

Basin Study Work Group Steering Committee (BSC) Meeting

April 5, 2016, 10:00 am - 12:00 pm

Barnes and Sawyer Rooms, Deschutes Services Building, 1300 NW Wall Street, Bend, OR 97701

MEMBER ATTENDANCE

Mark Reinecke, Avion Water Company
Shon Rae, Central Oregon Irrigation District
Adam Sussman, City of Bend
Bill Duerden, City of Redmond
Alan Unger, Deschutes County
Tod Heisler, Deschutes River Conservancy
Tom Davis, Native Reintroduction Network
Kyle Gorman, Oregon Water Resources Department
Theresa DeBardelaban, Oregon Department of Agriculture
Jer Camarata, Swalley Irrigation District
Marc Thalacker, Three Sisters Irrigation District

Mike Tripp, Trout Unlimited
Peter Lickwar, U.S. Fish and Wildlife Service
Jeff Wieland, Upper Deschutes River Coalition
Ryan Houston, Upper Deschutes Watershed Council
Rex Barber, Water for Life
Doug DeFlitch, Bureau of Reclamation
Victor Chudowsky, City of Bend
Brad Houslet, Confederated Tribes of Warm Springs Reservation
Dave Dunahay, Central Oregon Flyfishers
Tom Bennett, Natural Resources Conservation Service

MEMBER ATTENDANCE BY PHONE

Kimberley Priestly, **WaterWatch**
Bridget Moran, **U.S. Fish and Wildlife Service**
Russ Rhoden, **Ochoco Irrigation District**
Scott Carlon, **National Oceanic and Atmospheric Administration**
Betty Roppe & Mike Kasberger, **City of Prineville**
Chris Gannon, **Crooked River Watershed Council**

MEMBER ATTENDANCE BY EMAIL/PHONE AFTER THE MEETING

Jason Gritzner, **US Forest Service**

Member Organizations Not Present:

Arnold Irrigation District
Bend Paddle Trail Alliance
City of La Pine
City of Madras
Deschutes County Soil and Water Conservation District
Lone Pine Irrigation District
Oregon Department of Environmental Quality
Oregon Land and Water Alliance
North Unit Irrigation District
Tumalo Irrigation District

Also Attending:

Salem Opeifa, Oregon Water Resources Department (phone)
Gail Snyder, Central Oregon Land Watch

Owen McMurtry, GSI Water Solutions
Scott Nelson, Riviere Des Chutes
Lisa Seales, Oregon State University, Cascades Campus
Brandon Mahon, Anderson Perry & Associates
Jim Powell, Citizen
Chandra Ferrari, Trout Unlimited (phone)
Lauren Mork, Upper Deschutes Watershed Council
Pamela Thalacker, Three Sisters Irrigation District
Jonathon LaMarche, Oregon Water Resources Department
Jeremy Giffin, Oregon Water Resources Department
Harmony Burright, Oregon Water Resources Department
Yancy Lind, Citizen
Midge Graybeal, Anderson Perry
Dustin Pomeroy, Oregon State University

In addition, **Mike Relf**, Bureau of Reclamation Basin Study Project Manager, Bureau of Reclamation, attended by phone. **Niklas Christensen**, Water Professionals Network Technical Director attended. **Kate Fitzpatrick**, Deschutes River Conservancy, attended as Process Coordinator.

AGENDA

The group used the following agenda as a guide:

1. Welcome, introductions, and minutes
2. Basin Study Information
3. Study Element Updates
4. Middle Deschutes and Whychus Creek Temperature-Flow Assessments
5. Basin Study Scope & Evaluation
6. Communications Update
7. Oregon Spotted Frog Update
8. Public Comment:
9. Next steps

WELCOME, INTRODUCTIONS, AND MINUTES

Kate welcomed everyone to the meeting and began introductions. Chair Craig Horrell could not make the meeting and asked Kate to lead it.

- Approval of minutes of March 1st meeting (distributed via email on March 15th) **ALL GREEN CARDS.**

BASIN STUDY INFORMATION

Kate reminded the group that all information being generated in the Basin Study is DRAFT until it undergoes Technical Sufficiency Review by the Bureau of Reclamation. She relayed concerns from stakeholders that draft information may be taken out of context and used against them (e.g. in court). She urged members to recognize that emerging information is draft and to caveat any use of it as such.

STUDY ELEMENT UPDATES (FEDERALLY-FUNDED)

Bureau of Reclamation: Mike Relf

- Climate projections are complete, pending the tech memo.
- Hydrology/Groundwater Modeling: The working group had a call March 29.th GSFLOW should be available this month.
- Update/Develop Water Resource Model: updates are ongoing; technical webinar on Riverware is being scheduled; flow-temperature relationships will be assessed using a post-processing approach; baseline model configuration is to be developed.
- Reclamation staff is engaged in task-specific input/review on:
 - Upper Deschutes Ecological Assessment: Scott Willey
 - Crooked River flow-temperature assessment: Clyde Lay
 - Crooked River tasks: snotel and diversion measurement; rule curve analysis will likely take place in a parallel but separate Reclamation Pilot Study.
 - Reservoir optimization: coordination with GSI
- Storage Assessments: The two-phase approach is underway
 - Phase I inventory of structural storage opportunities- a draft was sent to the working group March 14th; refinements are underway to facilitate evaluations.
 - Qualitative evaluation of opportunities- draft criteria was sent to the working group March 14th; refinements underway.
 - Updated inventory/criteria will be distributed along with a doodle poll to set a meeting date for the working group to evaluate concepts.
 - Next steps: Determine one concept for Phase II assessment in Deschutes; define scope/approach for Phase II in Whyhous and the Crooked.
 - Discussion of how we obtain more information on sites once we have the short list. Mike said he expects there is some existing information about the ones that rise to the top as priorities. He is also currently having the sites located on a map with GIS, so we can understand specific locations of sites.

STUDY ELEMENT UPDATES (STATE-FUNDED)

Niklas Christensen, Watershed Professionals Network

Water Conservation Assessment #1 (Anderson Perry)

- Draft literature reviews handed off to Farmers Conservation Alliance (FCA)
- Some details to be added by Niklas/FCA, finalized mid-summer

Water Conservation Assessment #2 (Farmers Conservation Alliance)

- Black Rock Consulting is developing hydraulic models for each district
 - FireWhat has developed a mobile GIS application to verify delivery gates to patrons and make sure it all ties into the system accounting.
 - LIDAR: 2 districts have adequate LIDAR, three were just flown and three more will be flown in the fall.
- Black Rock (with SWCD, OWRD and others) is developing a water loss measurement program.

Alan asked how the FCA work is going, and if all is on-track. Discussion included:

- Jer said they could use help with loss assessments due to the sheer volume needed. They are thinking about getting interns trained up in partnership with OWRD and COCC.
- Jonathon asked what approach they were using for loss measurements. Jer said mainly the use of a Doppler boat and getting some people trained with water measurement certification.
- Concerning the LIDAR, Jer reported that TSID is already done and OID is assessing whether what they have is adequate. SID, TID and AID were just flown with half-mile buffers around mainlines and laterals. This should be in-hand by May 12th. They are contracting to fly COID, NUID and LPID when the water shuts off in the fall.
- After the LIDAR is flown and the models are built, the systems will be modeled. The model assumes that the systems are piped 100%.
- Discussion of how COID had NUID will be modeled on that timeline if LIDAR won't be flown until late fall. Jer said COID has FODAR that was developed a while ago that they may be able to use.
- Niklas noted that he hopes to see the approach for the on-farm assessment in more detail by the end of the month. He noted that we do have some money left in the WCA#1 scope, and the \$50K scope reserve if we need to fill in gaps.

Upper Deschutes Ecological Assessment (River Design Group/HDR)

- Niklas expects to see the HSC memo by mid-April.

Middle D/Tumalo and Whychus Temperature Assessments (UDWC)

- UDWC presented results to working group March 10th
- UDWC finalized the memo based on input.
- UDWC is presenting at today's meeting.

Legal, Policy Economic Assessment (GSI)

- Task 1: Summary of existing water use: revised draft memo based on comments received. Sent to working group. Will be distributed to BSWG and posted on BOR website.
- Task 2: Evaluate opportunities for stored water and reservoir management: underway
- Task 5: Evaluate legal/policy issues for new/expanded storage: draft memo circulated to working group.
- Task 6: Evaluate opportunities and impediments with groundwater mitigation: underway.

Legal, Policy Economic Assessment (Ecosystem Economics)

- Task 1: Desired Outcomes and Evaluation Criteria: presented to BSWG Feb 2nd, revised approach memo to Kate/Niklas March 29th. Planning team to work on further refining, will be presented to BSWG summer 2016.
- Task 7: District financial information; gathered data from districts, preliminary analysis underway. Evaluation of opportunities to lease water: Willingness to Pay/Willingness to Accept survey under development.

Crooked Temperature Assessment (Watershed Professionals Network)

- DBBC in contracting with PSU.

WHYCHUS CREEK AND MIDDLE DESCHUTES RIVER TEMPERATURE ASSESSMENTS

Niklas described how the temperature assessments fit into the Basin Study. The temperature-flow assessments identify the regression equations that best describe the relationship between streamflow, air temperature and stream temperature. These are then incorporated into the water resources modeling (in this case through post-processing in Riverware), and provide information about how different water resources and climate change scenarios affect stream temperatures, informing the evaluation of scenarios.

Lauren Mork, with the Upper Deschutes Watershed Council, walked through the methods, data and findings (details in presentation attached and in the Tech Memo distributed.).

Discussion included:

- It is good to have a larger range of variability in the data used (for example, there was a significant increase in instream water between 2000 and 2014 in Whychus Creek).
- Ryan explained that this is not a model in the descriptive sense, but a description of the data as they actually existed. It can help us understand the relationship between variables, but does not represent precision at any point.
- Noted that it is odd that in the Middle Deschutes, the best regression fit is in July, while August and September are not good. There could be a number of other variables affecting stream temperature in those months.
- In Tumalo Creek, July is the best fit, while no relationship is discernible in October.
- The scenarios run through Riverware will change flow and temperature at three nodes. These regression equations should then describe the temperature outputs, which can be used as evaluation criteria.
- Suggestion to be clear in the memo about how we are going to use this, and how we could build on it.
- DEQ is in the process of collecting data this year that will be used to develop QUAL2Kw models for the Deschutes River between Wickiup and Lake Billy Chinook and the Little Deschutes River. In the future, we could tag this work to some of those kinds of robust processes underway.

BASIN STUDY SCOPE AND EVALUATION

Kate described the ongoing process for soliciting feedback from the BSWG on the Basin Study.

- Evaluation sheets are distributed at each BSC meeting. Feedback is documented in the minutes.
- Specific evaluation questions were asked on the eval form at the February meeting.
- This past month, Kate solicited specific BSWG feedback via email on two documents;
 - 1) a document describing Niklas/Kate's best understanding of the Basin Study scope and where the desired scope elements show up in the current study elements; and
 - 2) a "report card" on how the Basin Study is progressing.

Two people responded to this feedback request. Input included:

- Concerns with an apparent foregone conclusion that piping is THE answer. Make sure we are looking at:
 - On-farm
 - On-demand management
 - Enhanced patron education
- Irrigation Districts should be recognized and applauded for the work they have been doing (clarification: this came from a non-irrigator).
- Suggestion to capture the economics of avoided legal costs.

Kate relayed that Niklas and she spend a lot of time thinking about whether the Basin Study is capturing everything the Plan of Study intended and whether it is progressing as successfully as possible. They are very interested in hearing from any group members at any time; there is an open invitation for feedback.

COMMUNICATIONS UPDATE

As per the process agreed upon by the BSC, the BSWG now has a finalized PowerPoint presentation and communications brochure. Shon, Kate and Adam presented to the Deschutes Basin Board of Control April 4th and will be presenting to each district board over the next couple months. Other BSWG and/or related public meetings include:

- April 28th: 11:30-1 PM, LaPine lunch water forum sponsored by Tony DeBone (Ryan will give a 10 minute info item on BSWG)
- May 2nd: Tower Theatre, 6 PM Scott Nelson film on the Upper Deschutes and multi-stakeholder panel in development.
- May 10th: public event at SHARC in Sunriver; BSWG presentation and multi-stakeholder panel; organized by Jeff Wieland and the Communications Subgroup.
- May 17th: “What’s Brewing: the frog and the river”. 5-7 PM. Sponsored by Bend Chamber of Commerce. Stakeholder panel.
- Jer added that Swalley/COID are hosting Earth Day hydro tours, 10-Noon at their facilities.

OREGON SPOTTED FROG UPDATE

Bridget Moran gave a brief update on legal/regulatory issues associated with the Oregon spotted frog (by phone). In the case of the lawsuit brought by EarthJustice and Center for Biological Diversity, Judge Aikens denied the preliminary injunction request for immediate relief measures. The case will continue to move on. The Judge will require/request mediation, and all parties have signaled an interest in doing so. No schedule has been set yet. The Confederated Tribes of Warm Springs Reservation and the State have joined the case as an amicus.

The districts are releasing 600 cfs below Wickiup by April 1 to assist with spring breeding. Related to the Habitat Conservation Plan, US Fish and Wildlife Service and NOAA are working diligently with the applicants to put a framework together this year. Districts are seeking technical

input to help advise them. The basic structure will be a series of milestones at increments, with adaptive management built in. The ultimate goal is to put more water back instream and use the water we have as efficiently as possible. The main question is, how fast can we implement conservation efforts to restore flows in Deschutes? Bridget noted that the fish-related pieces are coming along nicely as well.

PUBLIC COMMENT

There was no public comment.

NEXT STEPS

The next meeting is May 3, 2016 from 10-Noon. Location is Deschutes County DeArmond Room.

Meeting adjourned by Kate Fitzpatrick..

MEETING EVALUATION

Members were provided forms on which to write one piece of feedback about what they liked about the meeting, indicated below with a plus symbol (+), and one piece of feedback about what they would like to change for the next meeting, indicated with a delta symbol (Δ). Each check mark (✓) indicates that someone repeated an item. The following comments were received.

| + | Δ |
|--|---|
| <ul style="list-style-type: none">• Temperature update from Lauren• Good presentation | <ul style="list-style-type: none">• More people in person rather than on the phone• More info on how we will use the model |

ATTACHMENT 1: BSC ACTIVE MEMBERS LIST

From Section 3.a of the Charter: “If a member organization does not participate in decision-making at two consecutive meetings by attendance or by email (see 4.a.vi), that organization cannot participate in decision-making until after it participates at two of the prior four meetings.”

| Organization | 11/30/15 | 2/2/16 | 3/1/16 | 4/5/16 |
|------------------------------------|----------|--------|--------|--------|
| Arnold Irrigation District | P | P | P | |
| Avion Water Company | P | P | P | P |
| Bend Paddle Trail Alliance | | | | |
| Central Oregon Cities Organization | P | P | P | P |
| Central Oregon Flyfishers | P | P | P | P |
| Central Oregon Irrigation District | P | P | P | ? |
| City of Bend | P | P | P | P |
| City of La Pine | P | P | | |
| City of Madras | P | P | | |
| City of Prineville | P | P | P | P |

| Organization | 11/30/15 | 2/2/16 | 3/1/16 | 4/5/16 |
|---|-----------------|---------------|---------------|---------------|
| City of Redmond | O | O | P | P |
| Confederated Tribes of Warm Springs | P | P | | P |
| Crooked River Watershed Council | P | P | P | P |
| Deschutes County | | | P | P |
| Deschutes County Soil & Water Cons. Dist. | | | | |
| Deschutes River Conservancy | P | P | P | P |
| Lone Pine Irrigation District | | P | P | |
| Native Reintroduction Network | O | O | P | P |
| Natural Resources Conservation Service | O | P | | P |
| North Unit Irrigation District | P | | P | |
| Ochoco Irrigation District | P | P | P | P |
| Oregon Department of Agriculture | P | P | P | P |
| Oregon Dept. of Environmental Quality | O | P | | O |
| Oregon Land and Water Alliance | | | O | O |
| Oregon Water Resources Department | P | P | P | P |
| Portland General Electric | P | P | P | |
| Swalley Irrigation District | P | P | P | P |
| Three Sisters Irrigation District | P | P | P | P |
| Trout Unlimited | P | P | P | P |
| Tumalo Irrigation District | O | O | O | |
| U.S. Bureau of Reclamation | | P | P | P |
| U.S. Fish and Wildlife Service | P | P | P | P |
| U.S. Forest Service | O | P | | O |
| Upper Deschutes River Coalition | P | P | P | P |
| Upper Deschutes Watershed Council | P | P | P | P |
| Water for Life | P | P | P | P |
| WaterWatch of Oregon | O | P | P | P |