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## Yakima River Basin Water Enhancement Project (YRBWEP) 2009 Workgroup

### Meeting Notes

August 26, 2009, Yakima Arboretum in Yakima, Washington

### Review of July 29, 2009 Meeting Notes

The work group made the following comments on the August 12, 2009 meeting notes:

- Dawn Wiedmeier should be listed under “Work Group Members in Attendance,” not “Other Attendees.”
- Tom Ring has provided the consultant team with additional edits to the notes on his presentation. The consultant team will incorporate these edits.
- On page 3, under “*Step 4: Attend a Workshop*,” the consultant team will change the workshop date to September 8, 2009.

The consultant team provided the work group with the following revised documents based on the group’s input at the August 12 meeting: work plan, consensus handout, ground rules, water supply and flow track approach, and July 29, 2009 workshop comments.

### Reservoir Fish Passage Subcommittee

The Reservoir Fish Passage subcommittee organizers (Wendy Christensen, Dave Fast, Joel Hubble and Ben Floyd) prepared a suggested work plan for the subcommittee. The work plan summarizes information from previous studies and reports from the Yakima Basin. Ben reviewed the suggested work plan, which includes draft goals, a project list, the evaluation process, key information sources, identified uncertainties, recommendations, and a suggested schedule. The work group discussed the following points related to the suggested work plan:

- The group agreed to remove heading 1. “Develop Working Draft Goals.”
- The Habitat Enhancement Subcommittee will address upstream habitat work contingent upon reservoir passage and passage on tributaries.
- The group agreed to add Clear Lake to the project list for a total of six projects on the list of potential projects for consideration in the Integrated Package.
- The subcommittee will identify in its recommendations report how fish passage facilities would effect Total Water Supply Available (TWSA) and share this information with the work group.
- The subcommittee will describe how passage would support sockeye reintroduction and benefit other salmonids, and also describe reintroduction plans.

The group approved the work plan and the following subcommittee membership: Joel Freudenthal, John Easterbrooks, Dave Fast, Joel Hubble, Alex Conley, Wendy Christensen, and David Child.



## **Habitat Enhancement Subcommittee**

The Habitat Enhancement subcommittee's organizers (Alex Conley, David Child, Jeff Thomas, Scott Nicolai, Joel Hubble, Perry Harvester and Ben Floyd) prepared a suggested work plan for the subcommittee. The work plan summarizes information from previous studies and reports from the Yakima Basin. Ben reviewed the suggested work plan. The work group discussed the following points related to the suggested work plan:

- The group decided that there were too many projects to rank and a more programmatic approach is necessary, although the subcommittee may still look at specific projects where they are already defined.
- The subcommittee needs to consider local planning efforts because local governments have protection responsibilities that may be affected by habitat enhancement efforts. As much as possible, the work group will try to integrate biological principles with policy concerns.
- The subcommittee will characterize water supply needs or effects as part of its subcommittee report and recommendations.
- The subcommittee, not the water supply and flow track, will address tributary flow enhancements.

The group approved the work plan and the following subcommittee membership: Joel Freudenthal, Alex Conley, David Child, Scott Nicolai, Joel Hubble, Perry Harvester, and Michael Garrity. In addition, the consultant team will contact Kittitas County to see if they would like to have a representative on the subcommittee.

## **Draft Goals Discussion**

Ben presented the Goals Handout, which contained some guidance and existing goals information from the State's Integrated Water Management Alternative Final EIS (June 2009). Establishing goals helps in defining what the group wants to achieve with the Integrated Package. Potential actions to include in the integrated package can be compared against the goals.

The group developed the following draft guiding principles and goals:

### **Guiding Principles**

- Choose the most environmentally-friendly approach
- Choose the most cost-effective approach
- Choose measures that lead to economic stability
- Recognize institutional/legal constraints and obligations
- Don't make things worse/avoid harm to represented interests
- Provide for future flexibility and adaptability (e.g. climate change)
- Identify realistic projects to accomplish and fund in a specified timeframe
- Choose projects and actions that do not jeopardize the continued existence of listed species
- Maximize benefits (e.g. recreation, hydropower)

### **Water Supply Goal**

Provide for adequate water supply to fulfill minimal in and out of stream needs during drought conditions:

How

- Maximize conservation and efficiency and water supply potential of water banks
- Identify potential legal and institutional changes
- Integrate surface and groundwater management to achieve total supply benefits

What

- Address future supply needs for M&I and rural domestic supply
- Determine instream demands and agriculture out of stream demands (defined as demands for Kittitas Reclamation District, Roza Irrigation District, Wapato Irrigation Project and Kennewick Irrigation District)

### **Fisheries/Habitat Goal**

Restore fisheries resources and habitat within the Yakima Basin:

How

- Manage exotic, invasive species that affect water supply and fish restoration goals
- Open more habitat by providing passage into unregulated habitat includes passage at existing reservoirs)
- Recovery, maintenance , and enhancement of all salmonids
- Protect, maintain, and enhance fish habitat

### **Discussion about Goals**

The work group discussed the need for quantitative water demand information. Minimum needs of irrigation districts may be difficult to quantify because drought year needs differ.

The group discussed the following points related to irrigation district water demands:

- The 70% proratable supply needs could be a starting point.
- Kennewick Irrigation District future supply needs should be addressed because they use return flows. Flows have been reduced in the lower Yakima due to water conservation efforts.
- Proratable water rights need to be treated equally to comply with the 1945 consent decree.
- KRD needs 85,000 acre feet of water a year during drought years in addition to 32% of their annual supply entitlement.
- Roza needs 100,000 AF of storage/supply separate from TWSA. This is their minimal need based upon the 1992 – 1994 drought period.
- WIP is developing estimates.
- In a normal year, KID delivers 66,000 AF of water (requires additional water to deliver).
- Need to consider tributary water needs.
- The current estimate for M&I (including rural domestic) demand is 40,000 to 80,000 AF.

NOAA cannot support a package that would worsen flows during drought years.

The consultant team will work to better define/quantify water demands and provide this information to the Work Group at a future meeting.

## Public Comment

The following comments were made:

- City of Yakima is unique in having prorated irrigation water. Yakima should be considered as a proratable irrigation provider with unmet needs in drought years. The City of Yakima's water needs will not increase greatly in the future as the City is geographically limited for growth, however urbanizing areas in Yakima County will see larger increases in water demand. The total basin municipal need is closer to 40,000 AF than 80,000 AF. Industrial uses affect this demand.
- North Yakima Conservation District developed goals for the group to consider and will provide them to Dan Silver to distribute to the work group.
- Many similar processes in the western US often look for outside water supply. The work group needs to demonstrate that water is being managed within the basin as effectively as possible (conservation, efficiency, etc.) before seeking additional supply. The work group should also determine water needs.
- The work group should look further into minimum water needs, pointing out that the Yakima Valley is experiencing an influx of job seekers from California.

## List of Potential Projects and Actions

Ben reviewed three flow maps provided to the work group. Bob Montgomery noted these maps give a general overview of flow issues, but do not capture flow variability or flip flow. Ben also reviewed the Flow handout. Based on the work group discussion, the consultant team will make the following changes to the handouts:

- On the maps, "Sunnydale" will be changed to "Sunnyside."
- On the summary flows table change monthly flow targets to monthly flow "objectives"

Ben reviewed the draft list of potential projects provided to the workgroup as a handout. The work group discussed the following points related to the list.

### *Fish Passage*

- The group agreed to add Clear Lake per the earlier discussion.

### *Modifying Existing Structures and Operations Element*

The group agreed to add the following projects to the Modifying Existing Structures and Operations Element list:

- Keechelus to Kachess pipeline. This project would allow water to be delivered from Keechelus Reservoir to Kachess Reservoir, improving the water supply for Kachess and bypassing the upper reach of the Yakima River between the reservoirs, which could improve flow conditions for fish.
- Modify Flip Flop. This is more of a goal than a project as substantial investments in structural improvements to storage and conveyance of water through the Yakima River system would be required to substantially modify flip flop.

- Utilization of Dead Storage Pumping from Kachess and Cle Elum. This project would pump from dead storage in the two reservoirs in drought years to supply additional water. The dead storage would be refilled in the following year or during wet years.
- Gravity feed from Cle Elum to downstream (Roza). This project is similar to the Wymer storage project with direct feed from Cle Elum Reservoir. If a tunnel was constructed from Wymer Reservoir to Roza Dam or to another reservoir in Burbank Canyon and then to Roza Canal then Roza Dam may be taken out and flows from Cle Elum Dam to Yakima would be reduced in summer time.
- Lower outlet pipe at Cle Elum. This project appears to be similar to the utilization of dead storage at Cle Elum. A lower outlet would allow gravity flow from dead storage.

#### *New Surface Storage Element*

- The group decided to remove Bumping Lake Enlargement, Large (458,000 AF) from the list due to significant impacts on bull trout spawning habitat that would be inundated (ESA listed as “threatened”). Small Bumping was left on the list, with Jeff Thomas noting that there are also bull trout spawning habitat inundation concerns with Small Bumping. Ann Root and Bob Montgomery will put together a map showing the inundation area for the work group for a couple of Small Bumping scenarios.
- The group agreed to move the two projects listed under Other Potential Alternatives to New Surface Storage Element.
- The title “New Surface Storage Element” will be changed to “New Surface Storage and Transfer Element.”
- The group discussed that the Yakima Nation had previously studied a reservoir on the Klickitat River, but decided not to add this project to the list.

#### *Groundwater Storage Element*

- The group decided to add Surface infiltration at suitable areas (e.g. KRD, WIP, Moxee)

#### *Enhanced Water Conservation Element*

- The group agreed to add the municipal water law/water use efficiency rule compliance to the first bullet.
- The level of supporting detail for the listed conservation projects varies, making it difficult to make comparisons among projects.
- Bob Montgomery will prepare for the work group a summary document identifying conservation projects and geographic areas they would benefit. The work group will likely use a programmatic approach to address conservation with some details about where desired benefits would be and potential projects, rather than working off a prioritized project list.
- The group agreed to remove from the list the project “Lower Yakima River Pump Back to Roza Irrigation District or Sunnyside Valley Irrigation District.”
- The work group needs to identify municipal efficiency opportunities and take into account for water savings from converting agricultural to urban/suburban lands. May not be substantial savings in the larger acreage parcels when this conversion occurs.

## **Presentation: Estimates of Demand for Water Transfer by Ann Root and Bob Montgomery**

Ann Root of ESA Adolphson and Bob Montgomery of Anchor QEA gave a presentation on demand for water transfers. They noted that it is difficult to accurately predict demand for this voluntary program. The state Integrated Alternative EIS estimated a maximum demand of 205,000 AF in drought years (this was estimated to be the upper boundary on the demand based on proratable demand). This figure was referenced from a 1994 Pacific Northwest National Lab study (Mike Scott).

The existing process for water transfers is cumbersome, therefore improving the process could help increase demand. Considerations during water transfers include seniority of water rights, location of parcels, physical limitations to transferring water, etc.

The consultant team will provide the work group with information about the number of water transfers currently and historically done in the Yakima Basin. Alex Conley suggested that John Vacarro (USGS) may have information from the USGS modeling efforts to improve the water transfer demand estimates. Another work group member noted that temporary transfers, such as during drought years have a less complex process, but there are many considerations when attempting a permanent transfer.

The group discussed the following points related to exempt wells:

- A work group member commented that permitted wells undergo a process to determine third party effects while exempt wells do not. New wells could be required to buy into a mitigation program. If exempt wells are not dealt with, it could lead to costly litigation.
- All exempt wells pull water from TWSA.
- Reservations were expressed about the mitigation bank and that the work group would need to consider how this would work at the county level.
- A comment was made suggesting that the exempt well issue should be handled by state legislators, not the work group.
- The Department of Ecology is pursuing a mitigation bank in Kittitas County.
- Some group members felt that they should lend support to the idea of a mitigation bank. Another group member suggested the solution may lie in additional storage.
- The issue of how the work group will address exempt wells and an associated mitigation bank will be a topic for the Executive Committee to discuss and a recommended approach will be brought back to the work group for further consideration.

## **Public Comment**

The following comments were received:

- The concept of return flows is not consistently applied. There is return flow from municipal use and exempt wells. The demand numbers discussed during the work group session may be overstated if this is not recognized.
- Water is a single resource and cannot be managed unless surface and groundwater are treated as such.

## **Meeting Wrap-up**

### **Summary of Consensus Decisions**

- Approved Reservoir Fish Passage Committee and Work Plan
- Approved Habitat Enhancement Subcommittee and Work Plan

- Approved draft list of proposed projects
- Approved draft goals

### **Summary of Identified Information Needs**

- Describe potential effects on climate change (presentation scheduled for 9/23)
- Better quantify instream and out of stream water demand information (consultant team to work on this)
- Identify bull trout spawning areas affected by Small Bumping options (information to be provided to work group by September 23)
- Provide additional information on the number of water transfers within the Basin.

### **Action Items**

- The consultant team will revise the Fish Passage Subcommittee Work Plan
- The consultant team will revise the Habitat Enhancement Subcommittee Work Plan
- The consultant team will develop a revised Guiding Principles and Draft Goals handout
- The consultant team will revise the flow summary maps
- The consultant team will revise the list of potential projects and actions
- The consultant team will prepare a summary of conservation projects and where they provide benefits geographically, and likely flow benefits
- The consultant team will prepare map showing the bull trout spawning impact area of Small Bumping
- The consultant team will research numbers of water transfers in the Yakima Basin

### **Work Group Members in Attendance**

Brad Avy, Washington Department of Agriculture  
 Dale Bambrick, NOAA Fisheries Service  
 Max Benitz, Benton County Commissioner  
 Dave Brown, City of Yakima  
 Alex Conley, Yakima Basin Fish & Wildlife Recovery Board  
 Rick Dieker, Yakima-Tieton Irrigation District  
 Urban Eberhart, Kittitas Reclamation District  
 David Fast, Yakama Nation  
 Michael Garrity, American Rivers  
 Mike Leita, Yakima County Commissioner  
 Bill Lover, City of Yakima  
 Charlie de la Chappelle, Yakima Basin Storage Alliance  
 Scott Revell, Kennewick Irrigation District  
 Phil Rigdon, 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  
 Jim Trull, Sunnyside Valley Irrigation District  
 Ron VanGundy, Roza Irrigation District  
 Dawn Wiedmeier, Bureau of Reclamation

## **Other Attendees**

Melissa Bates, Aqua Permanente  
Tom Carpenter, Yakima Basin Storage Alliance  
David Child, Yakima Basin Joint Board  
Wendy Christensen, Bureau of Reclamation  
Stuart Crane, Yakama Nation  
James Davenport  
Brian Diehm  
Sharon Edgar, HDR Engineering  
Rand Elliot, Yakima County Commissioner  
Stephen Fanciullo  
Ben Floyd, HDR Engineering  
Joel Freudenthal, Yakima County  
Chuck Garner, Bureau of Reclamation  
Don Gatchalian, Yakima County  
Bob Hall, Yakima Basin Storage Alliance/Yakima Auto Dealers  
Ken Hasbrouck, Kittitas Reclamation District  
Lynn Holt, Bureau of Reclamation  
Joel Hubble, Bureau of Reclamation  
Terry Keenhan, Yakima County  
Jerry Kelso, Bureau of Reclamation  
Edwin Lewis, Wapato Irrigation Project  
Barb Lisk, Office of Representative Richard Hastings  
Steven Malloch, National Wildlife Federation  
Mike Marvich, Aqua Permanente  
Alec Maule, US Geological Survey  
Jim Milton, Yakima-Tieton Irrigation District  
Pat Monk, US Fish and Wildlife Service  
Tom Monroe, Roza Irrigation District  
Bob Montgomery, Anchor QEA  
Bryan Myre, Yakama Reservation Irrigation District  
Scott Nicolai, Yakima-Klickitat Fisheries Project  
Onni Perala  
Tom Ring, Yakama Nation  
Ann Root, ESA Adolfson  
Dan Silver  
Elaine Smith  
Michael Tobin, North Yakima Conservation District  
Joanne Wellner, Washington Department of Ecology

## **Next Work Group Meeting**

The next meeting will be held on September 8, 2009 at the Yakima Area Arboretum.



## **Where to Find Work Group Information**

Meeting materials, notes, and presentations from the work group's 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, will be 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 HDR Engineering's Pasco, Washington office, (509) 546-2053, or [ben.floyd@hdrinc.com](mailto:ben.floyd@hdrinc.com).