



Contact: Wendy Christensen, Columbia-Cascades Area Office, (509) 573-8050 Tom Tebb, Washington State Department of Ecology, (509) 574-3989

Meeting Notes Yakima River Basin Water Enhancement Project Workgroup September 13, 2023

In-person and WebEx Virtual Meeting

Welcome, Introductions, and Agenda Overview

Ben Floyd of White Bluffs Consulting welcomed the Yakima River Basin Water Enhancement Project (YRBWEP) Workgroup (Workgroup) members and other attendees both virtually and in person. He noted that it has been 6 months since the Workgroup has met.

Chris Lynch (U.S. Bureau of Reclamation [Reclamation]) introduced himself. David Haws, who is replacing Joel Freudenthal (Yakima County), also introduced himself. David is the Environmental Services Director at Yakima County. Crystal Elliot (Trout Unlimited [TU]) also introduced herself virtually. She is TU's Washington State Director, replacing Lisa Pelly (TU) in the Workgroup. Crystal was previously Lisa Pelly's counterpart (Lisa was the water project director, and Crystal was the habitat program director). Crystal has been with TU for 9 years, but she is somewhat new to the water world. Bret Walters took a new position in the South, so Cindy Boen is Bret's replacement. Cindy, joining virtually because of travel, is Chief of Planning for the United States Army Corps of Engineers' (USACE's) Walla Walla District. Nancy Aguilar (Commission on Hispanic Affairs) is a special guest today; the team has been working with the Commission on Hispanic Affairs to improve outreach to the Hispanic community. Nancy introduced herself; she said she is excited to be a bridge to connect this project with the Hispanic/Latino community in many creative ways. Rick Dieker introduced Travis Okelberry, Manager at Yakima-Tieton Irrigation District, replacing Rick when he retires in early 2024. Wendy welcomed Tel Jensen who is Reclamation's representative on the Groundwater Subcommittee. Tel is a civil engineer working for Reclamation's Columbia-Pacific Regional Office.

The following notes summarize the Workgroup's presentations and public comments. For more information, please see the full presentations available on the Yakima Basin Integrated Plan (YBIP) website: Yakima Basin Integrated Plan.

Executive and Implementation Committee Updates

Tom Tebb, Washington State Department of Ecology (Ecology): Tom noted that the Executive Committee has focused on the drought issues this year and the impacts to agriculture and aquatic species. They have also been working hard on federal grant opportunities, like National Oceanic and Atmospheric Administration (NOAA) fish passage grants, and celebrated The Nature Conservancy's accomplishments (it recently acquired 20,000 additional acres). Tom welcomed Chris Duke (Reclamation), new Area Manager to his first in-person meeting with the Workgroup. Welcome Chris!

The Implementation Committee has been focusing on drought impacts related to the state drought declaration and securing additional funds for irrigation districts. It is anticipating some turnover in the Washington State Legislature and looking forward to the opportunity to inform and educate the legislators on the Yakima work. The Governor's Drought Declaration is significant because it provides access to funds that would not have been available otherwise.





• Urban Eberhart (Kittitas Reclamation District [KRD]) emphasized the significance of this declaration, noting that it will be important to educate state employees on how drought declarations are to work.

Wendy Christensen, Reclamation: Wendy noted a major milestone was achieved for the Cle Elum fish passage: the contractor was able to run water through intake #6 (the bottom intake). Full commissioning is set up for next March—May, and Wendy noted that Reclamation appreciates the Confederated Tribes and Bands of the Yakama Nation (Yakama Nation) coming out to test the system using sensor fish. Preliminary results show no change in acceleration through the system—it took about 110 seconds for the sensor fish to go through the passage. Reclamation is in the process of awarding the fifth contract (set to be awarded by the end of fiscal year [FY] 2023 in late September) for finishing fish passage at Cle Elum. The agency received about \$68 million—appropriated budget in FY2023—due to internal and external support. Much of this funding goes toward fish passage, however, Reclamation also received funds and has provided a grant with Trout Unlimited for Tjossem Ditch. Reclamation provided funding to the Yakama Nation: irrigation demonstration project was awarded, and they are working on a Wapato Irrigation Project (\$10.5 million to be awarded there), and Sunnyside—several items there. Reclamation is excited to be able to support this work and many others at such a high level.

Tom Tebb, Ecology: Tom closed out this section by saying that, even at a 73 percent proration rate, there are significant impacts in the Yakima Basin (Basin) on the heels of what was thought to be a decent snowpack, with the amount that ran off/evaporated in the spring soil moisture is low. Farmers and fishery managers have had to make tough choices. Tom also gave an overview of the topics that will be covered in the remainder of the presentation.

2023 Water Year and 2024 Look Ahead/Potential El Niño Effects

Wendy Christensen, Chad Stuart, and Chris Lynch, Reclamation // Tom Tebb, Ecology

Tom gave an overview of the topics covered in the presentation. Wendy added that this Workgroup process is important, as we are seeing a future with more drought, and preparing for it will be very helpful.

Reclamation is working with the regional office to do a climate vulnerability analysis for the Yakima Basin, as one of two basins chosen for this analysis. Why is the YBIP significant and how will it help prepare us for future drought? One example: Currently, there are 20,000 adult returning salmon, but with permanent fish passage at Cle Elum, that number could double or based on modeling could be as many as 100,000 adult salmon returning. Reclamation is proud to support this kind of effort and will continue to prepare for drought for irrigation, fisheries, and all of us who depend on the water being available into the future.

Tom added more detail about the speakers and presentation topics: climate conditions for 2023, agricultural and fishery impacts, and anticipated carryover storage, focusing on the following year and looking to the mountains to see if we will have enough water. Discussion and closing thoughts to follow.

Nick Bond, Washington State Climatologist, University of Washington

Nick showed a map of the Washington Drought Declaration Areas, some of which are in emergency status (75 percent or less of usual water supply and hardship) and some are in advisory status (remainder of state). There have been only 5 years lower than current storage in the past. Nick also shared a graphic showing how much water is in the reservoirs versus capacity. Nick added that crop harvesting is occurring earlier because of warm weather.





Chris Lynch, Reclamation

Chris shared the Yakima Basin Five-Reservoir Cumulative Precipitation chart (aggregated, tracked at water supply meetings). This year the Basin received 162.55 inches, a 73.7 percent average. Chris explained the chart color coding, noting that we had one of the driest January–March periods on record. January (a significant month for building precipitation) was very poor (30.5 percent). Low stream flows led to low fill at reservoirs.

The Yakima Basin Snow Water Equivalent chart showed the accumulated snowpack at key forecasting sites over time. Another table compared these data to the Natural Resources Conservation Service's snowpack sites in different subbasins, which helps track snow and distribution in the winter. Washington State did fairly well with snowpack, considering how low precipitation was, which means that most of the precipitation came from snow rather than rain. At the end of May, the Yakima Basin was at only 19 percent of average, which is one of the big stories this year—snowpack melted quickly in May (less gradual than usual), leading to large flows and not much snow left to melt in June. This year there was a storage control date of June 1, which left us depending on storage in June rather than natural flows.

Snow water equivalent in Yakima from the United States Department of Agriculture (USDA): 2018 and 2019 were used as a reference for 2023 because they had similar trajectories. Despite following the 2018 trajectory, the runoff for the summer turned out more like 2019 (not as good).

System unregulated flow volume: Historically, peaks are due to wet occurrences throughout the winter, which provide key elements for ecology and reservoir refill. Two events occurred early in the winter, and another large flow in May.

Yakima system diversion: The Yakima Basin has been below average most of the period, with several warm events bringing usage close to average, which shows how much weather affects usage.

Total water supply available (TWSA): The June estimate for prorationing started at 77 percent but went down to 72 percent in mid-June and stayed in that range. Early in the year before the May melt-off, the basin water supply was in the 80 percent range, which is significantly better.

There was low carryover in the reservoirs, shown in two images of the Cle Elum Reservoir, which was very low. As a result, the reservoir is significantly drawn down that you can see the top of the outlet works intake. This is very rare and has only happened once before in recent memory.

Agricultural impacts from drought:

Scott Revell, Roza Irrigation District (Roza)

Scott showed a map, highlighting what each color represents, and gave an overview of Roza. Roza canal conveyance is roughly 95 miles long, with 72,000 irrigated acres. Water conservation programs are an outgrowth of the 1977 drought is still remembered by the organization and is deeply embedded in the culture. Approximately 300 miles of lateral canals have been piped. The conservation program was started in the early 1980s, with a couple of years taken off to recover from droughts. \$85 million in conservation has been invested, most of which has been funded by Roza growers.

Roza is as economically prepared as anyone. This was a strange season with hardships, but impacts are moderate at this point. Additional impacts may be seen in the future. There was a huge apple crop this year and a very large cherry crop, but some of the cherries did not have value because they could not be sold or picked since timing was the same as the California crop harvest. Scott explained that it is not a crisis, although it did not look very good for a while (late June/July) when Roza thought water might run out in October. For a shutdown, it would need to be a lower water supply than it currently is. Initially, Roza had thought it would end about 2 weeks early, but right now, it looks like it will make it to the end of the season (changes in projections since the slide was created).





Scott talked about on-farm drought management. Growers may have adjusted their watering to higher-value crops. If blueberry plants go 3 days without water, they die. There was a lot of internal leasing of water from farmer to farmer. The Board of Directors extended the pooling deadline, where farmers work to balance their combined water levels. Farmers of different crops work cooperatively to solve problems with different kinds of crops that use water at different times, etc. They have also been working hard on the emergency wells opportunity, which is very complicated.

Scott discussed Roza's actions since the 2015 drought, including piping canals, a new re-regulation reservoir, sealant, and drip irrigation conversions. The sealant has been a game-changer and a huge improvement from prior droughts. Farmers are making economically rational decisions and not running overtime. They are looking to build additional re-regulation reservoirs to capture water left in the canal.

Graysen Squeochs, Confederated Tribes and Bands of the Yakama Nation

Graysen, Interim Program Manager, recently replaced Richard Dills when Richard retired in October. Graysen discussed the WIP water supply, which has senior and proratable water rights. Existing infrastructure makes it difficult to distribute in shortages because of older infrastructure. WIP is working on implementing modernization projects. It is actively working to manage flows and ensure an equitable water distribution. WIP reduces diversion to avoid prematurely exhausting water rights throughout the year. It has adjusted its water diversion schedule to use most of its water remaining in the first half of September.

Graysen showed a map with the WIP Conservation Plan, noting the Ahtanum, Bench, Satus, and Wapato units and their associated colors. The Bench Unit and Unit 2 are supplied by a pumping station and return flows through the main canal. This year, the system was relatively stable, with a supply of only a few cubic feet per second (cfs) different from previous years. This is attributed primarily to the implementation of conservation practices, construction of pipelines, reconstruction of previous concrete pipelines, and enclosure of open ditches. In addition, the Yakama Nation increased measurement by applying staff resources and through individual delivery measurement increases by servicing flow meters. In the Lower Wapato Unit, because of the soils in the district, there is a large alluvial fan that comes through the Yakima River corridor, so all the deliveries on the southern edge are based on return flow from the main diversion at Union Gap flowing down and through.

Actions taken this year: WIP would have liked to have a blanket reduction across deliveries in this region, but that would not be equitable because of the mix of older and modernized infrastructure. The method was decided upon with a rotation schedule of 9 days on and 3 days off. With any modernized system, the Yakama Nation had flow meters in operation to track delivery. Supplemental shallow drought relief wells were activated appropriately.

A WIP modernization plan is being implemented, focused on areas that have been consistently difficult to serve (Unit 2 as well as the ones mentioned above).

- The Yakama Nation wants pump system upgrades in the Satus feeder section (#1 in the lower right corner). A diversion returns off of the main drain system from the Wapato Unit. Return flows are cycled back into the Satus system. There is a large project to modernize this system to make it more reliable.
- The Yakama Nation is also looking to implement a system-wide supervisory control and data acquisition (SCADA) system. The project will connect the main canal to a pumping station on Unit 2 for more reliable flows to Unit 2.
- Re-regulation reservoirs are key for controlled releases on the irrigation systems, and the Yakama Nation is looking to implement these on Unit 2 and Satus Units 2 and 3.





Graysen showed a photo of conservation work that has been done, including the installation of Unit 2 pressurized pipeline and Satus long-crested weirs, which allow for a consistent level of control with very little oscillation in the canal. From an operational standpoint, it allows the district manager to reassign staff away from chasing water down the ditch and is lower maintenance (no specialized data technicians needed). This is a long-term, simple solution to making canal delivery more robust.

Graysen summarized the work, reiterating that the entire project experienced shortages. The existing infrastructure combined with the modernized system made it difficult to have a blanket management scheme, so the Yakama Nation still uses elements like rotation, which it would rather not. However, the Yakama Nation is seeing the benefits of conservation projects in specific regions. Its office tried to increase conservation as much as possible to maintain stream flow, primarily for fish.

Urban Eberhart, Kittitas Reclamation District

Urban noted that KRD started this year thinking it would be a good water year. Based on that assumption, KRD allocated water to farms, set at 2 cfs, but the temperature rise caused the snow to come off very quickly. So much water came out of the river system so quickly that it started to fill up areas like the Naneum and Wilson stream channels. Despite initial assumptions, no snow remained at the end of May, so KRD readjusted there plans for 72 percent supply through summer. This was a late drought; notice happened after fertilizer had gone out and fields had been planted. KRD got the June 1 proration date and started reducing the cubic feet allocated to acres and instantaneous flow. KRD started with a 1-inch/acre restriction, going heavier pre-storage control to get more water out on the fields to act as groundwater storage, then started locking it down once it hit storage control.

Historically, the canal system had heavily irrigated hay-type crops. As a direct result of the increased temperatures, there is an attempt to get fruit crops to be raised in higher-elevation, cooler areas. Looking at projected temperatures about 20 years out, fruit trees will grow better at 2,000 feet elevation; there may be a lot more fruit production on the south side of the Kittitas Valley, north-facing slope, where the whole hillside is being filled with high-density fruit (apples, cherries, etc.).

Many farms are completely out of water. Some farmers are working with Ecology and purchasing senior water rights to mitigate drought wells. In prior droughts, they would have been out before now, but because of the teamwork across this project, they have been able to install piping, lining, and telemetry. So they are operating the canal system differently and can get the water out to the farms more efficiently and simultaneously create the capacity to help out multiple streams.

The first on-the-ground construction project was the Manastash pipeline, which kicked off the tributary supplementation program resulting from the 2015 snowpack drought. Multiple streams had been going dry throughout the summer but are now flowing water all year and have improved habitat (with an image of a stream where the habitat is improved). Because of the conservation, various salmonid species are being re-established, including coho. Surface water and groundwater storage and conservation are the primary efforts so that water can be moved around in the distribution system.

We are a lot better off than we have been in the past; we know where we are headed and can continue to improve it, but we have a lot of work to do. This year provides an opportunity to educate people who have not been through one of these droughts before, which will set us up for next year. We can manage this in such a way that future generations have something to work with, and the ecosystem and people can move forward together.





Fish impacts from drought:

Mike Livingston, Washington State Department of Fish and Wildlife

Drought exacerbates shortages of fish every year. The commitment to the project is year-round, not just when we need to respond to severe drought. WDFW takes additional actions during drought, but every year is a drought year for the fish in the Basin.

Mike shared a video that showed what is being done in Mountain Box Canyon Creek to enable bull trout to get up the river in water-short years. This was done in 2001, 2005, 2015, and 2019 and will be done this year.

Joe Blodgett, Confederated Tribes and Bands of the Yakama Nation

Joe began by noting that the members of the Yakama Nation have always been taught that they have a responsibility to speak for those who cannot speak for themselves, including our fish and our water. It is critical to their way of life and culture.

Joe described the Sunnyside Dam and how it was central to fishing in the Basin. It is not that way anymore. Things have come a long way, and he sees potential to get back to increase the fish in the Basin tenfold—it is possible.

Fish have unique lifestyles. They are on their own clock and rely on fresh, cold water. This year, we are low in the number of fish because of the 2015 drought. An extreme example is the Klickitat River, where we are at a quarter of the fish we expected. River temperature and flow are directly correlated. Higher temperatures strongly impact fish species, reducing fish counts heavily.

The lower Teanaway flows near Jack Creek makes it difficult for returning adults. Access points are narrow and unpassable; fish will not make the trip.

David Blodgett III, Confederated Tribes and Bands of the Yakama Nation

David daily calls from tribal fishermen experiencing difficulty during this drought year. The connection between fish and people is essential. The tribes of the Columbia River are salmon people, and this is critical for people to understand. Just like the plains, people were connected to the buffalo, the people of the Yakama Basin are connected to the salmon. The health of our people has historically been linked to salmon. And it all goes back to clean water for survival. First foods, like berries and salmon, also need reliable, clean water for ceremonies, good harvests, and tradition. The more significant impacts on salmon mean greater impacts on people. The salmon of this Basin historically represent the Basin's economy's origins.

Tribal harvest is managed very conservatively. It is first managed to provide for ceremonies. Second, it is managed to keep the rivers open for subsistence fishing. The last use, if available, is for commercial opportunities.

This year the Yakama Nation had to close the subsistence fishery, the first time in a very long time. We stopped because the most threatened species were at risk; not every species faced that risk. Often, the burden to manage the fish appropriately rests on tribal harvesters, even though they are not the cause of these declines.

The Yakima River ecosystem is at a tipping point from legacy impacts. Catastrophic impacts occur during drought. It makes it much more difficult to recover when the habitat degrades—less shade from trees/vegetation—and the cycle worsens.

A video of crews installing a channel at Box Canyon made of hay bales and plastic was shown describing tributary restoration efforts, highlighting partnerships with Reclamation, WDFW, and others to restore bull trout.





Kathryn Furr, United States Forest Service (USFS)

Kathryn highlighted a couple of projects in the Okanogan-Wenatchee National Forest. Forest accounts for 25 percent of the Basin. These are a few bull trout projects that cover an amount of land, at such a scale, that USFS cannot do it alone without its partners.

Gold Creek Valley and Lake Kachess are at the top of the watershed; Gold Creek Pond used to be a gravel mine for a series of projects. USFS wants to determine the best way to accomplish change in that channel to restore water for more of the year to allow bull trout to move up there for fall spawning. As it dries up, the fish are subject to direct mortality.

There are problems with dispersed camping and recreation; people are accessing some of these channels to drive around. WFDW is highlighting these impacts to us. Our partners are helping implement seasonal closures at one of the boat ramps near the area of entry to the reservoir bed and USFS is already seeing benefits.

Mitch Long, Kittitas Conservation Trust

For the Gold Creek and Kachess Lake streams, we do not have the tools to increase the flows for these streams. For the Kachess, we are targeting juveniles; less than 3 miles are available for the young bull trout. We have worked to narrow the channel to the historical widths before clearcutting for logging. While we cannot produce more water, we can try to improve natural flows with deeper pools for more cover and shade where fish can go when water levels are low. Through the Bipartisan Infrastructure Law (BIL), we received full funding for this project from the Salmon Recovery Board, Ecology, USFWS, and the Yakama Nation. This means that the conservation trust can get this restoration done in 1 year. This is more than 1 mile in the river with 64 structures and a side channel.

The work window is from July 15 to September 30. Most of the early activities are complete, and the conservation trust is now working on revegetation and cleanup work. There is 2.5 miles of restoration to do, which could be done in 1 year if we get the permitting and funding.

- Comment from Kathryn Furr: We have seen a variety of new funding sources, including BIL. Because we were ready to go when BIL funding hit our desks, we diverted \$800,000 into this project so that climate funds are now being rolled over into these investments.
- Comment from Mike Livingston: All these projects are possible because of the collaborators in the room. It is a major lift and a testament to our success and how effective we are becoming as a team because of more than 10 years of working together. Larger projects in the upper Basin are planned to store water, but these restoration projects are critical, too.
- O Question from David Ortman (via chat): Will there be another attempt to place plastic and straw bales at the mouth of Box Canyon Creek in Lake Kachess this year? How much straw and plastic wound up in Lake Kachess from the last attempt? Would maintaining Lake Kachess at a higher water level not also provide bull trout access to Box Canyon Creek?
 - *Mike Livingston response:* Yes, there's an effort this year: September 18–22 with a build date of September 21. That is tentative.

Wendy Christensen, Reclamation

Wendy shared that they are focused on this project and very committed to getting passage at this location. The milestone of being able to do "flow test" is critical for the contractor, as next year, we will be coordinating with the contractor to "commission" or run water through all six intakes. With 20,000





adults returning now, if we could have a fivefold increase, or even double it, it would be a significant increase. It is significant as a gateway to the Basin. Regarding climate change, access to fish above the reservoir for cooler temperatures is critical. In 2011, Reclamation and Ecology had our Environmental Impact Statement (EIS), and we have been through 8 years of construction, so to see running water was very gratifying. We also had Yakama Nation representatives test the facility with sensor fish.

Wendy described technical aspects of the Cle Elum fish passage facility, including the helix structure, and displayed a video demonstrating how the structure functions. The helix structure is 120 feet long, 9 feet wide, and more than 100 feet deep.

 Comment from Mike Livingston: He expressed appreciation for the contractor, the Yakama Nation, Reclamation, and Ecology. This is the biggest capital project yet for the YBIP.

Nick Bond, University of Washington

Nick shared a sea surface temperature anomaly map noting where it is warmer than normal. The tropical Pacific has a lot of red, which means El Niño effects. It is also warmer in the Northwest: in 2015, there was extremely warm weather and in 2019 and 2020, water was extremely warm, too. However, although the temperatures are warm, the temperatures do not go as deep as in previous years, so he expected it to be a moderate year.

He is not expecting modulation in the tropical Pacific. El Niño conditions are present and will persist into 2024. Looking at the east side of the Cascades from October to December, overall, they get less precipitation during El Niño. Snow water equivalent at Stampede Pass is shown during a strong El Niño and very strong El Niño. The Pacific Northwest tends to do OK regarding precipitation amounts. During El Niño, snowpack is slightly subpar by the end of winter. The outlier is 2015, which shows that Stampede Pass had no snow on April 1.

The models as a group show below-normal precipitation, but not as bad as it could be. It looks like the Pacific Northwest will be on the dry side in the earlier part of winter and on the warmer side in the latter part.

Chris Lynch, Reclamation

Chris then shared a graph showing precipitation for "strong" El Niño events. The two blue curves (2016 and 1983) have above-average precipitation for the Basin. 75 percent of the other strong El Niño years are lower precipitation. During El Niños, there is a 50:50 chance of the Yakima Reservoir refilling above/below the 90 percent average.

Yakima Reservoir refill projections show the percentage chance of refilling those reservoirs. There is a similarity between El Niña and strong El Niño years, but there are reductions in expected refill during strong El Niño compared to regular El Niño. There are a few years to sample for strong El Niño years.

General Public Comment

Bob Hall: I am speaking in summary of one of the most effective meetings we have had. I wanted to discuss what got us here, and where we are headed. It started in 1995, when the private sector pulled together a 24-seat group; a very respected retired local businessman led this group. It had many leaders there—private sector, the chairman of the Yakama Nation Tribe always brought one or two members, we all sat at that table for 46 straight meetings. The group worked out an agreement for a solution. In 1945, this system that has served this community very well and put us on the map in the world with agriculture, was declared inadequate. In 1995, we came up with a 50-year plan, and 30 years of work has





gone by. At that point in time, that group got a few of us on the outside to assist with raising \$3 million. The purpose of everyone here is to get solutions—that is what your jobs are, to provide solutions and expertise. The group sought to put into place a solution through Reclamation. We raised the \$3 million and put a coalition together (local, federal, state); it took 3 years to complete and was not supported by the Reclamation Commissioner. But it did look at a potential solution: drop water from a source that would consume 0.1 percent of the Columbia River. It would supply the water needed to the Yakima Basin that comes from the hills into reservoirs during droughts. Energy came into play in the last 10 years for electricity. \$26 billion has been spent in the last 15 years to find solutions to fish in this region. That cost would be another \$5 billion to \$6 billion to put that project in place to back up the Basin. That is what we are in business for. I hope that people understand what the real target and goal is—for Charlie and me and the Yakima River Basin, we all need to replace ourselves for who will do this work next to find a solution. The target is to provide water for that fish to make it to the Columbia River and into the Yakima Basin for our Tribal nation, as it has been for centuries.

Chris Maykut, Friends of Bumping Lake: "Good old reliable Bumping Lake" was said related to water supply. What is great about Bumping Lake is that it is going to be sustainable the way it is. The projections you showed for a new Bumping Lake dam and the water flowing into it shows that if you actually built that dam and drain it in a drought year, it would take 2.0 to 2.5 years to refill. You would just be kicking the can down the road. I encourage you to keep Bumping Lake 100 percent throughout the next 7 years. Thank you.

Gap-to-Gap Floodplain Restoration Update

Joel Freudenthal, Yakima County

In 2020 the Reaches Report came out, which looked at the Basin's productivity. The conclusion was that the Gap-to-Gap reach was the one that, if restored, could have a Basin-level effect on the productivity of the entire Basin. That is the primary objective of the Gap-to-Gap reach. Work has been going on for the past several years.

Joel showed a Reclamation map from 2003 that included projects and how, in the last 1,200 years, the river has been wandering around. The map also showed the levee system.

The SR 24 bridge was a problem and has been replaced and widened. Critical levee facilities protect key infrastructure like the one that protects the City of Yakima Wastewater Treatment Plant (WWTP). YBIP provided \$5 million for this project.

There are three other key projects:

- East-West Corridor: The river is currently confined, and the project would open the side channel up and reconnect it to all floodplains (400 acres). This drops the energy load in this region. This project includes floodwater recharge and flood reduction benefits. It is fully funded, all real property needs to be acquired, and NEPA is finishing.
- Gap-to-Gap USACE 1135 General Site Plan: The river's east bank would add a pilot channel, remove levees, and open up channels. This creates about 640 acres of floodplain and a new 100-year levee connected to the system. It is divided into three pieces: Base (Phase 1), Option 1 (Phase 2), and Option 2 (Phase 3). The Infrastructure Investment and Jobs Act (IIJA)/BIL fully funded the base case and Option 1 with a Salmon Recovery Funding Board (SRFB) funding match of \$4.9 million. There will be a ribbon-cutting ceremony in mid-November. Option 1 is out for bid in spring 2024 or early summer, with construction in fall. Option 2 advertises next fall and will be constructed in 2025.





- Gap-to-Gap Locally Preferred Alternative (LPA) General Site Plan: The LPA would remove old levees from the 1940s and 1950s that no longer work. These are some of the first levees that were built in Yakima County. It would provide reconnection for new culverts.
 - Question regarding 1135 funding: How do these funding sources work in relation to USACE gold standard projects?
 - Answer: This is funded through a \$7.3 million federal grant. Permitting is almost completed. It is on the funding list for the Federal Emergency Management Agency (FEMA), supported by Senator Maria Cantwell and Representative Dan Newhouse through congressionally designated funding. It will be implemented in two phases, with the majority to be spent in mid-2024 and the Nob Hill setback in fall 2024.

Roundtable Discussion

Ben Floyd recognized Joel Freudenthal and Lisa Pelly for their contributions to the Workgroup. Joel was honored for his many years of service to Yakima County and the Yakima Basin. Joel is retiring and the group presented him with a virtual card, a framed picture, and a gift. Lisa is also retiring and will be recognized in a future meeting. Ben then invited Workgroup members to share any final thoughts for the meeting.

Wendy Christensen: Thanked new members and looks forward to working with them.

Alex Conley, Yakima Basin Fish and Wildlife Recovery Board: Kudos to Joel and Lisa. I am in Olympia today, celebrating approval of \$2 million of SRFB habitat projects for the Yakima Basin and weighing in on policies that should bring in increased funding for next year—it has been great to see the way SRFB and YBIP funds have matched each other and made good fish projects happen. I appreciated the climate presentation. Great meeting, there will be a celebration for all the partners. That will be between around noon and 2 p.m. on September 28.

Seth Defoe, Kennewick Irrigation District: Expressed appreciation for Joel and congratulated him on his retirement. Looking at the climate forecasts and refill scenarios on the reservoirs, I know that we are all hoping for the best and planning for the worst. I look forward to addressing these challenges and hoping the worst does not happen, but working with this group to figure out the best way to make sure this does not happen.

Sean Gross, NOAA National Marine Fisheries Service: I appreciate the presentation on drought. This is a good time to check in because we are experiencing a 72–73 percent drought year—the agriculture side is aimed at 70 percent proratable supply during drought years. It is only moderate pain, so having more of these years instead of worse years is important. I appreciate the information, including the impacts on fruit.

Brandon Parsons, American Rivers: He really appreciated the presentations today and shared an anecdote about Joel.

Charlie de la Chapelle, Yakima Basin Storage Alliance (YBSA): YBSA is going to send a letter to our elected officials expressing our dissatisfaction with the rate of recovery of salmon in the Basin. Anyone who has comments, we would be happy to incorporate them.

Bill Gale, USFWS: Expressed appreciation for all the speakers and all the work on Gold Creek and Kachess; everyone in USFWS is very happy to be working with this group.





Joe Blodgett, Confederated Tribes and Bands of the Yakama Nation: I am impressed and appreciative of the group that we have here. We are an ambitious and goal-oriented group. He expressed appreciation for Joel.

David Haws, Yakima County: I will echo what everyone has been saying. It is great to be here, and I feel honored to sit here and listen and be a part of it.

Urban Eberhart, KRD: Today really shows how important it is for us to continue working on all the elements of the YBIP, but especially all the forest management work we are all doing, including the fish passage and habitat restoration, groundwater storage, getting groundwater to pastures and new industry.

Jeff Tayer, WDFW: I wanted to give a little recognition to USFS. When the YBIP started 10 years ago, USFS got repeated questions about how it got to the YBIP priorities and how they relate to USFS. I kept saying the same thing over and over—Box Canyon Creek, Kachess River, Gold Creek, Clear Creek for fish passage, and South Fork Tieton. All five of those priorities have gone from "What are your priorities?" to implementation. All are completed or constructed. The late 1990s were not marked by cooperation between local governments and fisheries interests, but they were marked by a gigantic flood in 1996. The Yakima County Commissioners were in the middle of controversies about floodplains and fisheries and decided to form a Flood Control Zone District. And they hired a guy from Clallam County named Joel Freudenthal. Joel went on to play a key role, really dug in, and was the steady hand from the very beginning and saw the vision. It gives you an idea of how long it takes to implement one of these big projects. Joel has been that steady guy, positively working, using the best available science, and learning as we went. In 2000, it was just a dream. I just really appreciate the scale of what Joel has done for Yakima County.

Arden Thomas, Kittitas County: Joel has been a leader in the flood control zone district and floodplain control and has been a personal mentor. He has been a mentor and leader in terms of the domestic water supply and has provided direction to get the Yakima program in place.

Crystal Elliot, TU: Expressed appreciation for the group and how impressive today was, as this was her second session attended.

Upcoming Meetings

The next Workgroup meeting is scheduled for Wednesday, December 13, 2023. The meeting is currently scheduled to be at the Yakima Valley Community College Conference Center from 9:30 a.m. to 12:30 p.m.

Attendance

Workgroup Members:

Adam Fyall, Benton County

Alex Conley, Yakima Basin Fish and Wildlife Recovery Board

Amanda McKinney, Yakima County Commissioner

Bill Gale, United States Fish and Wildlife Service

Brandon Parsons, American Rivers

Cindy Boen, United States Army Corp of Engineers

Charlie de la Chapelle, Yakima Basin Storage Alliance

Chris Duke, Bureau of Reclamation

David Blodgett III, Confederated Tribes and Bands of the Yakama Nation

David Haws, Yakima County





Jaclyn Hancock, Washington Department of Agriculture

Jim Milton, Yakima-Tieton Irrigation District

Joe Blodgett, Confederated Tribes and Bands of the Yakama Nation

Joel Freudenthal, Yakima County

Kathryn Furr, United States Forest Service

Kevin Eslinger, Kittitas Reclamation District

Lori Brady, Sunnyside Valley Irrigation District

Mike Livingston, Washington Department of Fish and Wildlife

Mike Shane, City of Yakima

Rick Dieker, Yakima-Tieton Irrigation District

Scott Revell, Roza Irrigation District

Sean Gross, National Oceanic and Atmospheric Administration National Marine Fisheries Service

Tom Tebb, Washington State Department of Ecology

Urban Eberhart, Kittitas Reclamation District

Wendy Christensen, U.S. Bureau of Reclamation

Other Attendees:

Abbey Gatlin, Bureau of Reclamation

Al (no last name)

Alan Chapman

Amber Betts, Washington State Department of Agriculture

Arden Thomas, Kittitas County

Chris Maykut, Friends of Bumping Lake

Cianna Wyshnytzky, U.S. Bureau of Reclamation

Crystal Elliot, Trout Unlimited

David Mckenzie, Kennewick Irrigation District

David Ortman

Ed Lisowski

Elaine Packard, Sierra Club

Gary Wilburn

Jason Douglas

Jeff Tayer, Washington Department of Fish and Wildlife

Jennifer Nelson

John Cowling, City of Kennewick

John Crotty, Kennewick Irrigation District

John Reeves, Save Lake Kachess

Justin Harter, Naches-Selah Irrigation District

Kain Shaffer, U.S. Bureau of Reclamation

Kerrie Mathews, U.S. Bureau of Reclamation

Laine Young, Washington State Department of Ecology

Laurel Jennings

Michael Lucid

Michael Porter, Confederated Tribes and Bands of the Yakama Nation





Mik (no last name)
Nathan Draper, Selah Moxee Irrigation District
Nick Bond, University of Washington
Paul Tabayoyon
Rick Evans, Office of U.S. Senator Maria Cantwell
Sara Vickers, Kittitas Reclamation District
Seth Defoe, Kennewick Irrigation District
Tel Jensen, U.S. Bureau of Reclamation

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 White Bluffs Consulting, (509) 539-3366 or ben@whitebluffsconsulting.com.