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## Meeting Notes

July 28, 2010

Yakima Arboretum, Yakima WA

## Yakima River Basin Water Enhancement Project (YRBWEP) 2010 Workgroup

### Opening Comments

After introductions and an overview of the meeting agenda, Wendy Christensen (Reclamation) informed the Workgroup that she had met this morning with the Yakima Sunrise Rotary Club to update them on the Yakima River Basin Study and Integrated Plan process. She also noted that the video that Reclamation is preparing about the Workgroup process is anticipated to be completed in the next few months.

### Review of Previous Meeting Notes

There were no comments on the June 23 Workgroup meeting notes.

### Previous Studies Validation *by Jim Peterson, HDR*

Jim Peterson (HDR) presented information on the Keechelus-to-Kachess (K-to-K) Conveyance project (see <http://www.usbr.gov/pn/programs/yrbwep/2010workgroup/meetings/index.html> for this and other presentations, and additional July meeting materials).

The project would transfer water from Lake Keechelus to Lake Kachess for seasonal storage. If implemented, Reclamation would attempt to align the pipeline to minimize impacts to wetlands and stay within existing rights-of-way to the maximum extent possible. Representatives from the Department of Ecology (Ecology) have met with the Washington State Department of Transportation (WSDOT) to discuss this project since the pipe would cross under I-90 and therefore could be coordinated with planned WSDOT I-90 wildlife crossing construction. The consultant team will provide an appraisal-level project cost estimate to the Workgroup in September. The Workgroup discussed the following points following the presentation:

- The bull trout population in Lake Kachess could be affected by drawdown; analysis should include an estimate of negative impacts or benefits to bull trout habitat conditions.
- The primary purpose of the pipeline is to capture and store water from the Keechelus drainage that would otherwise not be stored; and to improve instream flow benefits below Keechelus Dam.
- This project may need to be fast-tracked depending on when I-90 work is done.
- Need to assess the effects of this project on anadromous fish in the reservoirs and tributaries in the Yakima Basin.



### **Kachess Inactive Storage** *by Jim Peterson, HDR*

Jim Peterson gave the Workgroup a presentation summarizing inactive storage at Lake Kachess for water supply during drought conditions. Preliminary engineering focused on drawing down Lake Kachess an additional 200,000 acre-feet below the existing dead pool storage with a lake tap and conveying it downstream through either a gravity tunnel or by moving it through a pump station to a discharge point. The consultant team will provide an appraisal-level project cost estimate to the Workgroup in September. The Workgroup discussed the following points following the presentation:

- The analysis needs to compare the cost of a 1,000-cfs pump station to a gravity tunnel, including O&M costs.
- The pump station would probably be used during drought periods only, while the tunnel could be used at any time.
- The project team assumed that fish screens will not be needed because bull trout will not be present at the lake tap depth (approximately 60'), but this assumption needs to be verified.

### **Wymer Project Overview** *by Stan Schweissing, HDR*

Stan Schweissing presented a brief overview of the Wymer Project to the Workgroup and reviewed possible routing alternatives. He referred to a figure that identified how the Wymer Project could receive water from a variety of sources including both Yakima and Columbia Rivers. The consultant team will provide an appraisal-level project cost estimate to the Workgroup in September. The Workgroup discussed the following points following the presentation:

- It will take an estimated 3-6 years for a Columbia River pump/Yakima Basin storage feasibility study to be completed, particularly with addressing new potential storage sites for Selah or Burbank Creek drainages. The first issue addressed will be Columbia River water availability.

### **Thorp Pump Station and Wymer Upstream Conveyance** *by Jim Peterson, HDR*

Jim Peterson presented information about the Thorp Pump Station and Wymer Upstream Conveyance project to the Workgroup. The project would involve building a pump station adjacent to the Yakima River near Thorp, Washington, with a pipeline to an existing Kittitas Reclamation District (KRD) canal, which would need to be expanded to convey 1,000 cfs of water pumped from the river. The pipeline would cross State Routes 10 and 97. The consultant team will provide an appraisal-level project cost estimate to the Workgroup in September. The Workgroup discussed the following points following the presentation:

- The pump cannot be located upstream of the proposed location and closer to the existing KRD canal because there needs to be a stable section of river with room to site the pump station.
- The total distance from Wymer to the Yakima River following the pipe and canal route is approximately 40 miles.
- The Workgroup should consider outlets at Wilson and Naneum Creeks and potentially other locations to support instream flow and/or water supply enhancements.
- There are big game (elk and deer) that could end up in the canal along the route presented. Fences may need to be placed to prevent access.

- This configuration could also support aquifer storage, as water would be conveyed away from the river and then used to recharge groundwater to enhance water supply before storage control.
- The basis for the 1,000-cfs design criteria is two parts: 1) Meaningful flow reduction during the reach in summer months, and 2) increased flexibility to capture water available for filling the reservoir.
- The project team should analyze how pumping 1,000 cfs from the river would affect instream flows, and when excess water could be withdrawn.
- There has not been an analysis of the potential benefits or impacts to winter flows.
- Reducing flows in the reach where the Thorp pump station would be located is only biologically valuable in July and August.
- With the Thorp pump station, the 400-cfs Wymer pump station evaluated in the previous Reclamation Wymer 2007 Appraisal Report would not be necessary.

### **Wymer Reservoir and Wymer Conveyance** *by Stan Schweissing, HDR*

Stan Schweissing summarized information about the Wymer Reservoir from the 2007 Appraisal Report. The consultant team will update the costs from the 2007 Report and present them to the Workgroup in September.

The Workgroup discussed the following points following the presentation:

- In the Final Storage Study EIS, Reclamation estimated the capacity of Wymer at 162,500 acre-feet. This was a conservative estimate that factored in a 100-year sediment load. Reclamation is fine with using the 169,000 acre-foot estimate identified by HDR for planning purposes.
- The Wymer Conveyance project would carry water from Wymer Reservoir to the Roza Canal headworks. This would require an elevated flume to be constructed over the Yakima River. More geotechnical information is needed for this project.

### **Small Bumping Reservoir Enlargement** *by Stan Schweissing, HDR*

Stan Schweissing presented information about the Small Bumping reservoir enlargement to the Workgroup. The information presented was based on the 1985 feasibility design. The footprint of the enlarged reservoir would total 3,250 acres. Modeling information showing how this and other projects will be managed to meet in- and out-of-stream water needs will be presented at the August Workgroup meeting. Information about possible environmental impacts from this project will be presented to the Workgroup in September, along with an appraisal-level cost estimate. A Workgroup member suggested that the Workgroup consider whether it is possible to use the existing dam rather than breaching it.

### **Summary Results – Water Needs Assessment** *by Andrew Graham, HDR*

The project team has received comments from the Workgroup on the water needs assessment and is currently working on addressing these comments. A summary of the comments and responses will be provided to the Workgroup.

### *Federally Supplied Agriculture*

The Workgroup discussed the following points regarding the information presented:

- Irrigation Districts agreed to 70% or their proratable entitlement as their need during a drought; it is economically damaging but “survivable.”
- The water need amount listed for Roza Irrigation District listed on the handout is not correct. It should read 115,500 acre-feet, based on the 70% proration; the project team will update this.
- There is farmable land that is not being supplied water. This is addressed in the future water-needs analysis.
- This analysis did not include other districts with proratable water rights.
- The project team will analyze return flow to the Kennewick Irrigation District using RiverWare modeling.
- RiverWare modeling can account for the return flows that show up after the irrigation season and therefore should not be included in available water estimates.
- The project team will address land use changes and their impacts on water needs.

#### *Non-federally Supplied Agriculture*

Current water use on non-federally supplied agricultural lands is estimated at 590,000 acre-feet per year.

#### *Municipal and Domestic*

This analysis did not look at conservation but it did include the estimated changes in water use due to land conversion. Due to Workgroup comments on the methods used to estimate land-use change impacts, the project team will be updating these values. A Workgroup member asked that the term “no action” not be used since it may be misinterpreted to mean that conservation efforts are not currently being made. The term “future without Integrated Plan” was suggested as a substitute for “no action.”

#### *Other Uses*

The category called “Other Uses” includes livestock watering, fish and wildlife needs, mining, and other uses. This category represents only a small percentage of water needs.

The Workgroup discussed the following points regarding the information presented in all the categories of water use:

- A Workgroup member would like the project team to verify the 70% need through an analytical exercise where the impacts and benefits at varying lower percentages are estimated.
- The project team will also complete water needs analyses based on a multiple-year drought. A Workgroup member noted that climate change may result in a greater chance of drought years and multiple-year droughts.
- The project team researched crop analysis requirements along with considering information about current water use to provide for water needs broken down by crop type, and to allow for assessing future changes in water needs due to potential cropping pattern changes.
- The project team should tighten the analysis by looking into how much supply might be gained from moving existing water rights around to meet needs to help meet deficiencies.
- The project team needs to recognize that water rights have been adjudicated.

### **Future Agricultural Demands** by *Bob Montgomery, Anchor QEA*

Bob Montgomery presented preliminary information about future agricultural demands. The project team is working with the Out-of-Stream Subcommittee on how to address the need for farmers to have flexibility to change crops in response to market conditions. The Workgroup discussed the following points:

- Bank lending practices will have a large impact on the future of agriculture. If bankers see uncertainty in water supply; this will affect their relationship with the agricultural industry and the farmers' ability to secure loans.
- The agricultural industry needs flexibility to change crops in response to market opportunities.
- The Workgroup should assume conservation will improve over time and some cropping areas will include residential irrigation. This is an opportunity for conservation savings.
- There is a large amount of idle acreage in WIP that is irrigable. This block of water was not reflected in the analysis.
- When looking at the data, Workgroup members should note that 2005 was a drought year and substantial amounts of acreage may have been idled. Crops may not recover fully in the years following droughts, so the water use estimates may be misleading.

### **Public Comments**

The Workgroup meeting was opened for public comment. The following comments were received:

- Regarding the Wymer improvements, there was no mention that the Thorp pump station could be used for irrigation delivery of Kittitas Reclamation District water at other times of the year. Also, the area discussed in the presentation currently presents a minimal risk to wildlife, as it is an open channel. Lastly, KRD does not have widespread delivery of supply through creeks. This only occurs in a few, limited situations.
- Water conservation is important but will not be enough to solve water problems in the Basin. A comprehensive program is needed. Water costs are hurting agricultural business. Policy changes are needed in addition to engineering solutions so that individuals can conserve and bank water within an irrigation district. On-farm water reductions are not insignificant.
- The Sierra Club does not think that the Workgroup process has met basic needs for public participation. There are more cost-effective measures than building new dams. Additionally, pursuing new dams is a national issue. The Sierra Club supports fish passage but opposes new storage measures, including Wymer and the small Bumping option. See attached letter for complete comments provided.
- The groundwater needs assessment is underestimated as are the impacts to instream flows.

### **July 1, 2010 Briefing for Governor Gregoire** by *Derek Sandison, Ecology*

Derek Sandison discussed July 1, 2010, briefing by the Executive Committee to Governor Gregoire on Workgroup efforts. Several Workgroup members were present when members of the Executive Committee made the presentation to the Governor on the preliminary Integrated Plan that the Workgroup approved in 2009. The Executive Committee also described the current process leading to a final Integrated Plan. The Governor is very impressed with and supportive of the Workgroup's efforts

and encourages them to continue to work together to come up with a solution for the water needs issue in the basin. She also expressed support for the integrated approach: linking passage and habitat improvements with water supply development, including surface storage.

#### **Agricultural Conservation** by *Bob Montgomery, Anchor QEA*

Bob Montgomery presented information about agricultural water conservation requirements. The No Action table (Table A in the meeting materials) provided to the Workgroup includes conservation projects that are likely to be implemented in the next 10 years. Table B listed conservation projects ranked by the project team. This list of projects needs to be reviewed with Reclamation. The project team proposes to evaluate the list of projects in Table B as the enhanced conservation scenario in the RiverWare model. The Workgroup discussed the following points following the presentation:

- Table B includes projects for which funding is uncertain.
- YRBWEP Phase I and Phase II conservation efforts have been successful.
- The Workgroup discussed the 10-year timeframe for the “future without Integrated Plan” baseline. It was suggested that this timeframe is not appropriate since the Workgroup is considering 50-year scenarios.
- The project team should complete analysis of water needs based on different levels of water-use efficiency.
- The conservation actions in the Integrated Plan will be implemented through a programmatic approach, similar to how conservation actions are currently funded through the YRBWEP.
- The entire KID pump exchange was not included; however portions of the project were included.

#### **Municipal Conservation** by *Andrew Graham, HDR*

Andrew Graham reviewed the Summary Results of Municipal/Domestic Water Conservation handout. The Workgroup needs to define how the Integrated Plan will address municipal operations. The following items were discussed during the presentation:

- Low-use fixture requirements and other water efficiency regulations were applied to domestic well users.
- The project team will check with Ecology about regulations on domestic well users in upper Kittitas County.
- It would be short-sighted from a political standpoint to not address water conservation.
- There is a misperception that people in the Yakima basin do not make efforts to conserve water. In fact, water conservation is taking place in the basin. There needs to be a concentrated effort to make sure urbanized areas have urbanized services. Conservation is best dealt with by city and county governments; therefore, funding should be provided to local governments.
- Implementing municipal conservation efforts could be expensive while only gaining a small amount of water. Plumbing codes result in water conservation regardless of Workgroup efforts. Real water savings will come from projects that address irrigation. Water rates could be raised to conserve water, but this would be very difficult politically.
- The Workgroup should take an aggressive stance on conservation.

- The Workgroup should document findings about water conservation and then focus on higher priority plan elements.
- There needs to be a commitment to conservation as a condition to receiving water.
- The small amount of water savings from municipal conservation is not enough to solve the Basin's problems and therefore should be kept in perspective.

### **Modeling Scenarios** by *Keith Underwood, HDR*

The Workgroup discussed modeling scenarios and the timeframe for their analysis. The project team currently is planning to conduct analysis through 2030. Some Workgroup members believe this analysis should extend out farther, e.g., 50 years. The Workgroup discussed the following comments about this topic:

- The Workgroup should not be too concerned about the timeframe since actual implementation timelines are uncertain.
- The Workgroup needs some way to measure benefits.
- The project team is considering modeling two to three climate-change scenarios to provide a range of estimates to consider.
- There needs to be progress for both fish issues and water supply (storage). The Workgroup will have difficulties if it does not include storage projects. The Workgroup should analyze scenarios with and without storage to see what can be achieved with different implementation combinations.
- Past actions have not addressed the water problems in the Basin. The Workgroup needs to recognize the history of the Basin and, when analyzing scenarios, consider what has taken place in the Basin over the past 50 years.
- The Workgroup should address hydropower and recreation in the scenarios.
- The Workgroup should consider fish passage at all five dams in the modeling scenarios.
- The nonstructural scenario was included for illustration purposes only; it is not intended to be an implemented scenario.

### **Hydrologic Modeling Update** by *Bob Montgomery*

Bob Montgomery provided the Workgroup with an update on the hydrologic modeling. The modeling should be complete in the next few weeks for the No Action (Future without Integrated Plan) scenario. This information will then be presented to the Modeling Subcommittee and the Workgroup at the August meetings.

### **Comparative Benefits Matrix**

Workgroup members should provide the project team with comments on the comparative benefits matrix metrics by August 4, 2010.

### **Meeting Wrap-up**

At the next meeting, the Workgroup will receive additional information on Integrated Plan actions, pumping out of the Columbia River, and hydrologic modeling results. At the September meeting, the Workgroup will be provided with project cost information and environmental effects.

A member of the public asked that the fish community look into recent record fish run returns and try to determine if this will take place in the Yakima Basin like it has at other locations, and provide a presentation at a future meeting on this topic. The Executive Committee will consider this request.

**Workgroup Members in Attendance**

Dale Bambrick, NOAA Fisheries Service  
Max Benitz, Benton County Commissioner  
Dave Brown, City of Yakima  
Alex Conley, Yakima Basin Fish & Wildlife Recovery Board  
Tom Davis, Washington Department of Agriculture  
Seth DeFoe, Kennewick Irrigation District  
Urban Eberhart, Kittitas Reclamation District  
David Fast, Yakama Nation – Yakima/Klickitat Fisheries Project  
Michael Garrity, American Rivers  
Mike Leita, Yakima County Commissioner  
Sid Morrison, Yakima Basin Storage Alliance  
Tom Ring, Yakama Nation – Natural Resources  
Derek Sandison, Washington Department of Ecology  
Jeff Tayer, Washington Department of Fish and Wildlife  
Jeff Thomas, US Fish and Wildlife Service  
Ron VanGundy, Roza Irrigation District  
Dawn Wiedmeier, Bureau of Reclamation

**Other Attendees**

Wendy Christensen, Bureau of Reclamation  
David Bowen, American Forest Land Co.  
Tom Carpenter, Yakima Basin Storage Alliance  
David Child, Yakima Basin Joint Board  
Joe Cook, University of Washington  
Stuart Crane, Yakama Nation  
Charlie de la Chappelle, Yakima Basin Storage Alliance  
Warren Dickman, Yakima Basin Storage Alliance  
Sharon Edgar, Anchor QEA  
Ben Floyd, Anchor QEA  
Chuck Garner, Reclamation  
Don Gatchalian, Yakima County  
Andrew Graham, HDR  
Bill Gray, Reclamation  
Sean Gross, NMFS  
Bob Hall, Yakima Basin Storage Alliance/Yakima Auto Dealers  
Justin Harter, Naches-Selah Irrigation District  
Ken Hasbrouck, Kittitas Reclamation District

Lynn Holt, Bureau of Reclamation  
Joel Hubble, Bureau of Reclamation  
Jerry Kelso, Consultant to Bureau of Reclamation  
Barb Lisk, Office of Representative Richard Hastings  
Chris Lynch, Reclamation  
Steven Malloch, National Wildlife Federation  
Mike Marvich, Aqua Permanente  
Tina Mayo, US Forest Service  
Tom Monroe, Roza Irrigation District  
Bob Montgomery, Anchor QEA  
David Ortman, Sierra Club  
Onni Perala  
David Reeploeg, Office of Senator Maria Cantwell  
Mike Schwisow, Schwisow & Associates  
Elaine Smith  
Rob Swedo, BPA  
Bob Tuck, Yakima Basin Storage Alliance  
Keith Underwood, HDR  
Ric Valicoff, Roza ID  
William Woods

### **Next Workgroup Meeting**

The next meeting will be held August 25 at the Arboretum. A meeting notice and agenda will be distributed in advance of the meeting.

### **Where to Find Workgroup Information**

Meeting materials, notes, and presentations from the Workgroup meetings will be posted on the project website (<http://www.usbr.gov/pn/programs/yrbwep/index.html>). A bibliography of information sources, many of which are available online, is also posted on the website. If anyone needs help finding an information source, contact those listed at the top of page 1 or Ben Floyd at Anchor QEA, Richland office, (509) 392-4548, or [bfloyd@anchorqea.com](mailto:bfloyd@anchorqea.com).



## **Statement of the Sierra Club to the Yakima River Basin Water Enhancement Project Work Group – July 28, 2010**

### **The Sierra Club re-affirms its statement to the Work Group of July 15, 2009 that:**

- \* The Work Group process and limited public Task Force membership established by the BuRec and Ecology does not meet basic requirements for public participation.
- \* New dam construction and irrigation water storage projects are national issues, because new dams have significant adverse economic and environmental impacts.

### **The Sierra Club re-affirms its statement to the Work Group of November 9, 2009 that:**

- \* The Sierra Club reasserts its support of fish passage measures and water supply solutions that involve common-sense water management. We believe that in the face of climate change, aggressive water conservation, adoption of water efficiency standards and metering, water markets, low-impact storage projects (e.g., aquifer storage and recovery), forest and flood-plain restoration, and other strategies to promote natural storage are much more cost-effective than new dams, and could vastly improve the efficiency of water use in Washington State.
- \* The Sierra Club remains opposed to new storage projects on the Yakima River and its tributaries, including the Bumping Dam Enlargement, Wymer Dam (on Lmuma Creek), and Black Rock Dam.
- \* The Sierra Club remains opposed to the Bumping Lake Dam small option as set out in the Discussion Draft Integrated Package because it would still flood late-successional and old-growth forest land that includes threatened spotted owl and bull trout habitat; a National Forest inventoried roadless area that should be added to the William O. Douglas Wilderness Area.

**The Sierra Club supports conserving land in the Teanaway River watershed.** However, we find that such conservation should not serve as “mitigation” for the permanent loss of bull trout habitat and old growth national forest lands surrounding the existing Bumping Lake or shrub-steppe land flooded by a Wymer Dam because such mitigation would be off-site in another Yakima sub-basin and out-of-kind, not replacing the same threatened fish/wildlife habitat.

Elaine Packard, Chair, Water and Salmon Committee  
Mark Lawyer, Chair, National Forests Committee  
Cascade Chapter  
Sierra Club