of pipe, and presently supports 10,600 irrigated acres.

Nathan Draper presented the Selah-Moxee Irrigation District's (SMID) Water Conservation Program. A feasibility study in 2015 determined there was \$100 million in necessary infrastructure upgrades including canal lining and canal piping. SMID decided to implement the program to increase reliability for customers and conserve water through modernizing the aging infrastructure. The district has spent \$3.5 million on upgrades so far and now conserves 1200 acre-feet of water annually. The funding sources are SMID Landowners and the SMID Water Bank. The water banking general structure was approved in 2021 to deal with sales and leases for medium to large blocks of water solving local supply problems. When this project is completed, it is estimated that SMID will conserve 7,800 acre-feet of water annually.

Wapato Dam Fish Passage Improvements

Presenters: *David Fisher, Consultant, Bureau of Indian Affairs; Tom Elliott, Yakama Nation Fisheries*

David Fisher shared an overview of the Wapato Dam Fish Passage Improvements. He shared background including the challenges of a sinkhole, the dilapidated condition of aging infrastructure, high juvenile fish mortality, a lack of tribal harvesting opportunity, and the overall impediment to river functionality. He reiterated that the dam is a critical part of the Wapato Irrigation Project. David shared that project objectives include improvements to operator safety, addressing operation issues, improving fish passage sediment transport, and opportunities for tribal fish harvest, as well as addressing flooding concerns. He shared an overview of the project history timeline, including current project status where an alternative concept analysis and feasibility study are taking place.

Tom Elliott provided an overview of the two alternatives and acknowledged that they do not have the same degree of feasibility and design. Alternative 1 is about a year ahead, and this is what he called the “make what you have better” option. It addresses fish passage issues by changing the way the gates work and how the tailwater control, which raises the water level, then slows it down as it comes into the canal. Alternative 2 is the “alternative screening concept” which is a more radical concept that would put the fish screens directly in the river instead of on the headgate. This would allow fish to stay in the river without going past the headgate. It would close off the current west channel, giving maintenance crews more room to work, and moves the majority of water over to the east channel. He explained that addressing the objectives to improve sediment transport, reduce flood risk, and increase water flow work against each other. One way to work around that is adjustable dam gates. This alternative still has some issues and will be difficult and more costly to build.

David Fisher presented the workflow plan beginning in 2024 and continuing through 2028 and beyond. He gave an overview of funding and cost estimates; all subject to Congressional funding appropriations. The current estimate for Alternative 1 is \$145.9 million.

Wendy Christensen, Reclamation emphasized that the Bureau of Indian Affairs has funding for the headgate replacement, however, they are looking for support from Reclamation and Integrated Plan partners to implement a solution that includes fish facilities to address the entire issue at this location. She thinks it is a great opportunity to learn what might work at the other diversion dams and support BIA and Yakama Nation looking at potential options for in river fish screens at this location.

Alex Conley, Yakima Basin Fish and Wildlife Recovery Board, asked if there is an opportunity to flush out existing sediment during construction.

Tom Elliott replied: Not sure, but it won't be a top priority.

Sean Gross, NOAA Fisheries commented that these alternatives don't address the whole problem. There are still more sources of fish mortality downstream in the Lower River. He hopes to hear more about that as this work proceeds.

Tom Elliott replied: We have great numbers from a study monitoring fish over 40 years (ending in 2021) and the difference if they go over the dam, survival rates were 97%. That increases as fish go downstream, until we have a 90% survival rate, which is too low – no mortality is acceptable.

Public Comment

David Ortman: Expressed concern regarding the absence of information on the Department of Ecology and Bureau of Reclamation's websites regarding subcommittee and subgroup meetings. He also expressed concern over the request to state legislators to extend YBIP's water storage goals by 10 years. **See attachment for Mr. Ortman's comment.**

Jean Mendoza, Friends of Toppenish Creek: (submitted online)

Mabton Dairies Withdraw Over a Million Gallons of Groundwater Daily Jean expressed that dairy cows consume a high amount of water each day in and around Mabton. Each dairy cow consumes about 30 to 50 gallons of water each day, and even more during periods of heat stress. Dairy cows also need additional water per cow to wash them and flush manure to lagoons. A herd of 3,500 milking cows requires nearly 300,000 gallons per day, or 360 acre-feet per year. There are an estimated 15,000 dairy cows in the six dairies around Mabton which adds up to about 1,275,000 gallons of water per day.

Rick McGuire, Alpine Lakes Protection Society:

Rick expressed that he is part of an all-volunteer group called the Alpine Lakes Protection Society (ALPS) that has been tracking the Yakima Basin Integrated Plan for several years. He is concerned with the legislative request for a 10-year extension on the Teanaway Community Forest and would like that request to be removed altogether. His hope is that we focus on the parts of the Integrated Plan that have widespread support and are working, rather than risk not getting funded given federal funding cuts.

Drought Strategies – Cloud Seeding Feasibility Analysis

Wendy Christensen, Reclamation due to the fact that this is the third year of drought we are experiencing in the Yakima Basin, Reclamation and Ecology wanted to showcase that we are open to "thinking outside the box" to help provide more tools in our tool box. That is why when Roza suggested we have a presentation on cloud seeding that they are working on we agreed

Scott Revell, Roza Irrigation District, introduced Sarah Tessendorf and let the group know that Roza has been working on a feasibility study on cloud seeding. They are in the initial evaluation, however, based on their discussions to date the process may have merit. There is a lot of work to do, including environmental compliance, before they implement any action.

Presenter: *Sarah Tessendorf, Project Scientist, NSF National Center for Atmospheric Research*

Sarah explained what cloud seeding is and how it is used to enhance precipitation by converting extra liquid cloud water into additional snow. The concept was discovered in 1946, but it has taken over 70 years to prove the entire seeding conceptual model. Recent studies have finally shown that it works despite variability of the process, and difficulties with observing and creating computer models. Cloud seeding is deployed across several western states and in many countries around the world to enhance precipitation. She explained that cloud seeding does not remove water from the sky that would have been precipitation elsewhere, hence it is not "robbing Peter to pay Paul." Water vapor budget calculations suggest a very small impact, less than 1 percent.

Melissa Downes, Washington State Department of Ecology, asked if success is temperature dependent.

Sarah replied that yes, it is. The silver iodine must be -4 or -5 degrees for it to create ice.

Jeff Tayer, Chair of the Habitat Subcommittee, asked about the amount of water one could expect to get out of a cloud seed.

Sarah replied that this is an important question, and that they are still not sure. Modelers are using statistics to try and figure it out, but there is still a lot of uncertainty. They're now trying to run simulations for an entire season and currently estimate thousands of acre feet.

Rick McGuire inquired about cost and benefit.

Sarah replied that costs vary widely depending on the program. Longstanding programs have an estimated cost of less than \$10/acre-foot. Current models are showing \$50-100 per acre-foot. Sarah emphasized that these are very rough estimates.

Round Table Discussion – Work Group Members

Theo Burgoon, Trout Unlimited, appreciated the information presented.

Jason McShane, Co-Chair, Lower River Subgroup, said that we're seeing better and better use of water supply, and we have to continue those efforts.

Travis Okelberry, Yakima-Tieton Irrigation District, appreciated all the updates. Conservation projects all add up, but these efforts are costly. Having partnerships and funding opportunities is crucial – and Travis was pleased with the senior districts who presented on their efforts. He also expressed fascination about the cloud seeding concept.

Craig Haskell, US Fish and Wildlife Service, was impressed with what the Yakima Basin can do when everyone works together.

Amanda McKinney, Yakima County, expressed that the best plans emerge from collaborators coming together to talk about challenges and agree on the solutions. This is how YRBWEP vets its decisions on behalf of the public.

David Blodgett, Yakama Nation, said he appreciated the efforts of everyone who was able to go to DC last week. He felt their advocacy messages were well received. He appreciated the presentations today. David shared that when the group talks about Wapato Dam fish passage, he gets excited because he grew up catching fish with his family there and it holds good memories.

Arden Thomas, Kittitas County, expressed gratitude to those who traveled to Kittitas County and for the efforts made to hold Workgroup meetings in various locations in the Basin. Arden shared that she appreciates the local presence of Federal staff, including those who are familiar with local communities. She mentioned that water marketing is an important part of conservation efforts that she hopes we will discuss in the coming months.

Mike Livingston, Washington Department of Fish and Wildlife, expressed appreciation for the presentations, particularly the conservation work happening in senior districts. Mike provided a Bateman Island update: his agency is working with the US Army Corps of Engineers, and the project is under review. After permitting processes, the Corps would secure a contractor in August with a planned start

date of December. He mentioned that there is still a need to find a home for the hundreds of cubic yards of ballast once causeway removal is underway.

Peter Dykstra, Chair, Watershed Lands Conservation Subcommittee, welcomed Larry Mattson.

Sean Gross, NOAA – National Marine Fisheries Service, expressed concern regarding a third year of drought and the challenges ahead regarding the river, fish, and irrigators, and that we must rely on the Integrated Plan to get us through this. He added that while we have made significant progress through water conservation, our number one challenge with our fish population is getting fish out of the lower Yakima River. He would like to examine how course correction on water conservation might help. Sean also thanked the external communication and advocacy team who went to DC last week.

Larry Leach, Washington State Department of Natural Resources, expressed that DNR, which manages state trust lands to benefit schools and other public beneficiaries as well as the Teanaway Community Forest, has participated in YBIP since 2013. He described the loan that was taken from DNR's trust land replacement account by the Legislature in 2013 to help pay for the Teanaway Community and that the Board of Natural Resources agreed to the loan board decided it would be a good use of the funds to allocate it toward the Integrated Plan. He described that the interest payments associated with the loan were at risk as part of the ongoing Legislative session and that he hopes to have further discussions with YBIP members regarding this matter.

Jaclyn Hancock, Washington State Department of Agriculture, shared that the current drought status has been at the top of mind at state level. The current declaration is set to expire mid-April, and she expects that this will be extended. She added that the Yakima Basin is under scrutiny in these meetings because water supply and drought conditions are concerning, but it also gives YRBWEP the opportunity to highlight its good work. She asked that members bring any drought-related messages to her, and she will make sure they get to the governor's office. Jaclyn stressed that the Wapato Dam presentation was very powerful. She has toured those facilities and is encouraged by the fact that we are currently examining and making progress on fish passage alternatives.

Chris Duke, Bureau of Reclamation, shared that Bureau of Reclamation offices in Oregon are not closing, despite a lease cancelation. The Bureau will continue to manage its own lease and stay focused on its mission.

Urban Eberhart, Kittitas Reclamation District, thanked all presenters and touched upon the Integrated Plan's request to the state legislature regarding water supply milestone established in the 2013 Integrated Plan policy bill. Several implementers of the Integrated Plan have asked for 10 more years to complete the groundwater and surface storage goals in the Basin through multiple projects.

Joe Blodgett, Yakama Nation Fisheries, shared concerns with irrigators and other partners that there is not enough water this year. Yakama Nation communities are feeling the same pressures, and he is receiving similar questions about fish and opportunities for what was given to them by Creator. He expressed that water conservation discussions are important and that not having enough flow of water is the biggest killer of fish. Joe finished by saying that we must be strategic in the short term for the fish, but we must also realize we each play a part in conserving water and having more available for everybody.

Larry Mattson, Washington State Department of Ecology, thanked all of the stakeholders.

Attendance

Workgroup Members:

Alex Conley, Yakima Basin Fish and Wildlife Recovery Board
Amanda McKinney, Yakima County Commissioner
Arden Thomas, Municipal Subgroup Chair, Kittitas County
Brandon Parsons, American Rivers
Chris Duke, Bureau of Reclamation
Cindy Boen, U.S. Army Corps of Engineers
Craig Haskell, U.S. Fish and Wildlife Service
David Blodgett, Confederated Tribes and Bands of the Yakama Nation (Alternate to Phil Rigdon)
Jaclyn Hancock, Washington State Department of Agriculture
Jason McShane, Lower River Subgroup Chair, Kennewick Irrigation District
Jeff Tayer, Habitat Subcommittee Chair, Washington State Department of Fish and Wildlife
Joe Blodgett, Confederated Tribes and Bands of the Yakama Nation
Kathryn Furr, U.S. Forest Service (Alternate to David Farmer)
Larry Leach, Washington State Department of Natural Resources
Larry Mattson, Washington State Department of Ecology
Mike Livingston, Washington State Department of Fish and Wildlife
Mike Shane, City of Yakima
Peter Dykstra, Watershed Lands Conservation Subcommittee Chair
Sage Park, Water Use Subcommittee Chair, Roza Irrigation District
Scott Revell, Roza Irrigation District
Sean Gross, NOAA National Marine Fisheries Service (Alternate to Justin Yeager)
Seth Defoe, Kennewick Irrigation District
Theo Burgoon, Trout Unlimited
Travis Okelberry, Yakima-Tieton Irrigation District
Urban Eberhart, Kittitas Reclamation District
Wendy Christensen, Bureau of Reclamation

Other Attendees:

Alison Pieper, HDR Engineering Inc.
Bailey Draper, Union Gap Irrigation District
Ben Woodard, Kennewick Irrigation District
Bill Gale, U.S. Fish and Wildlife Service
Bonnie Miller
Brian Iller, Rettig Law
Brittany Beebe, U.S. Fish and Wildlife Service
Bruce Sully, Bureau of Reclamation
Byron Gumz, Yakima Valley Conference of Governments
Chad Stuart, Bureau of Reclamation
Chris Pitre, Coho Water Resources
Chris Perra, Yakama Nation Fisheries
Curt Strifert, Columbia Irrigation District
Cynthia Carlstad, Northwest Hydraulic Consultants
David Brown, Retired
David Fisher, Consultant, Bureau of Indian Affairs

David Haws, Yakima County
David McKenzie, Kennewick Irrigation District
David E. Ortman
Dawn Weimer, Washington State Department of Ecology
Ed Lisowski, Washington State Department of Agriculture
Elaine Packard, Sierra Club
Erin Cox, Jacobs
Griffin Hanberg, Kennewick Irrigation District
Heather Baxter, HDR Engineering, Inc.
Heather Hazlett, Washington State Department of Ecology
Heather May, Washington State Department of Ecology
Ilene Le Vee
Jean Mendoza, Friends of Toppenish Creek
Jeanine Carlson, Washington State Department of Ecology
Joel Freudenthal, Retired
Joel Hubble, Consultant, Kittitas Reclamation District
John Crotty, WSWRA
John Reeves, Save Lake Kachess
John Stuhlmiller, Washington State Water Resources Association
Justin Bezold, Trout Unlimited
Justin Harter, Naches-Selah Irrigation District
Kaila Anderson, Landau Associates
Keelan Naasz, Yakima Valley Conference of Governments
Kelsey Green, Consultant to the Yakima Basin Joint Board of Irrigators
Kevin Eslinger, Kittitas Reclamation District
Kevin Haydon, Washington State Department of Ecology
Kory Graafstra, Yakima County
Kyle Hill, Washington Water Trust
Leif Krapas, Washington State Department of Ecology
Lily Sadataki, HDR Engineering, Inc.
Madison Roy, Washington State Department of Agriculture
Marcella Appel, Benton Conservation District
Mark Johnston, Yakama Nation Fisheries
Melissa Downes, Washington State Department of Ecology
Merritt Mitchell, Mid-Columbia Fisheries Enhancement Group
Michael Coffey, Bureau of Reclamation
Michael Horner, Washington State Department of Ecology
Nathan Draper, Selah-Moxee Irrigation District
Jennifer L Nelson, Washington State Department of Fish and Wildlife
Norm Semanko, Attorney for NSID, YTID, SMID, SVID/SDBOC
Questen Inghram, Yakima Herald
Rachel Grena, Bureau of Reclamation
Rebecca Gutshall, Bureau of Reclamation
Rebecca Wassell, Mid-Columbia Fisheries Enhancement Group
Richard Evans, Office of US Senator Maria Cantwell
Rick McGuire, Alpine Lakes Protection Society
Sanjay Barik, Washington State Department of Fish & Wildlife



— BUREAU OF —
RECLAMATION



Sara Vickers, Kittitas Reclamation District
Sarah Tessendorf, NSF National Center for Atmospheric Research
Scott Turner, Washington State Department of Ecology
Shawna Warehime, Washington State Department of Ecology
Shaelyn Molvik, Ahtanum Irrigation District
Stuart Crane, Yakama Nation
Susan Woodward, American Rivers
Tim Poppleton, Washington State Department of Ecology
Todd Newsome, Yakima-Kittitas Fisheries
Tom Elliott, Yakama Nation Fisheries
Trevor Hutton, Washington State Department of Fish & Wildlife
Walter Larrick, Consultant for the Yakima Basin Joint Board
Wyeth Wallace, Bureau of Indian Affairs

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 Anna Marandi at HDR Engineering, Inc. anna.marandi@hdrinc.com.