Basin Study Work Group (BSWG) Steering Committee Meeting
January 6, 2015 1:00 to 4:00 pm
DeArmond Room, Deschutes Services Building, 1300 NW Wall Street, Bend OR 97701

ATTENDANCE (SEE ATTACHMENT A FOR ACTIVE MEMBERS TRACKING)

**Member Representatives Present**
Arnold Irrigation District: Shawn Gerdes
Avion Water Company: Mark Reinecke
Central Oregon Flyfishers: Dave Dunahay
Central Oregon Irrigation District: Craig Horrell
City of Bend: Adam Sussman (also Technical Co-Coordinator)
City of Redmond: Bill Duerden
Crooked River Watershed Council: Chris Gannon
Deschutes River Conservancy: Tod Heisler
Lone Pine Irrigation District: Chris Louis
North Unit Irrigation District: Mike Britton
Ochoco Irrigation District: Mike Kasberger
Oregon Department of Environmental Quality: Bonnie Lamb
Oregon Water Resources Department: Kyle Gorman
Portland General Electric: Bob Spateholts
Swalley Irrigation District: Suzanne Butterfield
Three Sisters Irrigation District: Marc Thalacker
Tumalo Irrigation District: Ken Rieck
U.S. Bureau of Reclamation: Doug DeFlitch
U.S. Fish and Wildlife Service: Nancy Gilbert
U.S. Forest Service: Jason Gritzner
Upper Deschutes Watershed Council: Ryan Houston
Upper Deschutes River Coalition: Jeff Wieland

**Member Alternates Present**
City of Prineville: Eric Klann
Deschutes River Conservancy: Kate Fitzpatrick (also Process Co-Coordinator)
Oregon Department of Environmental Quality: Smita Mehta (by telephone)
Three Sisters Irrigation District: Pamela Thalacker
Trout Unlimited: Herb Blank
U.S. Fish and Wildlife Service: Peter Lickwar and Jennifer O’Reilly

**Member Organizations Not Represented**
Bend Paddle Trail Alliance
Central Oregon Cities Organization
City of Madras
Deschutes County
Native Reintroduction Network
Natural Resources Conservation Service
Water for Life
WaterWatch of Oregon

**Also Attending**
Bea Armstrong, Deschutes River Conservancy
Phil Chang, Office of U.S. Senator Jeff Merkley
Jeremy Giffin, Oregon Water Resources Department (presenter)
Jonathan La Marche, Oregon Water Resources Department (presenter)
Paul Lipscomb, Oregon Land and Water Alliance
Salem Opeifa, Oregon Water Resources Department
Steve Shropshire, Jordan Ramis PC, representing DBBC
In addition, Mike Relf, Basin Study Lead from the Bureau of Reclamation (Reclamation), attended the meeting. Mary Orton and Anne George, The Mary Orton Company, LLC, attended as facilitator and note-taker, respectively.

**AGENDA**

The group used the following agenda as a guide during their meeting:

1. Welcome, self-introductions, and meeting minutes
2. Policy regarding requests for BSC membership
3. Education: Hydrological and Water Right/ Legal Constraints in the Upper Deschutes Basin
4. Plan of Study Development
5. Public Comment
6. Next Steps
7. Meeting Evaluation

**WELCOME, INTRODUCTIONS, AND MINUTES**

Suzanne opened the meeting and welcomed everyone. She mentioned there were new member organizations to the Steering Committee and welcomed Herb Blank from Trout Unlimited to the meeting. BSC members in attendance and others in the room introduced themselves.

Members reviewed the minutes of the November 3, 2014 meeting, and agreed unanimously to approve them.

Mary said there was a new policy, suggested by the Planning Team and noted on the agenda, that anyone in the room who wished to speak would be called on by the Chair or Facilitator, and that usually Steering Committee members would be called on first. She also reminded members about the active members policy in the Charter that states that if a member misses two meetings in a row, the member cannot participate in decision making until the member attends two of the last four meetings. She asked members to review the Active Members Tracking Sheet for any errors. She noted the Active Members Tracking Sheet would be attached to the minutes of each meeting. (See Attachment A.) She reminded new members that they would not be eligible to participate in decision-making until they had attended two of the last four meetings, and she encouraged them to actively participate in discussions even if they could not participate in decision-making.

Nancy said she hoped the group would not be so structured. She said she felt the process was time intensive and hoped there could be some flexibility. She hoped that when important decisions arose and someone had missed a meeting they would be allowed to participate. Mary reminded members that the provisions for attendance and decision-making were in their Charter, and they could change it if they wished. She also reminded them that, per the Charter, they could always participate after the meeting (indicating a “virtual” red, yellow, or green card for decisions made) and be counted as participating.

**POLICY REGARDING REQUESTS FOR BSC MEMBERSHIP**

Mary asked members to review the draft policy regarding requests for BSC membership (see Attachment B) and invited discussion. Discussion included the following points:

- I would not want a cap on membership, but it is important to limit the size of the group because of the capacity of most meeting rooms.
I like that the policy encourages anyone interested in membership to make the effort to learn about what the group had already done before they would be considered for membership.

Guests who participate regularly would in effect show interest and the group would likely need to work with those guests, regardless of whether they were members or not. It would be valuable to have them as members as the BSC seeks consensus.

The policy should specify the intent is to include those who showed sustained interest in the process.

It is important to pay attention to organizations or ideas that were not represented at the BSC. Requests from these organizations should be given strong consideration.

In answer to a question about individual memberships, Mary reminded the group that the BSC Charter specifies that only organizations are members of the Steering Committee. Mary also clarified that the list of active members was comprised of those who were invited, per the Charter, and responded affirmatively that they wanted to become a member. It was noted that Oregon Fish and Wildlife (among others) had declined membership in the Steering Committee.

**CONSENSUS:** The group agreed by consensus (all green cards) that Mary would develop language in the new member policy to include the following concepts, and send the new language to the group:

- with the intent of being inclusive of people who demonstrate commitment to the issues, and
- pay particular attention to organizations not represented.

**EDUCATION: HYDROLOGICAL AND WATER RIGHT/LEGAL CONSTRAINTS IN THE UPPER DESCHUTES BASIN**

Jonathan La Marche and Jeremy Giffin from the Oregon Water and Resources Department (OWRD) provided the group with information about the hydrology of the Upper Deschutes Basin and the water rights and legal parameters associated with the management of the basin. (See Attachments C and D.)

**Hydrology of the Upper Deschutes Basin, Oregon: Jonathan La Marche, OWRD**

Jonathan presented a PowerPoint presentation entitled “Hydrology of the Upper Deschutes Basin, Oregon.” He said that most of the slides and data are from five hydrology reports from the U.S. Geological Survey (USGS) and OWRD. He explained (slide 2) that the flow of the Deschutes River is remarkably stable, especially when compared to other rivers in the United States of similar size. Its hydrology is also unique. The Oregon Water Resources Department (OWRD) defines the Upper Deschutes Basin (slide 3) as beginning at the drainage above the Madras gage and including the irrigated lands around Madras served by the North Unit Irrigation District (NUID). It does not include the Ochoco Creek or Crooked River systems. Most of the water for the basin originates as precipitation from the Cascade Range (slide 4), which receives more than 100 inches of precipitation per year. By contrast, Redmond receives less than nine inches.

The Cascade Range (slide 5) has very young, permeable volcanic centers to the north and east (i.e., the Upper Deschutes River), with less permeable formations at the Clarno section of the John Day River and the Columbia River basalts (i.e., the Upper Crooked River). The permeable volcanics are thinner toward the lower part of the drainage. As the river crosses the permeable volcanic rock,
water seeps into the groundwater system. Irrigation canals (slide 6) are also dug into this permeable rock, and they lose about 50 percent of their water into the groundwater system.

There are very few streams coming off the Cascades into the Deschutes Basin (slide 7), despite the high precipitation in the Cascade Range, because water directly enters the groundwater system. Groundwater recharge (slide 8) happens at Tam MacArthur Rim and the Three Sisters Range as well as through the canal systems around Newberry and Prineville. Stream gaging (slide 9) shows that much of the water surfaces near the confluence of the Metolius, Crooked, and Deschutes rivers. Opal Springs (more than 1,000 cfs) is one of the largest spring systems in the United States, as is the Metolius. A large amount of recharge in the higher elevations bypasses streams and flows back into the drainage network at the confluence. Less permeable rock acts similar to an underground dam and (slide 10) prevents groundwater from continuing as the volcanic rock thins from the southwest to the northeast. Looking at a cross section from the Three Sisters from west to east at the confluence of the Deschutes and Crooked Rivers, the formations are incised down into the water table as they run into less permeable rock at the Clarno section of the John Day. A transection from north to south near the headwaters shows the deposits thin and the groundwater is forced to the surface. This is demonstrated downstream of the Hollywood Grade on the Crooked River where springs flow from the canyon walls.

Mapping the regional water table (slide 11) shows the groundwater flow directions. The “whale diagram” (slide 12) developed by Bob Main 25 years ago shows that flows vary from the headwaters as they go downstream, with the thickness of the line corresponding to the amount of flow. This diagram describes natural streamflow without reservoirs or distribution. Flows in August and December are very similar and responses to storm events are muted.

The Reclamation “teacup diagram” (slide 13) shows the anthropogenic influences on hydrology and streamflow from reservoirs and diversions. The upper Crooked River (above the reservoirs) does not have a robust groundwater system because of its geology. Water from the Crooked River into the Prineville or Ochoco Reservoirs in the summer months may be as small as 10 cfs, while the Deschutes River flows remain consistent in August. Irrigation districts return water to the Crooked River around Prineville and large springs feed the lower Crooked River.

The “whale” diagram showing storage and diversions (bottom of slide 14) compared to natural flows (top of slide 14) shows the obvious effect of those changes to the system. There have been considerable restoration and conservation efforts near Bend that have increased flows in the Deschutes River (slide 15) as well as Whychus and Tumalo Creeks. Before these efforts, those creeks would often run dry, while now they have year-round flow.

While storage and use have obvious impacts, the effects of groundwater pumping (slide 16) are less evident. When groundwater is pumped, less water flows into streams. As part of the mitigation program to counter the effects of pumping, users are required to put an equal amount of water instream. The amount of water is so large at Lake Billy Chinook it is difficult to notice the effect of groundwater pumping, particularly relative to the climate signal.

Canal leaks (shown in dashed lines on slide 17) peaked in the late 1950s and early 1960s. Increased leakage matched increased flows at Opal Creek and elevated the flow above natural conditions because water taken from the Deschutes River is returned to the Crooked River. There are also local return flows that change the regional system.
Jonathan summarized his presentation (slide 18) with the following points?

- The basin’s hydrogeologic setting consists predominately of young geology.
- There are incredibly stable (groundwater dominated) flows in the Deschutes River.
- The upper Crooked River is runoff dominated.
- There are significant groundwater/surface water interactions.
- Changes in surface water and groundwater management affect streamflow both directly and indirectly.

He noted that some of the changes referenced in the last bullet will be obvious, and some will not. USGS and Reclamation groundwater models help managers and users understand the system and manage it efficiently. He offered several useful links (slide 19), as follows:

- This presentation: http://filepickup.wrd.state.or.us/files/uploads/for_deschutes/
- USGS reports: http://or.water.usgs.gov/projs_dir/deschutes_gw/pubs.html
- Flow data from Reclamation: http://www.usbr.gov/pn/hydromet/destea.html
- Near Real Time Hydrographics Data from OWRD: http://apps.wrd.state.or.us/apps/sw/hydro_near_real_time/
- Historical Streamflow and Lake Level Data from OWRD: http://apps.wrd.state.or.us/apps/sw/hydro_report

In answer to a question about how long it takes to see effects of diversions, Jonathan said that through particle tracking, managers could determine that the water is reduced, but more important to management is the pressure effect. As an analogy, when a hose is full of water and a person turns on the water at the spigot, there is an immediate response of water at the end of the hose. Opal Springs, he said, would respond to the climate cycle, in high and low water years, in tens of years, despite being old water.

Peter asked if the other water (besides the 700-1000 cfs that flows to Opal Creek) was old water. Jonathan replied that water in upper Opal Springs contains tritium (so it is at the most 70 years old), while the lower springs do not contain tritium (i.e., at the least, it is older than 70 years). He added that did not mean that the system was not affected by upstream action because of the pressure impact response.

Water Management in the Upper Deschutes: Jeremy Giffen, OWRD

Jeremy Giffen, Deschutes River Watermaster for OWRD, made a PowerPoint presentation on water management on the Upper Deschutes Basin (slide 1). He said there was a common misconception that OWRD released water from the reservoirs without a scientific basis. He said the process was, in fact, quite complicated and there were strict parameters (slide 2) within which they were required to manage the water. For example, while the natural flow of the Deschutes River in Bend is 1,300 or 1,400 cfs, homes in Tumalo would be flooded if water were released at that level. Every drop of water is held by some entity with a water right. The inter-district agreement of 1938, signed by four parties who are members of BSWG, directs OWRD on how to regulate Wickiup and Crane Prairie reservoirs.

OWRD makes judgment calls on the interpretation of the regulations through policy memos on issues that adjudication does not cover. The gage network is extensive and with 50 gages, it has more
than any other basin in Oregon. The system is heavily monitored and OWRD knows what water is coming in and where it is going. The department relies on prediction tools for planning including NRCS data.

In any day, the OWRD must account for hundreds of instream water rights that have varying seasons, rates, and duties. Each day a different amount of water needs to be in the Deschutes River below Bend. Irrigation districts may request a different amount of water every day of their season. OWRD regulates and tracks every drop of water throughout the year. Their storage report shows the water irrigation districts took and how it should have been distributed. This information directs their distribution of water. Monthly manager meetings help with the management function. With more than 100 years of watermaster experience in the department, the department is able to manage or advise in various situations, including assisting the City of Bend when flooding occurred on the Deschutes River the prior week.

Crescent Lake (slide 3) has 1911 and 1961 water, and holds more water than all the rest of the storage in the basin combined. Historically, there was a voluntary minimum release of 5 cfs, which is now formalized to support the fishery. There is now 645 AF released each year for instream flows from Crescent to Bend, in addition to the 5 cfs minimum. Crescent Lake has a small drainage for a large storage facility. The water is in the lake for an average of 13 years. Releases can take up to five days to reach Bend. This delay can cause difficulties when Tumalo Irrigation District (TID) needs water.

OWRD works to account for wet and dry cycles (slide 4), as it can take several wet cycles to fill the lake or several dry years for it to empty. He said OWRD was more efficient now in their distribution methods and as a result less water is wasted.

Crane Prairie Reservoir (slide 5) is a Reclamation reservoir maintained by Central Oregon Irrigation District. The watermaster and districts have become more efficient throughout the year and there is a stable pool in the reservoir. The metric on the left of the water level chart (slide 6) is acre-feet. They try to keep a minimum pool for the fishery. OWRD does not run the reservoir over the spillway anymore, as it was not built for that. They know the level in real time.

Wickiup Reservoir (slide 7) holds 200,000 AF of 1913 water rights for North Unit Irrigation District, which supplements NUID’s live flow right. The live flow right is senior to either reservoir. By paying attention to the snotel sites and predicting snow levels, they can release more water than the minimum (20 cfs) as needed. There is a 300 cfs instream water right below the dam.

The Reclamation safe channel capacity is 3,000 cfs, although no more than 1,800 cfs can be released. A full time dam tender allows OWRD to make more changes than they did historically. Working with the districts, if a rainstorm is likely, the watermaster will release less water in anticipation of reduced district demand. This allows a higher pool. A release of 1,800 cfs is rare, and they do not usually go to 20 cfs as the dam leaks as much as that.

The average reservoir elevation (slide 8) has been rising despite dry years. The low points (troughs) are higher today. Despite recent droughts, they have been able to fill the reservoir with 200 KAF because of better water management and irrigation district conservation. Over the last five water years (slide 9), OWRD has managed the reservoir so it reaches its capacity on April 1 in anticipation
of irrigation season. Historically, the water was drafted down more. (The "AVG Storage" line on this graph includes the entire period of record.)

The 1938 inter-district agreement (described on slide 10) required Crane Prairie Reservoir to be rebuilt in exchange for the federal government building Wickiup Dam. In the winter, OWRD is able to maintain constant flows from Crane Prairie to Wickiup. The two reservoirs (slide 11) are slowly filled at the same time. At the beginning of the irrigation season, releases set based on the rights and needs of the irrigation districts and the reservoirs’ levels.

Instream water rights (slide 12) have various priority dates and amounts in the different reaches.

The monthly storage report (slide 13) is an important management tool. Losses from evaporation in Crane Prairie and Wickiup are calculated as well as all protected water. OWRD informs water right holders of their storage account for the water year starting on September 1. Through the monthly storage report, OWRD accounts for every drop of water that is allocated, and ensures that the right water right is deliver to the right people and the accounts reflect who uses what. This ensures that no one exceeds their water rights and the department checks every day that the gage does not go above a water right. The natural flow is calculated, and is delivered first until it is gone, and then storage accounts are used. The upper basin reservoirs are managed as one pool, allowing, for example, for TID to receive water more quickly if necessary. All accounts are balanced by the end of the season. In addition, if the Little Deschutes River flows are increasing, the watermaster can reduce the amount of Deschutes River water, so when the water arrives at the confluence, it is at the correct flow amount.

In response to a question about what the storage looks like before the annual rebalancing each year, Jeremy replied that it depended if any district needed to utilize their full storage accounts. OWRD works to return the system to balance as soon as possible, so one irrigation district does not owe another.

In response to a question, Jeremy said there is no excess storage capacity in existing facilities on the Upper Deschutes River, because they are filled to capacity and are not drained completely. He said that in wet years, storage rights could exceed actual need, but the accounting for each district resets to zero at the end of each season. Jonathan remarked that if OWRD emptied the reservoirs, it would reduce the probability that they could be filled in the next season, particularly in the event of a dry year. He said the carry water was very important as insurance.

Kate mentioned through the DWPI process, Reclamation and OWRD conducted modeling on the impacts of letting additional water out. She said she would send that presentation to the group.

In answer to a question, Jeremy said OWRD projects whether the following year was likely to be a dry year, though there was risk in doing so. They have many years of data. They try not to micromanage on a daily basis, but they communicate with the districts when looking at the weather.

Mary remarked that the BSC had not had many of these types of educational presentations and suggested that if members liked it, or had ideas for additional educational opportunities, to include that information on their meeting evaluations. Peter said that he would like a similar presentation on the Crooked River.
Kate remarked that one of the tasks of the Plan of Study was reservoir optimization. She suggested members think about how changing constraints at the reservoirs could contribute to optimization. She said the Whychus Subgroup would be delving deeper into these issues at their next meeting.

**PLAN OF STUDY DEVELOPMENT**

**Schedule and Draft Chart**

Adam introduced the development of the Plan of Study (POS), which is required before the Reclamation Basin Study grant can be utilized. He did not want to discuss budgets and tasks in detail at this meeting. He would offer some context on the work done thus far and describe how the process would move forward. He would also discuss what needed to be accomplished by the subgroups, where the detail will be discussed.

Adam said the presentations introduced the necessary work of the BSWG Steering Committee. They discussed what is known, what tools exist to make changes, and what regulatory constraints exist. Adam suggested there were ways to overcome some of those constraints. He said that all three legs of the stool—water providers, irrigators, and instream—needed to benefit at the same time if changes in water management were to be accomplished.

He explained that the task list would be used in the POS to identify additional information that was needed. He offered the example of the lack of data on what the ecological benefits of having additional water in the Upper Deschutes might be if the instream water right of 300 cfs were to be met or exceeded.

Adam said Kate had been working with the different subgroups to develop the task tables (see Attachment E), which the members reviewed. Most of the tasks were created by the subgroups, including additional information needed, and some were required to be accomplished in a Basin Study.

Adam explained that the dollar amounts in bold text on the table included estimated costs for tasks that reached across all of the subgroups. These amounts were not included in the totals at the bottom of each subgroup page.

He indicated that Tasks 17 through 21 comprise the difficult work of trade-off analysis required by the Basin Study. This will show relative advantages and disadvantages for various scenarios that will be created by the group and tested in the analysis, in order to resolve the existing water supply imbalances among the instream, provider, and irrigator sectors. The POS development would focus on the following:

- How to take information that existed and that the study would gather and create scenario and planning packages to benefit all three sectors.
- How the tools to measure the planning packages would be used to ensure that all three sectors benefitted.
- How one change or a combination of changes impacted one sector or all sectors.

Adam said the Deschutes Subgroup discussed these items at length and the Whychus and Crooked subgroups would be discussing their specific tasks in upcoming meetings. He hoped the subgroups would have defined the tasks by the end of January. Adam said the BSC would discuss a refined
draft table at its meeting in February. He said they would continue to incorporate the direction the members wanted in these documents.

Adam noted there were more dollars assigned to the Deschutes Subgroup proposed tasks than the proposed tasks of the Whychus and Crooked subgroups. The current figures indicated a plan that was under budget (less than $1.5 million), but when the three subgroups had completed their work, it was likely the tasks would be over budget. He said the BSC would refine the proposed tasks and budget, starting in February. Adam said information from Reclamation is still needed to complete the POS, and sequencing of tasks—an important part of the POS development—would be influenced by the availability of Reclamation staff.

Mike Relf clarified that the Memorandum of Agreement (MOA) that DBBC will sign with Reclamation will include the POS, and will describe who will do the work (study team) and an idea of a budget. Then, the budget is refined as proposals are submitted to actually do the work and the group has an idea of the real budget numbers. The BSC will be involved at every step, and the document today does not need to be in detail, as it will change as time goes on. He said the group would want a change management plan to provide policy for how changes would be approved.

Kate asked what level of detail was needed by March. Mike responded that the level of detail of the draft table was higher than that of other basin studies he was familiar with. He said this basin was different in that a much work had been completed already, so the Reclamation template might not be helpful. The challenge will be identifying the remaining needs and prioritizing them. He said the group needed conceptual agreement on tasks and costs.

Adam said BSWG would have access to the Reclamation team only after the MOA is signed. Kate and he will push for details from each subgroup on budget, sequencing, and staffing to minimize the need for future changes. He said the Planning Team hopes the POS would be completed by the end of March.

Mike said he had alerted the Reclamation team members who would likely be involved about the process. The BSC should define its priorities so the Reclamation can identify resources and availability.

Mike said that while there was no hard deadline, Reclamation recommends six months for POS development, and the study period would be two years from the signed contract, plus one year to finalize the study.

Dave suggested that the climate change work start immediately because it would take a long time and much would have to follow it in sequence. Mike responded that he would find out what key analyses still needed to be done. Mary reminded the group that Reclamation could not release any funds until the POS and MOA were signed. Mike also noted that the Reclamation had a pre-approved list of contractors, which would result in a shorter proposal process than a full RFP process.

Adam said he anticipated the climate change analysis would begin in April and be completed in July. He said he shared Dave’s concern and hoped the POS process would move quickly through the subgroups this month as they discussed the issues. Adam suggested the following schedule:
• Subgroups finalize task lists this month.
• Adam finalizes draft scheduling and budgeting this month.
• Communication and Outreach Plan completed by the end of January.
• Draft POS fifty percent completed by the end of January, including draft structure for how the BSC would meet in future months.
• Completion of the text of the MoA and POS in February.
• Completion of a full document for the BSC to review including tasks and structure in March.

Adam suggested the BSC might need to create some smaller work groups. Suzanne remarked that the group would need a project manager and someone to assist with the contracts. She said she would welcome a volunteer from BSWG because the team wanted to minimize the amount of money spent on project management. Adam remarked that on the last page of the draft chart there was budget for project management and administration. He said Reclamation might require a line item there as well for review of contractor work and other items.

**Communication and Outreach Plan (COP)**

Mike Relf said that Kate had emailed the draft COP to members. The draft was developed from an earlier effort toward a Basin Study in this region in 2010 and 2011, which Adam had updated. The Planning Team, he said, had not yet discussed the key messages of the plan specific to this Basin Study. Outreach and how information was shared with and received from the public were of significant importance. He asked members to review the draft and forward input to Kate. The Planning Team and Reclamation would review it. He said there would be additional opportunities to discuss the COP.

Suggestions included the following:

- **Suzanne:** The plan contains good ways to communicate with the public, but lacks information on how the group would solicit input from the public. The group should do one or two well-publicized presentations each year until the study was completed, with an emphasis on gathering feedback.
- **Ryan:** It might be helpful to reframe the first few bullets of the draft COP to highlight more explicitly the plan to balance the priorities of water providers, irrigators, and instream advocates. The Charter might contain some language on this topic.
- **Herb:** I agree that there needs to be more solicitation of input from the public. Also, page three of the draft needs to include outreach meetings that would be held across the area in Bend, Prineville, and elsewhere. People need a chance to comment during the process, rather than at the end.
- **Bea:** I am responsible for communications for the Deschutes River Conservancy. The consistency of the platform and message needs coordination. The study needs a social media plan and platform to connect with the public. Information that would be presented by BSWG, DRC, or an irrigation district needs a consistent platform that the entire group could agree to with high-level bullets so every presentation was consistent. The DRC had contracted with a specialist located outside of this basin and that he was versed on the basin and balanced.
- **Mary:** Another group I worked with had a communications manager from each organization that helped with the communications effort.
- **Kyle:** The hiring of a communications professional would be one strategy.
- **Craig:** The DRC Communications Committee, which includes Tod, Craig, and others, had discussed this topic at length. They had tried to sum up the basin in five minutes and found it
very challenging. Bea and other professionals had been very helpful in the process and he had suggested that the group lean on some of its partners.

- Herb: The COP needs to mention non-commercial farmers, in addition to commercial farmers.
- Tod: The group needed to think about whom they want to reach. After the Water Summit of 2006, the DRC had collected great information, but did not have the time to educate potential funders and those responsible for public policy changes. Outreach needs to target very specific constituents. He would be interested in working with a small task force to identify key people to bring into the process. Members of the public that were not versed in water management issues could be provided with information to answer three key questions:
  1. What was the problem?
  2. Why should they care?
  3. What did the group propose to do about it?

Tod handed members a proposed Key Messages for the Deschutes Basin Study document he drafted. See Attachment F. He said he did not expect everyone to agree with his draft and that he was offering it as a straw man. He said the group would need consensus on what key messages would be shared with the public and how that would be accomplished. As the study progressed, the group could update its key messages based on findings. Comments on Tod’s draft included:

- Adam: The group should be careful about using specific numbers in the materials.
- Mark: In educating the public, it does not seem necessary to compare and contrast the quantitative differences in needs between the river, drinking water, and agriculture, and doing so may cause confusion. The differences clearly exist but specifically identifying and quantifying them seems unnecessary for purposes of public outreach and it may be perceived as a value judgment as currently written.
- Tod: The magnitude of difference among the numbers highlighted that the challenges to the river were large. He said each leg of the stool was important, but they were greatest on the river.
- Suzanne: It minimizes the irrigation districts to say their goal for the basin study was solely financial stabilization. It was more than that for the districts.
- Doug: The key messages document Tod drafted may be more of a fact sheet. Numbers could be provided on a flyer or on a website, rather than a key messages document.
- Mike Relf: Reclamation is working with the Planning Team on a fact sheet that would be included on the website. I agree that the information Tod compiled would be useful as a fact sheet.
- Jeff: Instead of using the term “interested organizations,” the term “restoration groups and community organizations” should be used.

Mike Relf said that the basin study required the group to meet the minimum standards for a COP, but a more detailed COP would benefit the project. Reclamation, he said, had public relations people who could assist. They have resources, including video production. The costs for their work would come out of the budget.

Suzanne said she would take the suggestion of the development of a subcommittee to handle public involvement to the Planning Team and bring back a proposal to the BSC. Adam said he thought the Planning Team might be able to develop the COP to address concerns and that a subgroup would also be needed.
**PUBLIC COMMENT (occurred earlier in the meeting during COP Discussion)**

Paul Lipscomb, Oregon Land and Water Alliance, asked if the group was interested in measuring exempt wells. Kyle replied they were. Adam said it was not an identified task on the POS and that a work group had discussed this. Adam said the information existed and Kyle had it.

Paul replied that there seemed to be a sensitivity to measuring exempt wells, but no action. He said he sought a solution to the problem and that many people with exempt wells were not aware of how much water they were using. Adam said estimates existed.

**ANNOUNCEMENTS**

Adam announced that Danielle McBain had taken a new position and would not be working with GSI anymore. He said they had a few people they would pull into the BSWG project.

Dave said he noticed Oregon Department of Fish and Wildlife was not on the list of members. Kate replied they would continue as an advisory to the BSC, but had decided not to serve as a decision-making member of the BSC.

**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 endorsed a previously mentioned item. The following comments were received.

<table>
<thead>
<tr>
<th>+</th>
<th>Δ</th>
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<tr>
<td>Very informative educational item(s). Would like to see more.</td>
<td>More open discussion and dialogue.</td>
</tr>
<tr>
<td>Jonathan and Jeremy’s presentations.</td>
<td>Getting too formal. Less formality could encourage more robust participation.</td>
</tr>
<tr>
<td>Water resources presentations provided excellent background information.</td>
<td>I would like copies of the slides used in the two water presentations, which were very good and timely.</td>
</tr>
<tr>
<td>The water discussion.</td>
<td>Start with the hard hitting subjects then taper off to soft subjects. Format the agenda better.</td>
</tr>
<tr>
<td>The PowerPoint presentations were great!</td>
<td>Similar information (presentation) on roles of water quality and habitat quality would be useful.</td>
</tr>
<tr>
<td>Great talks.</td>
<td>Please schedule a presentation on Crooked River hydrology and law, including the recent Crooked River legislation.</td>
</tr>
<tr>
<td>Presentations by Jonathan and Jeremy were very helpful in getting folks on the same page.</td>
<td>Need to have a list that recognizes the Warm Springs Tribes as a participant. Just make it explicit.</td>
</tr>
<tr>
<td>Education component was worthwhile.</td>
<td></td>
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<tr>
<td>Informational presentations were excellent. Please do more.</td>
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<tr>
<td>The presentations by OWRD and the Watermaster were great!</td>
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<tr>
<td>Time management – kept meeting on track.</td>
<td></td>
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<tr>
<td>Agenda detail, participation from everyone, finishing on time.</td>
<td></td>
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<tr>
<td>Ended a little early.</td>
<td></td>
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<tr>
<td>Started good discussion on Communication and Outreach Plan and tension around messaging.</td>
<td></td>
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</tbody>
</table>
+ Good structure.
+ Group knows each other, which helps more every time.
+ Cookies.

Δ Facilities were not sufficient. Too crowded and much too warm.
Δ (Nothing noted.) ☑️☑️☑️☑️
Attachment A: BSC Active Members List

<table>
<thead>
<tr>
<th>Organization</th>
<th>8/1/14</th>
<th>9/23/14</th>
<th>11/3/14</th>
<th>1/6/15</th>
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<tr>
<td>Arnold Irrigation District</td>
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<td>Avion Water Company</td>
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<td>Central Oregon Cities Organization</td>
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<td>Central Oregon Flyfishers</td>
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<tr>
<td>City of Bend</td>
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<td>Deschutes County</td>
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<td>Lone Pine Irrigation District</td>
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<td>Tumalo Irrigation District</td>
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<td>U.S. Bureau of Reclamation</td>
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<td>U.S. Forest Service</td>
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<td>Upper Deschutes River Coalition</td>
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<td>Water for Life</td>
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</table>

**Otherwise participated in decision-making - documentation**

May 2014: Chris Gannon participated in decision-making after the meeting via email.
Sept 2014: Chris Gannon participated in decision-making after the meeting via email.
Attachment B: Draft New Members Policy Considered January 6

In the interest of maintaining a Basin Study Work Group (BSWG) Steering Committee (BSC) that is balanced in membership and an effective size, the BSC will address requests for membership in the BSC as follows:

1. Anyone interested in membership in the BSC will be
   a. sent the Charter for review,
   b. invited to attend and participate as non-members in BSC meetings, and
   c. offered a briefing on what the BSC has accomplished so far.

2. No new members will be invited to join the BSC until the Communication and Outreach Plan (COP) is approved and it is known what type of outreach and public input will be part of the Basin Study.

3. Once the COP is approved and those interested in membership have attended a few meetings, if they continue to express interest in membership, the BSC will develop a process for considering new members.
Attachment C - Hydrology of the Upper Deschutes Basin, Oregon: Jonathan La Marche, OWRD
Attachment D: Water Management in the Upper Deschutes: Jeremy Giffen, OWRD
Attachment E: Draft Task Tables
# Attachment F: Key Messages for the Deschutes Basin Study,
Suggestions from Tod Heisler (01/06/15)

| 1. What problems are we trying to solve? | • Commercial farmers, cities, and rivers in Central Oregon face key water supply challenges which are projected to get worse under expected climate change.  
• The most significant water imbalance is suffered by rivers which need an estimated 160,000 acre feet annually to achieve minimum streamflow standards.  
• Commercial farmers holding junior water rights are confronted by water supply uncertainty, particularly in dry years. The farmers’ water security could be greatly improved by gaining access to additional 55,000 acre feet of water.  
• The imbalance between supply and demand for the drinking water needs of urban communities is relatively small at only 15,000 acre feet but is of critical importance. |
|---|---|
| 2. Why do we care? | • Improve conditions for fisheries, wildlife, recreation and aesthetics while also addressing the financial stability of the Basin’s irrigation districts and their patrons.  
• Assure drinking water supply.  
• Support agricultural and quality of life based economies. |
| 3. What are we going to do to address them? | • The Deschutes Basin study will develop, analyze and model alternative strategies for addressing these three important water imbalances.  
• The most important outcome of the study and its consensus process is reaching agreement among Basin stakeholders on a suite of actions that can be taken to eliminate the imbalances as part of a comprehensive water management plan. |