

TO: Deschutes Water Planning Initiative Joint Working Group, Other Interested Parties
FROM: Lara Fowler, Facilitator
RE: Summary of June 25, 2013 Deschutes Water Planning Initiative Meeting
DATE: July 24, 2013

Thank you for the opportunity to facilitate the Deschutes Water Planning Initiative Meeting on Tuesday, June 25, 2013. This summary provides a brief overview of this meeting.

Background: The Deschutes Water Planning Initiative convened a needs assessment from March 2012 to December 2013 that identified water management goals for instream, agricultural and municipal interests (see <http://www.deschutesriver.org/resources/deschutes-water-planning-initiative/>). On January 31, 2013, stakeholders met in a workshop to identify the problems of concern facing the Deschutes River, particularly below Wickiup Reservoir, and to learn and share the needs of different stakeholders. After that meeting, the Deschutes River Conservancy and the Deschutes Water Alliance formed a Joint Working Group to develop and implement a work plan with a goal of applying for a U.S. Bureau of Reclamation Basin Study grant. In addition, a smaller staff work group was identified to help conduct work between Joint Working Group meetings. The staff work group includes the Deschutes Basin Board of Control (Mike Britton, Steve Johnson, Leslie Clark), Deschutes River Conservancy (Tod Heisler, Kate Fitzpatrick, Brett Golden), Central Oregon Cities Organization (Adam Sussman), Mike Tripp from Trout Unlimited, Jason Gritzner (US Forest Service) and representation from the Oregon Water Resources Department.

Meeting Overview:

The June 25th meeting was a chance for the larger Joint Working Group to brainstorm potential water supply options for the staff work group to research. Approximately 35 people attended the June 25th meeting, including representatives from the following.

- Irrigation Districts: Arnold, Central Oregon, Lone Pine, North Unit, Swalley, Tumalo
- Municipal water providers: Central Oregon Cities Organization (COCO), Prineville
- Counties: Deschutes
- State: Department of Water Resources
- Federal: U.S. Forest Service, U.S. Bureau of Reclamation
- Non-profits: Deschutes River Conservancy, Water Watch, Trout Unlimited
- Individuals representing various interests (neighborhoods, fisheries, hydropower)

Tod Heisler from the Deschutes River Conservancy provided an introduction, and then I reviewed the summary from the January 31, 2013 meeting (available at the website listed above).

Background on Brainstorming Potential Solutions:

After a brief review of the prior work and meetings, meeting participants then brainstormed potential opportunities for addressing water supply needs related to the Upper Deschutes. After a general brainstorming activity, meeting participants identified additional topics and ideas, and then discussed a number of them more in depth. These topics are listed below.

Important note: As part of the brainstorming process, participants were asked to think creatively and outside the box, and not to be bounded by existing legal, regulatory, contractual, or other requirements and existing conditions. *This process recognizes that changes in law, congressional authorizations, and/or state-issued water rights may be required for some of the options being evaluated, and cautions that the potential benefits of any such option or the use of such option in another context, such as the Deschutes Basin HCP, must be considered in light of the feasibility of making those changes.* The ideas generated and listed below are just that: ideas to be explored further and not ideas for which anyone expressed any commitment or agreement. The staff work group will then take these ideas and options to develop additional information.

Information Generated During Brainstorming Activity and Follow Up Discussions:

Note: Some of the ideas and options below are from those generated directly by meeting participants during an initial stage of individual brainstorming by writing ideas on pieces of paper. During the meeting, I read these initial ideas or options aloud anonymously; the group then generated additional ideas, thoughts, and details. The information below is a list of all of this information. As the facilitator, I have tried to organize the information into categories to enable easier follow up; note, however, that this structure was not discussed during the meeting.

I. General Considerations or Questions

A. General questions or needs:

- How do we get to healthy flows without harming agricultural or municipal users by addressing issues related to the “last worst place” on the Upper Deschutes?
- How do we create a more consistent river when it is used as a conveyance system (need to address quantity, timing, consistency of flow and any unexpected impacts)?
- How do we make it easier to move water around the basin?
- Are there ways to address the need for mitigation credits (reduce costs of mitigation, develop permanent mitigation credits)?
- How do we share in the risk and conservation?
 - Irrigation district insurance policy for supply uncertainty from higher instream flows
 - Address steps/needs to incentivize water users to conserve water while maintaining irrigation district stability
- We have the plans; how and where do we get the money?

B. Goals for addressing flows in the upper Deschutes River:

- Improve winter flow to 300 cfs and beyond for the upper Deschutes
- Increase winter flows to improve stream “health”, improve Wickiup hydro project economics
- Maintain winter flows during the mandatory bi-annual Wickiup Dam inspection
- Increase minimum flow below Wickiup with new reservoir management agreement
- Determine flow goals for summer and winter for 1) fishery restoration, and 2) Sunriver homeowner summer flooding issues
- Hold riverfront property owners harmless by increasing flows (if this is even possible?)
- Reallocate storage in upper Deschutes to include instream flow releases to include minimum flows and at the same time provide mitigation credits, esp. in the winter
- Manage reservoirs to meet instream water rights and scenic waterway flows
- Water flows to restore the Little Deschutes River

C. Climate change and drought:

- How do we address the changing hydrograph and the prediction for less snowpack?
- Drought management plan, insurance, flexibility (for one year, multi-year drought)
 - Create a drought plan to address weak points, supply issues, opportunities
 - Different systems react differently to drought/water supply changes (i.e., the level of Davis Lake is related to precipitation)
 - Create a toolbox of drought management options (compensated fallowing, increased leasing, inter-district agreements)
 - Opportunity for community “barn raising” approach? (Voluntary programs within districts? Opportunity for more urban districts to help more rural districts?)
 - Instream leasing of stored water (insurance policy for future years if refill issues)

II. Ideas related to irrigation districts (IDs)

A. Water Supply Options (Infrastructure/Structural):

- New off site storage or reservoir (this general category suggested by several participants)
 - In upper or lower basin
 - In/near North Unit ID to receive winter releases out of Wickiup Reservoir for use in irrigation season. Allows for higher winter releases out of Wickiup but captures this supply for North Unit ID use during season
 - Determine potential location(s), capacity, timing of flow, feasibility, costs, process, etc. to develop new off-river storage capacity
- Increase capacity of existing storage (i.e., Haystack Reservoir) (need to address costs, obstacles, operations, etc.).
- Canal lining or piping
 - Canal/pipe from Wickiup to Bend (off stream)
- Shift points of diversion (i.e., Arnold ID, North Unit ID)
- Aquifer storage and recovery

A. Reservoir Management and Operational Options:

- Develop flexible/adaptive water management agreements on the upper Deschutes depending on the water year
- Increase flows in the upper Deschutes in wet/avg. years when modeling shows it is possible
- Use of flood water supplies for year round needs and deficiencies
- More “gentle” or moderated release schedule out of Wickiup
- Revise the inter-district agreement between Wickiup and Crane Prairie Reservoirs; include Crescent Lake as part of new agreement. Share resources between all reservoirs.
- Manage reservoirs as one pool or pooling stored water
- Rethink how storage is managed and utilized (i.e., change how Crane Prairie is operated)
- Reservoir optimization (unconstrain operational constraints to optimize natural flow)
- Water banks and instream leasing
- Manage water in Deschutes Basin within flexible parameters (like in Walla Walla River)
- Source shifting for tributary use during rain events for instream flows

B. Water Management Agreements and Opportunities Between Irrigation Districts

- Work with different district priority dates
 - Increase efficiency in senior districts, use that water to shore up junior districts
 - Creative agreements between irrigation districts to provide water to junior users (i.e. North Unit ID) and instream flows while keeping senior rights holders whole
 - Create easy/simple mechanisms to transfer water rights from senior to junior IDs
 - Work across district boundaries to ensure agricultural producers against drought
- Source swapping/exchanges/leases
 - Greater flexibility/tools for exchanges/leases between different irrigation districts
 - Get more Deschutes water to Tumalo ID, and more Tumalo Creek water instream
 - Irrigation acres from urbanization from COID/Swalley to Tumalo ID. In turn, Tumalo ID reduces use of Tumalo Creek, create mitigation for municipal needs
 - Central Oregon ID water to NUID; NUID to instream (Deschutes, Crooked)
 - Create more access to live flow for North Unit ID, decrease need for storage

C. District System Management Options

- General thoughts/questions
 - How to deliver water most efficiently to end users
 - How to use water more efficiently and manage waste/tail water
 - Address demand for water within districts

- Potential general ideas:
 - Piping/canal lining
 - Pooled agreements
 - Temporary transfers (may depend on the water year)
 - Improve management and control of water in irrigation districts
 - Telemetry/ gate control
 - Measure and management of in-district water
 - Deliver in smaller allocations (5 cfs vs. 20 cfs)
 - Order water versus scheduled deliveries
 - Tailwater reduction/recovery
 - Waste water reduction and re-use
 - Create “bulges” within district conveyance systems to allow for more precise management (manage timing requirements)
 - Address water quality concerns
 - Change rate structures
 - Incremental charge based on quantity to reduce demand
 - Tiered pricing
 - Think about the idea of an “ala carte” versus “buffet” structure
 - “Duty” management: provide only the quantity of water needed, transfer the rest
 - As development picks up, use water from urbanized acres in high priority restoration areas
 - Education
 - About requirements of prior appropriation (ok if only use portion of right)
 - Peer to peer/ cultural changes (develop a pilot project within a district)

- Potential specific ideas:
 - Move Arnold ID point of diversion downstream, eliminate need for flume
 - Secure funding for Tumalo ID conserved water project on Tumalo Creek
 - Increase the reliability of North Unit Irrigation District’s live flow Deschutes River water rights and reduce the reliance on Wickiup Reservoir
 - Address the leakage in Crane Prairie Reservoir
 - Maximize Tumalo Creek’s cold water input into the Middle Deschutes without harming existing water users

- Create insurance/ safety net to districts making changes
 - Operate the physical system in a way to provide assurance at different levels of shortage (i.e., 10,000 or 20,000 AF of shortage, or more)
 - Alter reservoir operations or create new reservoirs
 - Create alternative supply or augment existing supply
 - Support legal/transfer opportunities
 - Financial
 - Invest funding priorities to reduce demand
 - Compensation for inability to farm
 - Develop other incentives to address concern

D. On Farm Efficiencies and Demand Management Options

- Improved water conservation on the field, on the farm (suggested by several participants)
 - Support new technology
 - Create a new program that helps pay for increased levels of efficiency (beyond just flood to sprinkler conversions)
 - Example: create or expand programs to help pay for pivots, better pumps
- Create programs and incentives to increase efficiency of water use on farm
 - Use incentives to move water to other uses (high value agriculture, instream, muni.)
 - Develop pilot project to address demand side management
 - Determine potential scope/magnitude of potential benefit from conservation
 - Create a program linking water and energy conservation
 - Compare with demand side management in the energy sector
 - Review State Trust Fund for energy conservation (potential model?)
 - Earn energy credits for water conservation by linking to the Renewable Energy Program (REP) or Renewable Portfolio Standards (RPS)
 - Save pumping load = kWh not required
 - Explore potential techniques to maintain soil moisture (i.e., pilot project to take woody debris from landowners in the upper basin and create soil amendment for those in the lower basin)
- Provide technical assistance/service to individuals
 - Ensure that individuals know about existing programs
 - Focus on those with smaller acreages or those using flood irrigation
 - Develop list of names, technical resources
 - Develop pre-packaged list of ideas, incentives
 - Provide follow up/monitoring of results
 - Support Oregon Dept. of Agriculture and Soil & Water Conservation District efforts to work with individual water users
 - Connect technical resources with those interested
 - Evaluation of actual water needs/soil moisture
 - On-farm review and field assessments
 - Sprinkler/nozzle replacement programs
 - Model after the Energy Trust of Oregon?
- Develop water right transfer group (perhaps useful to have monthly discussions?)

III. Ideas/options related to municipal needs or mitigation credits

- There is a need for mitigation credits
 - Link mitigation credits to conserved water
 - Link flows in upper Deschutes River during winter/shoulder season for mitigation (timing, quantity, consistency) (based on both mathematical and gage info)
 - Use of tribal water rights in water bank to create mitigation credits
- Water conservation is and can help supply water supply needs
 - Conservation plans required; new building regulations affect water demand
 - Varied amount of success based on public education; education works in tandem with programs like toilet replacement programs
- Replace meters, especially on big users

IV. Financial Opportunities and Options

- General questions:
 - We have the plans; how and where do we get the money?
- Potential opportunities to develop additional funding:
 - Basin wide water restoration fund to restore flows
 - Potential county tax (Deschutes County? All counties in basin?)
 - Percentage property tax (general tax)
 - Ecosystem service charge/credit (similar to 3% surcharge on energy bills)
 - Voluntary donations to pay for conservation (similar to Blue Sky Program on energy bills, or Blue Water Program on Avion Water bills)
 - Charge for water
 - Prepare/utilize Fresh Water Trust work on water quality trading for Deschutes Basin by the time TMDLs are implemented in Deschutes/Crooked Basins (potentially provides \$ for water projects to increase flows)
 - Corporate/philanthropic focus (need to identify vision, steps)
 - Private foundations, corporate funding
 - Tribal funding
 - Product placement (i.e., bottled water)
 - Kayaking/recreational opportunities on irrigation district canals
 - Hydro electric development
 - In conduit or micro-hydro as a revenue and energy source
 - Develop non-profit to manage newly developed hydroelectric on Wickiup Dam, use funding for in-basin conservation
 - Tap into specific funding sources (or continue working with these programs)
 - Oregon Legislative Bill 1069
 - Bureau of Reclamation WaterSmart Program
 - Oregon Watershed Enhancement Program (renewal of funding)
 - Bonneville Power Administration mitigation funding
 - National Fish & Wildlife Foundation funding
 - Generate revenue through avoidance of costs (personnel costs, energy reduction)
- Potential Incentives/Use of Funds
 - Economic incentives for using water efficiently or diverting less water
 - Set price for acre (forbearance agreements, fallowing fields)
 - Reduction in duty
 - Lower assessments to incentivize certain changes
 - Increase controls, telemetry in districts
 - Need to document/monitor effects
 - Incentives to allow for changes during drought periods (compensation for taking less water)
 - Hire staff specifically for conservation activities
 - Internships
- Develop grant funding program with different kinds of incentives (other than reduction of water rights to restore instream flow)

V. Motivations/incentives for particular behaviors

- External drivers like the Endangered Species Act
- Economic incentives
 - Increasing cost of labor, electricity, prices
- Water law/prior appropriation
 - Use it or lose it policy
 - Perception versus reality
- Education about using less water, less fertilizer, other
- Perception: everyone wants irrigation district water

VI. Potential Legal/Policy Changes/Options:

- Revamp water regulations so water rights holders aren't harmed by "use it or lose it"
- Use of winter storage release can "mitigate" for the mitigation program and facilitate the use of conserved water for mitigation credits
- Allow for mitigation credits based on incremental flow improvements in defined locations
- Generate mitigation credits for groundwater (permanent) from conserved water (piping, lining) projects in irrigation districts (provides an additional/alternative solution to meet municipal water needs besides permanently removing water rights from ID certificates)
- Local rules like in Walla Walla River Basin (in return for instream flow benefit)
- Address incentives driven by prior appropriation doctrine
- Discussions about efficiency and duty limitations to possibly make more water available
- Allow users to lease/transfer a portion of their duty
- Reallocate storage in upper Deschutes to include stream flow releases to improve minimum flows and provide mitigation credits particularly in the winter time

VII. Procedural Needs/Questions/Considerations

A. General needs/questions/considerations:

- Wear someone else's shoes
- Why should those in Crooked River participate in discussions re: Upper Deschutes?
- Need to develop timelines and management scenarios
- Relationship building/understanding of needs
- A formal ("governance") mechanism (needs to be worked on) for collaboration by all stakeholders to achieve urban, agricultural, and instream water needs
- Establish a DWPI fantasy football league for this fall to increase collaboration

B. Informational needs

- Better understanding/more explanation of the science and supporting instream flow needs. What studies have been done, are peer reviewed, and are generally accepted?
- Understand true needs
- Long range (1+ year) climate forecasting
- How can agriculture and municipalities use what they get most efficiently?
- How does the upper Deschutes affect districts/cities on the Crooked River system?
- Develop a central document detailing issues, accomplishments, where the Basin is going
- Work on developing information that is understandable by someone not familiar with water issues (i.e., help explain the complexity)

VIII. Potential Evaluation Criteria

- Who/what benefits from a particular activity or action? What is the magnitude of the change? What is the potentially affected area(s)?
- Are there any negative effects? If there are unanticipated consequences, what happens?
- What is the cost (financial, time, personnel, other resources?)
- Is a particular option feasible?
 - Legal/regulatory questions?
 - I.e., impacts to the Lower Deschutes River (legal/policy needs)
 - Ecological/fisheries impacts?
 - Effects on the Middle Deschutes?
 - Effects on the Upper Deschutes (especially during winter/shoulder seasons)
 - Financial? (potential funding sources)?
 - Timely (short, long term)?
 - Scalable (amount, magnitude)
- How does this activity relate to others?
 - Options as a set of possibilities
 - Individually feasible, scalable, cost effective
 - How do individual options then fit together?
 - Individual options incorporated into overall scenario/package to move goals forward

IX. Next Steps Towards Creating an Optimized Package that Helps Address Goals, Meet Multiple Needs While Avoiding Duplication of Effort?

- As soon as possible
 - Take ideas generated during brainstorming session, categorize them (L. Fowler)
 - Develop a report to communicate ideas as clearly as possible to those participating in the discussion and other interested parties (L. Fowler)
- July-December 2013:
 - Investigate projects/scenarios/alternatives (staff work group)
 - E.g., heavy infrastructure scenarios; operational scenarios; etc.
 - Periodic check in meetings (joint working group)
 - Convene discussion group about temporary water transfers
 - General check in meeting (August 22, 2013)
 - Follow up work on projects/scenarios/alternatives (staff working group)
 - Check in meeting (November 18, 2013- facilitated)
- Develop proposal for Bureau of Reclamation Basin Study Program (Letter of intent due January 2014). See additional steps outlined in the Deschutes Water Planning Initiative Study (<http://www.deschutesriver.org/resources/deschutes-water-planning-initiative/>).