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Meeting Notes
Yakima River Basin Water Enhancement Project Workgroup
March 13, 2024
In-person and Teams Virtual Meeting

Welcome, Introductions, and Agenda Overview

Ben Floyd of White Bluffs Consulting 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

Tom Tebb, Washington State Department of Ecology: Tom shared the exciting news that the recently signed budget for Reclamation in fiscal year 2024 is $1.75 billion nationwide. Ecology is working with the Implementation Committee, the U.S. Army Corps of Engineers Portland regional office, and Washington, D.C., to move the Bateman Island restoration project forward. This includes key components like the Quality Assurance Project Plan for sediment sampling and associated communications work.

Ecology is looking at funding opportunities made available through the Bipartisan Infrastructure Law and the Inflation Reduction Act (IRA), with some success. Tom thanked the Yakama Nation for their contributions to this work.

Ecology is planning for the transition that will take place after Governor Inslee's last year concludes, including preparing for a new administration and potentially a new Ecology director.

> ***C:*** *Peter Dykstra (Watershed Lands Conservation Subcommittee Chair) reported on a feature in the recently passed budget related to the Land and Water Conservation Fund. The Nature Conservancy, U.S. Forest Service, and the Implementation Committee supported securing $12 million in funding for the Manastash Land acquisition. This is the first Land and Water Conservation Fund funding since the Integrated Plan started supporting those land acquisition projects. Peter stated that this is a great opportunity for the Forest Service and the group's partners in the Basin.*
>
> ***C:*** *Urban Eberhart (Kittitas Reclamation District [KRD]) added that the Easton Bull Trout Facility was also included in the budget.*

Wendy Christensen, U.S. Bureau of Reclamation: Wendy explained that the budget announcement includes $35 M for YRBWEP of which $15 million is for fish passage construction at Cle Elum. Reclamation will complete the current work on the juvenile fish passage facilities this summer, and the Adult Collection Facility will begin this summer. Wendy also announced that Reclamation anticipates five of the shoreline areas for the Cle Elum Pool Raise project will be constructed this fall. Reclamation

is working to have passage at Clear Creek awarded by December 2024 and announced that the Roza Fish Screens was awarded for around $30 million. Reclamation is working with the Wapato Irrigation Project, Yakama Nation, Sunnyside Division Board of Control, and KRD to secure funding for ongoing conservation work.

Tom Tebb, Washington State Department of Ecology: Tom added that the Executive Committee (EC) is developing a communications strategy. The EC is focused on capacity-related issues, noting that several agencies and partners, including Ecology, are also struggling with capacity. The Committee plans to discuss how to build capacity through the next budget cycle.

2024 Water Supply Update - Carryover Storage

Chad Stuart (Reclamation) briefly summarized Reclamation's activities and considerations during drought years. Chad highlighted that staff capacity issues are challenging, too. During drought years, Reclamation recognizes the necessity of many essential activities, and places high priority on meeting deliveries and contractual obligations. Chad stated that during drought years, all resources go to ensuring Reclamation is meeting its mission to deliver water where and when it's needed, and they are deprioritizing non-essential activities. He highlighted that Reclamation will continue to share storage control data bimonthly once storage control begins rather than the usual once a month.

Chris Lynch (Reclamation) shared a presentation detailing the 2024 water supply update. Records from the Yakima Airport Weather Station show temperature and precipitation records of the water year thus far. Notably, precipitation is currently around 97% of average. This year's precipitation accumulation in Yakima Basin reservoirs shows that accumulation is 140 inches or 86.7% of average. Chris noted that precipitation was low in February, high in January, and notably low last fall, a concern as November is generally a high-precipitation month.

He then presented the Yakima Basin Snow Water Equivalent (snowpack). As of March 1, the basin was at 132.8 inches, 77% of average. Chris also pointed out levels for the Upper Yakima Snow Telemetry (SNOTEL) site, the Naches Basin, and the lower Yakima for the water year. All values are below average, and the lower Yakima has particularly low yearly values. Referring to a map of SNOTEL stations, he demonstrated that as of March 7, the Naches was 76% and the Lower Yakim 60% of average.

In summary, the reservoirs are low and have about 425,000 acre-feet, 65% of the average. February precipitation was below average, with some recovery at the very end of the month, taking the basin from about 30% to 75%. The runoff forecast is 90% of the average, but the Total Water Supply Available (TWSA) is 84% normal, and pro rationing is 72%. The Title XII target flow is 300 CFS plus 134 CFS to add to that for fish flows at Parker. The April biological assessment (BA) pulse flow would be in the mid-range for the amount we would release for fish-out migration in April. The water conservation saved in storage last year still has 22,000 acre-feet remaining, which could be used this spring pulse flows for fish.

Conservation Update and Preparations for Anticipated 2024 Drought

Lori Brady, Sunnyside Valley Irrigation District: Lori presented an overview of the Sunnyside Division's conservation projects, and an overview of its plans for 2024.

The Sunnyside Division takes its diversion from the Sunnyside Dam, extends down to the Whitstran area, and is over 94,000 acres. The Sunnyside Valley Irrigation District makes up 95% of the Sunnyside Division - the remaining 5% are the cities and two private ditch companies. The division is 69% non-proratable and 31% proratable. In 2003, the Sunnyside Division Board of Control started its conservation project in partnership with Reclamation and Ecology and was funded through the 1994 YRBWEP legislation.

The conservation project was broken up into two phases. Phase one was the Sunnyside Canal Improvement Project, which began in 2003. This project fully automated the sixty-mile main canal, added three equalizing reservoirs ranging from 300 to 500 acre-feet, and installed 30 fully automated check structures. These project elements were then operated through the district's SCADA system. During phase one, 2/3 of the water conserved was devoted to instream flow, and the Division kept 1/3 of the conserved water.

In 2009, SVID received further funding and began the second phase, the Enclosed Lateral Improvement Projects. This phase enclosed laterals and replaced concrete structures with flow meters. To fund Phase II, SVID sold the water conserved during Phase I. Now, all water from Phase I is devoted to instream flows.

In the 2023/2024 construction season, SVID installed 4.5 miles of lateral pipe, ranging from 4-inch to 21-inch, and installed 59 flow meters. During this upcoming construction season, SVID will pipe 5.5 miles and install 60 flow meters. Since 2004, SVID has reduced its diversion by 38,500 acre-feet. The average federal cost per acre-foot for conservation projects is $1,989. The SVID has contributed over $20 million in water conservation since 2004.

Other ongoing and upcoming projects at SVID include lining open channels too big to pipe with PVC liner and shotcrete to reduce seepage losses and updating the Sunnyside Canal Improvement Project from Phase I, including modernizing the SCADA system hardware and software.

A 2024 drought resolution was passed at the last SVID board meeting to fallow lands in SVID and transfer the saved water to Roza Irrigation District, if initiated by the Roza Board of Directors.

Urban Eberhart, Kittitas Reclamation District: Urban presented an update on the district's conservation projects and an overview of its plans for 2024.

The Kittitas Reclamation District diverts water from the Yakima River at Easton into north and south branches. Urban gave an overview of the South Branch Canal Piping project. Last year, KRD installed 84-inch pipe; this year, KRD is installing 78-inch, or 6 ½ feet, HDPE steel rib pipe. This project's piping leads from Robinson Canyon towards Manastash Creek. Upstream of the location where piping is being installed, KRD also installed a geo-membrane liner topped with concrete to save water that goes into the streams and create more capacity to carry water. This project also helps threatened fish species adjacent to the district's canal distribution system. Urban stated that these projects are possible because of KRD's relationship with Reclamation, Ecology, and YRBWEP. KRD is also able to save water for better deliveries to farms and put water into streams, groundwater storage, and surface water storage.

Urban then described the North Branch Canal Lining Project, which lines the canal with a geo-membrane liner topped with several inches of concrete for protection. The water conserved with this lining will fill the proposed Springwood reservoir.

The Kittitas Reclamation District 13.8 Piping Project was the first on-the-ground construction project of the Integrated Plan. Urban mentioned appreciation for Anne Castle, now US Commissioner for the Upper Colorado River Commission, who was Assistant Secretary for Water and Science in 2013 and supported KRD and the YBIP in working with the state of Washington and Reclamation to get this first pipeline program constructed.

KRD has completed approximately 10 miles (52,888 feet) of conservation by piping or lining and has conserved almost 9,400 acre-feet of water. This water goes to Tucker Creek, Big Creek, Little Creek, Taneum Creek, and Manastash Creek. KRD is also in the process of getting water into Swauk Creek. After the irrigation season, at least half of the 9,400 acre-feet of conserved water is storable and can be used in November and into December while waiting for the fall rains to start.

The full list of canal conservation projects KRD has started since YBIP began includes the following:

- 13.8 Canal Lining Project
- North Branch Lining Phase 1
- North Branch Lining Phase 2
- North Branch Lining Phase 3A
- South Branch Lining Phase 1
- North Branch Lining Phase 3B1
- North Branch Lining Phase 3B2
- South Branch Lining R2-3
- South Branch Piping
- South Branch Lining R4-5
- South Branch Piping
- North Branch above Johnson
- South Branch Piping
- North Branch above Stevens

The Kittitas Reclamation District also works with the Yakama Nation whenever Coho adults are available for release. This year, KRD has worked with Yakama Nation to place live Coho into the Upper Basin at Swauk Creek, Big Creek, Little Creek, Tucker Creek, and Taneum Creek.

Graysen Squeochs, Yakama Nation Engineering, Wapato Irrigation Project: Graysen presented an overview of the Wapato Irrigation Project, an update on its work, and an overview of its plans for 2024.

Yakama Nation Engineering provides engineering services to the Wapato Irrigation Project through a Public Law 93-638 contractwith BIA. Wapato Irrigation Project has senior and proratable water rights. Existing infrastructure makes it challenging to distribute shortages equitably. WIP actively manages flows to all units. Typically, WIP reduces diversions to avoid premature exhaustion of the proratable water right. This requires regular monitoring, which relies on manual measurements from irrigation system operators (ISOs) or ditch riders. WIP will adjust the diversion schedule to use most of the remaining storage during the first half of September.

The current WIP administration will continue to implement a Drought Plan. In 2015, as the ITRC (the Irrigation Training and Research Center out of Cal Poly) was working on a drought scenario with the Wapato Irrigation Project, the BIA Division of Power & Water requested that ITRC develop a Drought Operation Plan and Recommendations. The results were:

- Overall high-level institutional recommendations.
- Identification of key operational information.
- Development of some operational strategies to address those shortfalls during the water shortage year.
- Other recommendations for future development.

The critical elements of that plan that have been picked up by the current administration of the Wapato Irrigation Project are:

- Recognition that flow rate data is of the highest priority within the district.
- Critical flow control to areas that are impacted under normal conditions must be prioritized, as they will be the hardest hit areas during the water shortage years.
- Recognition that existing infrastructure limits the ability to distribute water equitably and limits viable strategies, resulting in rotational scheduling.
- Irrigation system operators, or ditch riders, require additional training and must be held to a higher accountability standard.

WIP has also requested Yakama Nation Engineering to develop a drought relief well testing and maintenance or repair plan. In the 2015 season, there was recognition that only some of the Wapato Irrigation Project drought relief wells were operational, and some needed more infrastructure. Ahead of this drought season, WIP wants to address that. The WIP administration has also been engaging with water users to educate them on cropping practices, land use, and effective preparation for the upcoming water shortage year.

Yakama Nation also has a P.L. 93-638 contract with Reclamation to implement system improvements on WIP. WIP's ongoing conservation projects include:

- Approximately 1.25 miles of pipeline repair work, plus normal maintenance.
- Converted check structures to long crested weirs at Satus 2 Pump Canal.
- Control gate replacement at Wapato Main Diversion.

In the 2025 season, WIP aims to approach 60,000 feet of pipeline work.

Jason McShane, Kennewick Irrigation District: Jason presented an overview of the Kennewick Irrigation District, an update on KID's work, and an overview of KID's plans for 2024.

Jason shared appreciation for the efforts and activities undertaken by previous presenters, noting that irrigation districts have long-standing goals to conserve water and improve system efficiencies. From 2001-2005, KID observed additional drought impacts, such as reduced river flows and ramped up conservation project efforts. The 2015 drought highlighted areas in need of improvement.

The Tri-Cities area includes several irrigation districts, as well as four cities. The Kennewick Irrigation District is the only proratable irrigation district in that area. Most other districts pull their water from the Columbia River or the Columbia Basin project. One challenge facing KID is helping the community

understand the impacts of a possible drought and educating the community on why certain parts of the city are being encouraged to conserve water and other parts of the city are not.

Jason pointed to an example where KID ran a program with rolling water blackouts, which consisted of turning water on specific sections for a finite time. This created a problem, as water users ultimately would leave water sources, like sprinkler systems, on continuously as they were unsure of whether water would be available at specific times. This added to the problem, as water users in lower elevations had abundant water, and those in the upper elevations had less. Part of this communication effort is supported by KID's efforts in Demand Side Management. KID practices Gross Area Metering, which entails monitoring large sections and communicating with property owners regarding the amount of water being used and what reductions in usage are needed. This program has successfully reduced water usage by educating and communicating with the water users.

KID's Capital Improvement Program includes canal lining, automated control works, a Recapture Reuse Program in development that will store water in the ground, in-canal storage, operational storage activities, and plans for a large On-District Reservoir to help offset drought resiliency concerns.

KID is a 20,000-acre district with over 25,000 service accounts. The district receives water from the Yakima River at the Prosser Dam, and one challenge is inconsistent supply.

Highlights of the work KID has done include:

- Over 11 miles of new piping installation.
- Over 30 automatic control gates, which help in managing water.
- Inline storage work on the canal system.
- Capital investments supporting self-performance of construction work.

Jason shared a video demonstrating the installation of a high-density polyethylene geomembrane liner, which is a texturized liner. He noted that different substrates of soils present different challenges and produce different conservation rates. The Kittitas Reclamation District presented that they have completed 10 miles of canal lining and conserve 9,000 acre-feet of water a year, whereas the KID has completed over 40 miles of canal lining and conserves 5,000 acre-feet of water a year.

This is partially due to the wind-blown loess soil in the tri-cities. This soil compacts well and acts as a silt, slowing the water down. It is also highly erodible, which results in the rapid loss of canals in the case of a canal breach.. KID's canal lining program combats these canal breaches and improves the reliability and safety of the canals.

KID has also found that using HDP membrane lining creates a smoother channel and reduces friction, reducing the necessary elevation in the water or head pressure. With this technique, KID has increased the amount of head pressure available in the canal and decreased the depth of the water.

KID has also identified locations in their canal system where storing water directly within the prism being lined is possible. Where canals are much larger than needed for only water flow, KID has installed a "channel-in-channel." At KID's main canal in Badger Canyon, the small channel-in-channel is a 50 cubic feet per second (cfs) channel that can carry base flows through the system for maintenance activities, while the remaining portions of the canal are all for storage.

Q: What is the storage volume of this canal facility?

A: *At full capacity, this facility will store nearly 250 acre-feet. It's not quite as large as some re-reg reservoirs (Roza Irrigation District's re-reg reservoir is 1,600 acre-feet). But, as KID was already lining the canals, a small, incremental cost added fairly significant storage.*

Another challenge KID has faced is that some canals have become barriers between non-developed areas and more developed areas; to address this, KID has designed multi-purpose structures for storm facilities and wildlife egress. Jason gave an example highlighting the large acceleration in KID's activity: Since the 1980s, KID has lined over 50 miles of canal; of those 50 miles, 45 miles have been lined since 2007.

KID has primarily used district resources, Reclamation's WaterSMART program, and occasional help from the state of Washington. Jason reiterated that WaterSMART is a fantastic program and encouraged its continued funding.

Q: Are we reducing on-farm pumping demand because of the conservation practices that the districts have implemented?

C: *"I'm on one of the systems that was upgraded last year from Sunnyside Valley. It's on-demand now, all pressurized. We had to replace many pipes because the pipe I had was insufficient for the pressure. But once that was done, it has been nice to have that pressurized system."*

C: *It seems like something to account better for, even at a general level - the financial benefits to growers that helps justify the system, and the reduced energy demand. All those things (additional benefits) are massive.*

Jason: *It really depends on the system that you're putting together and how much fall there is in the system. Kennewick Irrigation District's main canal system is 25 feet total from one end to the other, so you don't have enough head developed to eliminate pumping needs in districts for farmers. In some cases, you can; districts try to do that wherever possible.*

Heather Simmons and Kelsey Collins, Ecology: Heather Simmons, Central Region section manager and Kelsey Collins, Water Banking and Drought Coordinator for the Water Resources Program, presented an update on Ecology's work and an overview of the Program's plans for 2024, including short-term drought response activities and intended long-term activities.

Ecology anticipates that the emergency drought declaration for Washington State will not expire at the end of June but will be extended through the irrigation season, potentially statewide. Short-term plans include the Emergency Drought Well Program, cost share for mitigation, and two temporary positions to assist with compliance and other drought work. Long-term plans include:

- Launching a telemetry metering program for emergency drought well users, including funding to assist with purchase and installation.
- Working with U.S. Geological Survey (USGS) on a groundwater availability study in the lower Yakima Basin.

- Long-term drought planning with the Yakama Nation and Reclamation in the Yakima Basin.

Ecology's Emergency Drought Well Program, launched over 20 years ago, allows irrigators in the Yakima basin to drill a well to help proratable users reach 100% of regular supply when needed. In 2023, Ecology began requiring full mitigation from all applicants to offset the impacts of their pumping on the Yakima River. In 2023, Ecology provided a 25% match for mitigation purchased from the Selah-Moxee Irrigation District water bank to get users up to 75% of their regular supply and will continue to do so in 2024. Applicants can purchase additional mitigation for up to 100% of the normal supply or purchase mitigation from other water banks, but without cost share assistance from Ecology. Water banks must hold 20% of mitigation instream for five consecutive years starting the year after purchase. So, for all mitigation purchased in 2024, starting in 2025, water banks will hold 20% instream for five years. This will help account for lag time impacts on the stream. 2024 is the last year cost-share will be offered for mitigation.

Ecology, through monitoring, have found many indicators of declining groundwater availability, including sustained declines in the Wanapum Aquifer and Lower Saddle Mountains Aquifer in the lower Yakima Basin. Ecology also has over 450 pending applications for new water use in the lower Yakima Basin and have currently placed a hold on processing most of these applications due to the uncertainties on water availability. Applications to continue pumping existing emergency drought wells or construct new ones face increased denials in coming years because of monitoring data showing sustained declining groundwater levels.

Ecology's long-term goal of installing telemetered meters on all emergency drought wells would help them understand better how much water is being pumped from these declining aquifers in drought years. Telemetered meters must report to an online platform accessible by Ecology, allowing them to track the wells in real time to monitor the amount of water being used and quickly account for the amount pumped versus the amount of mitigation allotted. This allows users of emergency drought wells to purchase only the necessary mitigation for water pumped, as this can be difficult to estimate accurately otherwise. Telemetered meters and water banking accounting allow for an accurate account of water used and allow users to pay only for what they pump.

Starting in 2023, Ecology is requiring all newly constructed wells (including replacement wells) to install a telemetered meter. In the next few years, Ecology will work to incentivize the installation of telemeters on all emergency drought wells, but this may become a requirement in future years and funding is limited.

Ecology is encouraging all emergency drought well users to install a telemetered meter. To that end, Ecology is partnering with the Roza Irrigation District to enter into a funding agreement to incentivize installing these meters.

In addition, Ecology is working with USGS on a pilot project to model groundwater availability in two key locations that have several pending applications and indications of declining aquifers. Ecology is waiting on a scope of work and budget from USGS and aims to start the project this year. Completion is estimated to take approximately a year. If successful, Ecology will replicate the project in other parts of the basin.

A final action Ecology is planning is developing a formal drought planning agreement with the Yakama Nation and Reclamation. The three co-managers all signed an MOU in 1999 which is in need of

renewal. Ecology intends to begin work this year but creation of the agreement will occur over the next few years.

Update on Land and Water Conservation Fund

Raquel Crowley, Central Washington Regional Director for Sen. Patty Murray: Raquel Crowley shared the exciting news of the recently announced award of about $19 million, which will be used for 30,000 acres of salmon habitat, the prevention of wildfires, the support of recreation, and the delivery of water for the Yakama Nation and farmers. She also shared that Sen. Murray had yet to open her portal for congressionally directed spending or program funding but anticipated it would open very soon and encouraged potential applicants to be ready to apply in anticipation of a very busy season. She also noted that President Biden recently released his budget and encouraged attendees to look to the budget as a gateway. Raquel plans on relaying much of the information shared today back with the Sen. Murray and her staff, particularly about drought and resiliency concerns, and praised the work of YRBWEP members.

Darcy Batura, member of the Watershed Lands Subcommittee and Forest Partnership Director for The Nature Conservancy: Darcy expressed the Nature Conservancy's deep appreciation for Raquel's funding news. She noted that this is an incredible win that demonstrates how we can do more when working together.

Urban Eberhart, Kittitas Reclamation District: Urban shared a success story about the Easton Bull Trout Research and Recovery Facility. Recently, it was announced that Sen. Murray could grant $2.692 million in FY24 to construct that 8,300-square-foot facility, totaling $3.39 million in total funding. This facility will be built by Kittitas Reclamation District, placed on Reclamation property, and operated by Yakama Nation Fisheries. Urban emphasized that the collaboration Darcy spoke of is what makes this group's success stories possible and expressed sincere thanks to Sen. Murray.

Public Comment

John Reeves: “I'm a property owner there (at Lake Kachess). My views do not represent any group or anything officially. I want to appreciate and thank everybody for all the work you're doing for the Bull Trout restoration, and we support the [planned] Bull Trout recovery facility and all of the land conservation and water conservation stuff; that's all great. It just makes no sense to me to do all that stuff, stick a pump in the lake and destroy the very habitat that those fish live in. Thank you so much. Have a great day."

David Ortman:

1. **Yakima Plan Status Report, due December 1, 2021:** It is now over two years and three months since the Legislative deadline for submitting a Yakima Plan Status Report to the legislature and governor. This Status Report is to be prepared “in consultation with “key basin stakeholders.” So far as can be determined, there has been no “consultation” scheduled on the agenda of the Yakima Workgroup, nor has there been any “consultation” with members of the public. In addition, since August 2023, Ecology has repeatedly ignored a request to provide a draft copy of this status report for review (see below). This is important because under RCW 38.100(2),

   > The status report required in this section for December 1, 2021, must include a statement of progress in achieving the water supply facility permit and funding milestone, as defined in RCW 90.38.010. If, after a good faith effort to achieve the water supply facility permit and funding

> milestone, it appears that the milestone cannot or may not be met, the department, in consultation with the United States bureau of reclamation, the Yakama Nation, Yakima river basin local governments, and key basin stakeholders, shall provide a detailed description of the impediments to achieving the milestone, describe the strategy for resolving the identified impediments, and, if necessary, recommend modifications to the milestone.

RCW 90.38.010, in turn provides the following definition:

> (6) "Water supply facility permit and funding milestone" means a date prior to June 30, 2025, when required permits have been approved, and funding has been secured to begin construction on one or more water supply facilities designed to provide at least two hundred fourteen thousand acre-feet of water to be used for instream and out-of-stream uses.

Regrettably, because Ecology refused to "consult" with the public on the development of this Status Report, which is two years and three months overdue, a Public Records Act request for this Status Report has now been filed.

2. **Bureau of Reclamation's Withdrawal Request:** On January 16, 2024, Ecology closed the public notice deadline for objections to the Bureau of Reclamation's request for extension of withdrawal of all unappropriated waters of the Columbia River and tributaries located upstream from Priest Rapids Dam to satisfy continued planning and study on the Black Rock Dam project, as set out under the Act of February 20, 2003 (PL-108-7):

> Title II Sec. 214: "The Secretary of the Interior, acting through the Bureau of Reclamation, shall conduct a feasibility study of options for additional water storage in the Yakima River Basin, Washington, with emphasis on the feasibility of storage of Columbia River water in the potential Black Rock Reservoir and the benefit of additional storage to endangered and threatened fish, irrigated agriculture, and municipal water supply. There are authorized to be appropriated such sums as may be necessary to carry out this Act."

Last week an email was sent to Ecology concerning the status of Ecology's decision, but this request has also been ignored. Therefore, a Public Records Act request has been filed. It would be helpful if this Workgroup would review the Office of Columbia River's failure to comply with Legislative deadlines and requests for information.

3. **Instream Flows:** It is disappointing that today's agenda, while having a short ten-minute Conservation Update and Preparations for Anticipated 2024 Drought, does not list updates on in-stream flows or have any reports from fishery agencies. Included in my written comments is a link to a March 9, 2024, Reuters article: "Australian farmers rip out millions of vines amid wine glut" which report: "Chile, France and the United States are among the other large wine producers also grappling with oversupply, with even prime areas such as Bordeaux uprooting thousands of hectares of vines." Perhaps the Yakima Basin could respond to this overproduction from vineyards by leaving more water in the river.

Chris Maykut, Friends of Bumping Lake: Has Kennewick Irrigation District (KID) compared the cost per acre-foot of smaller and re-regulation reservoirs to the cost per acre-foot of larger proposals such as Bumping Lake and Lake Kachess?

> ***Response:*** *Part of the challenge is that in storage projects, we have to pick places where water can be available to store, and then that water can be reused. There are only certain places where that's available, so it's not just a simple answer. For example, the Bumping Lake area and watershed above Bumping Lake have a refill ratio of over ten to one. There is ample supply in*

the Bumping Lake watershed to create additional storage that we could then utilize for the entire system as offsets to other areas in the Yakima Basin.

As we look at on-district storage facilities—specifically, re-regulation reservoirs and smaller storage—we're looking at the size and volumes of water that irrigation districts are utilizing compared to the size of a 500-acre-foot re-regulation reservoir, we're out of scale. The amount of water we're talking about is not solved by a 500-acre-foot reservoir.

Sometimes, small storage is more cost-effective. When you're already doing a project like a canal lining, and you're going to do some widening and deepening, that's a cost-effective methodology.

The on-district storage that KID is looking to create is about $9,000 an acre-foot. I would not consider that to be inexpensive. Some of these other larger projects are probably, at an economy of scale, going to be better priced than that project. For our district and the situation we're in, we're looking at that as a viable alternative because of all the circumstances around how our water and system work. That's why we have encouraged and continue looking at additional on-district type storage reservoirs throughout the basin, which we're seeing more of.

Lower Kittitas Reach Restoration Update

Arden Thomas, Kittitas County: Arden shared a photo of what was formerly Ringer Loop Road and described the strategy to address the county road's repeated flood damage due to the Yakima River's migration. Mitigation efforts such as rock barbs were unsuccessful in deterring the river's migration; it was decided instead to accommodate the river's movement. This resulted in the formation of a bar and the reestablishing of cottonwood trees, supported by active planting measures.

Arden explained that the 2002 report, authored by Jack Stanford, "The Reaches Project: The Reaches Project: Ecological and Geomorphic Studies Supporting Normative Flows in the Yakima River Basin, Washington," and funded by Reclamation, was established following court decisions directing more explicit consideration of salmonid species within the basin. The project highlighted the importance of prioritizing alluvial floodplain reaches to support salmonid species throughout the basin. Many partners play a role in this overall effort by supporting habitats for fish, spawning grounds, and rearing grounds, such as the Mel Sampson Coho Facility.

A significant habitat-limiting factor in the Kittitas Reach is the disconnection of the floodplain from off-channel habitats ideal for spawning and rearing due to a series of road revetments and flood control levees. Another factor is the loss of riparian forests due to past land use practices.

Arden demonstrated the increase in lands held by a public entity since the 2001 Reaches project began.

- In 2001, the publicly held lands in the highlighted area were owned by the City of Ellensburg, Kittitas County, and the Bureau of Land Management.
- In 2003, Reclamation purchased the Schaake property (280 acres) for the first Floodplain Restoration Project in this reach.
- In 2017, with the support of the Integrated Plan, Kittitas County purchased 83 acres, prompted by the need to address Ringer Loop Road.

- From 2019 – 2021, Kittitas County purchased 386 acres in partnership with the Trust for Public Land. This investment effort was supported by Floodplains by Design and funds from the Stream Flow Restoration Act.
- Last year, 2023, Kittitas County purchased 23 acres in partnership with Western Rivers Conservancy.
- The reach now has over 1,200 acres under public ownership.

Arden highlighted the collective action to implement a common goal within the reach. Projects within the scale of the reach include the Schaake Restoration Project (construction completed) & the Lower Kittitas Floodplain Reconnection, which is in the conceptual design phase.

Arden then highlighted the partners whose efforts contribute to the overall goal of reach restoration:

- **Reclamation:** The Schaake Restoration Project, in addition to providing habitat benefits, catalyzed opportunities for the entire reach. The Lower Kittitas Floodplain Reconnection project was also able to leverage Reclamation's technical staff as design engineers in the project's conceptual design process.
- **Trout Unlimited:** They are working with water rights holders near Tjossem Ditch**,** which is within the restoration footprint, to get them alternative water sources to continue to utilize their water rights without relying on infrastructure within the actively migrating floodplain.
- **Bureau of Land Management (BLM):** Contribute funding to Mid-Columbia Fisheries to implement restoration activities on their properties. They've also been working to remove a berm.
- **Mid-Columbia Fisheries** has worked with the Bureau of Land Management to restore habitat, utilizing BLM and state funding through the Conservation Commission. They also work to advance restoration on Kittitas County properties and with private landowners on the other side of the river.

Wendy Christensen, Reclamation: Wendy thanked the Schaake project partners for their trust in moving the project forward and preparing for construction. Construction is complete, and Trout Unlimited is working through Tjossum Ditch, which is near completion. The recent land exchange with the City of Ellensburg in collaboration with Twin City Foods has added 75 acres to the Yakima River floodplain for use by the Schaake Habitat Improvement Project. This area was previously used by Twin City Foods, which has now been relocated. The project is currently revegetating the 130 acres already part of floodplain restoration and will soon begin the same process on these additional 75 acres. This restoration work may allow Mid-Columbia Coho to be released into the area.

Arden Thomas, Kittitas County: Arden gave an overview of the rationale for the restoration approach to the lands recently acquired in the reach. The Hanson Levee protects from frequent flooding - without them; the lands would be subject to flooding roughly every other year. However, it doesn't provide effective flood protection. Arden shared photos of the area flooded at a level currently seen approximately every seven to ten years. This project aims to make this area a floodplain forest, with side channel habitat and widespread flooding of beneficial areas. First, this will be accomplished by removing features that disconnect the river from its floodplain and disconnect the side channel habitat. However, the county cannot increase flood risk to public and private infrastructure on the floodplain (homes, BNSF railroad, Canyon Road, etc.). Therefore, the plan includes setback features, such as a plan

to raise an existing road/berm and create a new one to provide protection set back from the river sustainably.

The county also plans to expand the riparian habitat and provide an area for the river to migrate into without capturing ponds. The project will require a lot of fill material, which could be sourced through floodplain recontouring in the southern areas of the reach, which are much higher in elevation than the riverbank under BLM ownership.

The project has been working with Mid-Columbia Fisheries using traditional approaches and piloting innovative solutions, such as using conventional agricultural practices to establish Cottonwood trees. This technique exposes bare mineral soil and irrigates it during the critical establishment period to restore vast acres of habitat to a forested condition.

Kittitas County is coordinating with BLM to plan recreation opportunities. There's also a long-term vision, developed around 2020, to implement a trail network through this area. Previous conceptions assumed the trail would need to cross Canyon Road, but these acquisitions provide an opportunity to continue the trail network down the floodplain.

Chris Sheridan, Bureau of Land Management: Chris gave an overview of BLM's goals for their land ownership and explained how they dovetail with the goals of the county and other partners in the reach.

BLM manages their acquired lands via a 1987 Resource Management Plan focusing on recreation and natural resources, including wildlife and especially listed fish and riparian habitats. Recent actions that BLM has taken include riparian plantings, berm removal, and storage of large wood removed from the Big Pines area, which they are hoping to use structurally in later restoration plans. BLM has worked with the Mid-Columbia Fisheries group and is in an agreement with the Yakima Basin Fish and Wildlife Recovery Board.

BLM is currently in a restoration phase, which involves prepping to move from small-scale BLM-centric projects to projects that will react to the changes resulting from this group's work. BLM's coming funding efforts will focus on responding to breaches, re-grading to provide material for lower elevation berms, restoration plantings, and small-scale projects to enhance future floodplain changes resulting from this group's work.

> **C: Jeff Tayer, Washington State Department of Fish and Wildlife and Habitat Subcommittee Chair:** *"I think sometimes it gets lost in the annals of history, but Arden mentioned the Reaches Report - that was a seminal moment here in the basin. The Bureau brought in an internationally renowned river ecologist, Dr. Jack Stanford. At the end of his lengthy report on the Yakima Basin, Stanford said that the Yakima River was one of two rivers he would put at the top of the list in the entire western United States for restoration. So, he identified Yakima as very significant compared to all the work he had done across the West and internationally (he had done work in Russia, Alaska, and all over the place). The guy was a prominent feature of the National Academy of Sciences and was the chair of the Independent Science Review Panel, so he knew his stuff.*
>
> *In that report, he identified priority reaches, including the Kittitas Reach, partly because, as you saw in the slides, it is wide and complex and partly because of the feature of having those geological features come together.*

The take-home message here is that not only was the Yakima one of the most important rivers, from his perspective, in the West to restore, but the Kittitas Reach was one of the most important places in one of the most important rivers in the West to restore. This effort is important to the Yakima Basin and is significant statewide and for the western region.

Thank you, Arden, and to BLM and everybody else working on this and to Reclamation, which started this with the Schaake purchase. We've reached a point where the Bureau of Land Management has become a pretty important partner to us because of the land holdings here, so we must build on those relationships."

Roundtable Discussion/Recognition of Steve Malloch

On behalf of the YRBWEP Workgroup, Ben Floyd recognized Steve Malloch for his 15 years of service to the Yakima River Basin and shared photos of Steve. Steve is retiring and was honored with a framed picture, a $300 donation to the Washington Water Trust in his name, and a book of photos and notes from YRBWEP members. Several workgroup members congratulated him on his retirement and thanked him for contributing to the YRBWEP Workgroup.

Steve spoke about the early days of his role, dating back to June 2009. He noted that YRBWEP partners were listening and talking to each other in dialogue about the Yakima Basin. He acknowledged that this was a unique situation and shared appreciation for this group's progress in addressing the issues in the basin. Steve thanked everyone for their contributions and their leadership.

Tom Tebb, Ecology: He thanked Steve for being a great friend and mentor in communicating this work and navigating through Washington, D.C. He noted his compassion and the care he brings to the table for the work and his colleagues.

Wendy Christensen, Reclamation: She shared that it was an honor to work with Steve and appreciated his perspective, especially on the Communications Coordination Group. She thanked him for his time and efforts and will miss working with him.

Ben Floyd, on behalf of Dave Brown: Dave thanked Steve for his help in building the Municipal Subgroup with Arden's assistance. He thanked him for his efforts on Nelson Dam as well.

Chris Duke, Reclamation: He thanked Steve for building the foundation of the Integrated Plan as he enters as the new Area Manager for Reclamation.

David Haws, Yakima County: He thanked Steve for welcoming him as he joined the Workgroup and appreciated the time he took to get to know him.

Mike Shane, City of Yakima: He thanked Steve for his support on the Nelson Dam project.

Arden Thomas, Kittitas County: She thanked Steve for his mentorship and critical role in communications for the Integrated Plan.

William Gale, U.S. Fish and Wildlife Service: He wished Steve the best of luck in his retirement and thanked him for his work.

Mike Livingston, Washington State Department of Fish and Wildlife: Mike appreciated Steve's work and collaboration on several projects, especially during the COVID-19 pandemic. He thanked him for his contributions to the basin.

Peter Dykstra, Watershed Lands Conservation Subcommittee Chair: Peter thanked Steve for bringing him onboard to the Integrated Plan, and for his work in engaging and bringing non-profit groups to the table. He noted that he will miss working with him.

Joe Blodgett, Confederated Tribes and Bands of the Yakama Nation: He highlighted Steve's role as an advocate for salmon and fish populations, and admired all the work that he has done for the team.

Lori Brady, Sunnyside Valley Irrigation District: She congratulated Steve on his retirement and noted that she will miss his upbeat and can-do attitude.

Jason McShane, Kennewick Irrigation District and Lower River Subcommittee Chair: He appreciated the respect and mentorship that Steve has provided over the years.

Alex Conley, Yakima Basin Fish and Wildlife Recovery Board: He touted Steve's role in helping build the Communications Coordination Group and other relationships. He noted that the work continues in part because of Steve's contributions.

Brandon Parsons, American Rivers: He appreciated Steve's assistance in the overall transition, his mentorship, and contributions.

Urban Eberhart, Kittitas Reclamation District: He highlighted the shared connections that Steve has had with others working on the Integrated Plan and thanked him for everything he's done to get the plan to where it is today.

Jeff Tayer, Washington State Department of Fish and Wildlife and Habitat Subcommittee Chair: He noted that he was going to miss Steve and his work in the basin and reminisced on the early days of his tenure and involvement with the plan. He thanked Steve for everything.

Upcoming Meeting

The next workgroup meeting is scheduled on June 5, 2024, from 9:30 a.m. to 12:30 p.m. The meeting will be held at the City of Richland Public Library (955 Northgate Dr., Richland, WA 99352).

Attendance

Workgroup Members:

Alex Conley, Yakima Basin Fish and Wildlife Recovery Board
Amanda McKinney, Yakima County Commissioner
Arden Thomas, Kittitas County (alternate for Cory Wright)
Brandon Parsons, American Rivers
Chad Stuart, U.S. Bureau of Reclamation (alternative for Chris Duke)
Chris Duke, U.S. Bureau of Reclamation
Cindy Boen, U.S. Army Corp of Engineers
Crystal Elliot, Trout Unlimited
David Blodgett, Confederated Tribes and Bands of the Yakama Nation (alternate for Phil Rigdon)
David Haws, Yakima County
Jaclyn Hancock, Washington State Department of Agriculture
Jason McShane, Kennewick Irrigation District and Lower River Subcommittee Chair
Jeff Tayer, Washington State Department of Fish and Wildlife and Habitat Subcommittee Chair
Joe Blodgett, Confederated Tribes and Bands of the Yakama Nation
Justin Yeager, NOAA Fisheries
Lori Brady, Sunnyside Valley Irrigation District (alternate for Ron Cowin)
Mike Livingston, Washington State Department of Fish and Wildlife
Mike Shane, City of Yakima
Peter Dykstra, Watershed Lands Conservation Subcommittee Chair
Tom Tebb, Washington State Department of Ecology
Travis Okelberry, Yakima-Tieton Irrigation District
Urban Eberhart, Kittitas Reclamation District
Wendy Christensen, U.S. Bureau of Reclamation
William Gale, U.S. Fish and Wildlife Service

Other Attendees:

Abbey Gatlin, U.S. Bureau of Reclamation
Alan Chapman, Whatcom Conservation District
Annie Byerley, Walla Walla County Conservation District
Ben Floyd, White Bluffs Consulting
Blake Hamilton, U.S. Fish and Wildlife Service
Bob and Sue Mecklenburg
Bryan Myre
Cameron Spiro, HDR Engineering, Inc.
Catherine Veninga, Washington State Senate Democrats
Chris Maykut, Friends of Bumping Lake
Chris Perra, Yakama Nation Fisheries
Chris Sheridan, Bureau of Land Management
Chuck Freeman, Kennewick Irrigation District
Connor Cunningham, U.S. Fish and Wildlife Service
Chris Lynch, U.S. Bureau of Reclamation
Daniel Lozar, U.S. Bureau of Indian Affairs
Darcy Batura, The Nature Conservancy
David Bowen, Washington State Department of Ecology
David E. Ortman
David McKenzie, Kennewick Irrigation District

David Reavill, Washington State Department of Fish and Wildlife
Dennis Sandstrom, HDR Engineering, Inc.
Devin Stoker, Jacobs Engineering
Diane Priebe, Bureau of Land Management
Doug Lindley, Yakama Nation Engineering
Edward Lisowski
Erin Cox, Jacobs Engineering
Ethan Lockwood, Washington Water Trust
Glenn Grette, Grette Associates
Graysen Squeochs, Yakama Nation Engineering
Hailey Vanessa Smith, Washington State University
Heather Simmons, Washington State Department of Ecology
Jason Romine, U.S. Fish and Wildlife Service
Jean Mendoza
Jeffrey Hosman, U.S. Bureau of Reclamation
Jennifer Johnson, Washington State Department of Fish and Wildlife
Joel Hubble, Yakima Basin Joint Board of Irrigators
John Cowling, Kennewick
John Marvin, Yakama Nation Fisheries
John Reeves, Save Lake Kachess
John Stuhlmiller, Washington State Water Resources Association
Justin Harter, Naches-Selah Irrigation District
Kathryn Furr, U.S. Forest Service
Kelsey Collings, Washington State Department of Ecology
Kerrie Mathews, U.S. Bureau of Reclamation
Larry Martin
Lon Inaba
Merritt Mitchell-Wajeeh, Mid-Columbia Fisheries Enhancement Group
Michael Coffey, U.S. Bureau of Reclamation
Michelle Mercer, Benton County
Mike Schwisow
Patrick Monk, U.S. Bureau of Reclamation
Portia Shields, Yakama Nation Engineering
Raquel Crowley, Office of U.S. Senator Patty Murray
Richard Evans, Office of U.S. Senator Maria Cantwell
Robbie Soltz
Sara Vickers, Kittitas Reclamation District
Sepideh Sadeghi, Washington State Department of Ecology
Seth Defoe, Kennewick Irrigation District
Tel Jensen, U.S. Bureau of Reclamation
Tim Poppleton, Washington State Department of Ecology
Todd Newsome, Yakama Nation Fisheries
Tom Ring, U.S. Bureau of Reclamation
Walter Larrick, Yakima Basin Joint Board of Irrigators

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.