Basin Study Work Group (BSWG) Steering Committee Meeting  
September 23, 2014, 1:00 to 4:00 pm  
DeArmond Room, Deschutes Services Building, 1300 NW Wall Street, Bend OR 97701  

ATTENDEES  
The following people attended the meeting:  

Mike Britton, North Unit Irrigation District  
Suzanne Butterfield, Swalley Irrigation District  
Bill Duerden, City of Redmond  
Dave Dunahay, Central Oregon Flyfishers  
Shawn Gerdes, Arnold Irrigation District  
Nancy Gilbert, US Fish and Wildlife Services  
Kyle Gorman, OR Water Resources Department  
Jason Gritzner, Deschutes National Forest  
Tod Heisler, Deschutes River Conservancy  
Bill Hopp, Tumalo Irrigation District  
Craig Horrell, Central Oregon Irrigation District  
Ryan Houston, Upper Deschutes Watershed Council  
Mike Kasberger, Ochoco Irrigation District  
Bonnie Lamb, OR Dept. of Environmental Quality  
Jonathan LaMarche, OR Water Resources Dept.  
Peter Lickwar, U.S. Fish and Wildlife Service  
Chris Louis, Lone Pine Irrigation District  
Kimberley Priestley, WaterWatch of Oregon  
Mark Reinecke, Avion Water  
Ken Rieck, Tumalo Irrigation District  
Adam Sussman, City of Bend  
Pamela Thalacker, Three Sisters Irrigation District  
Mike Tripp, Trout Unlimited  
Alan Unger, Deschutes County Commissioner  
Jeff Wieland, Upper Deschutes River Coalition  

Visitors included Bryan Black, HDR, Inc.; Mark Bransom, CH2M HILL; Phil Chang, U.S. Senator Jeff Merkley’s office; Niklas Christensen, Watershed Professionals Network and project manager with the Hood River Basin Study; Danielle MacBain, GSI Water Solutions, Inc.; Salem Opeifa, Contract Specialist, Oregon Water Resources Department; The Honorable Les Perkins, Hood River County Commissioner and Chair of the Hood River Basin Study; Jim Powell; and Steve Shropshire, Jordan Ramis PC, representing the Deschutes Basin Board of Control (DBBC).  

In addition, Mike Relf, Basin Study Lead from the Bureau of Reclamation attended the meeting. Mary Orton, The Mary Orton Company, LLC, attended as Facilitator; Kate Fitzpatrick, Deschutes River Conservancy, attended as Process Co-Coordinator; and Anne George, The Mary Orton Company, attended and took notes.  

AGENDA  
The group used the following agenda as a guide during their meeting:  
1. Welcome and self-introductions  
2. Minutes of August 1, 2014 meeting  
3. Presentation on Hood River Basin Study – Les Perkins and Niklas Christensen  
4. Overview of the Plan of Study Process and Timeline – Mike Relf  
5. OWRD Perspective on OWRD/DBBC Grant Agreement – Salem Opeifa  
6. Charter  
7. Professional Services Agreements with DBBC  
8. Subgroups Reports  
9. Next Steps  
10. Meeting Evaluation  

WELCOME AND INTRODUCTIONS  
Suzanne opened the meeting and welcomed everyone. She offered an apology to Kimberley Priestley and to the BSWG Steering Committee (BSC) members for having offered a too-quick
response to Kimberley about communication with Reclamation at the August BSC meeting. She also clarified that in her view, anyone participating with the BSWG could speak with anyone about anything, including Reclamation and OWRD staff. She also clarified that when the draft Charter says that DBBC is the official point of contact with Reclamation and OWRD, that is referring to communication regarding funding agreements with those agencies.

Suzanne introduced Mike Relf, Bureau of Reclamation (Reclamation) Study Lead and Salem Opeifa, the Oregon Water Resources Department (OWRD) Contract Specialist. Mike and Salem provided some background about themselves.

Suzanne also introduced the Honorable Les Perkins, Hood River County Commissioner and Business Development Director, Farmers Conservation Alliance, who served as the Chair of the Steering Committee for the Hood River Water Basin Study, and Niklas Christensen, Water Resources Engineer, Watershed Professionals Network, who led the study in coordination with OWRD and Reclamation.

Other attendees introduced themselves.

MINUTES OF AUGUST 1 MEETING

CONSENSUS: The group approved the minutes by consensus with no additions or changes.

PRESENTATION OF HOOD RIVER BASIN STUDY

Les and Niklas presented on the background, process, and findings of the Hood River Basin Study. Les said that the first three years of the Hood River stakeholders’ work together were fairly unproductive. They sought out studies that needed to be done but were not clear on how to proceed once they had completed and analyzed these studies. He indicated they needed outside funding to proceed with the work that needed to be done. The group was awarded $250,000 in in-kind services from Reclamation and received matching funds from OWRD. In addition to the expertise from Reclamation and funding from OWRD, Les emphasized they needed a project manager with technical expertise to work closely with Reclamation and make sure the stakeholder group’s interests were represented. Niklas served as that technical project manager – and also produced some of the studies – while Les handled the political aspects of the project.

Niklas provided an overview of the study. (See Appendix 1 for his PowerPoint presentation.) The following items were created and integrated into a water resources model (MODSIM) by Reclamation (slide 4):

- Water use assessment: potable, irrigation, hydropower, and instream water rights – led by stakeholder group with OWRD funding (slides 5-13)
- Water conservation assessment: potable and irrigation – led by stakeholder group with OWRD funding (slides 14-17)
- Water storage assessment – led by Reclamation (slides 18-20)
- Climate change models (surface water) – led by Reclamation (slide 22)

The climate change/surface water model (Distributed Hydrology Soil Vegetation Model, or DHSVM) was for the period 2030-2060, and studied the snowmelt-driven system in the Hood River basin.
In addition, they performed some instream flow studies, but these were not integrated into the MODSIM model. Also, the groundwater modeling resulted in too much uncertainty to be included in the water resources model. The groundwater/surface water connectivity is not well understood; these are data still needed in the basin. Les emphasized that this was not ideal; all studies performed should have been part of the same water resources model.

The water resources model (MODSIM) simulates water management in the basin. They tested and calibrated the model (slides 23-24). They developed three different climate scenarios to test with the model (slide 25): more warming dry, median, and less warming wet.

The climate change model was the most complex and it was difficult for lay people to follow. This is another good reason to have a project manager at the table on behalf of the stakeholders. They found that they would have more rain than snow, so their natural reservoir would be eliminated; however, glacier melt would mask the climate change impacts for 50 years.

In answer to a question about MODSIM vs. Riverware models (OWRD uses both in the Deschutes River basin), they chose MODSIM because they wanted a model they could update and use over time and MODSIM was less expensive to maintain.

They generated various water management scenarios to examine (slide 31):
- “Base” is the historic record.
- “Existing” includes projected climate change impacts.
- “Demands” includes Existing plus increased demands for potable and irrigation purposes.
- “Conservation” includes Existing and Demands, plus water conservation efforts.
- “Storage” includes Existing, Demands, and Conservation, plus existing and new storage. (Les noted that the discussion on additional storage was controversial, but the group finally agreed that everything should be on the table.)

They used these scenarios to determine impacts on streamflows (slides 32-37 and 40-41), on irrigation and potable water shortages (slide 38), and storage volumes (slide 39).

In answer to a question, Les indicated native and threatened species were taken into account in their work. He added that climate change modeling was the most challenging part of the project; they worked diligently to make sure they were using the best modeling types and bringing the most highly qualified experts to the table.

Ryan asked if the Hood River team sought instream targets or if they were outcomes of the research. Les indicated that they did not want to establish instream targets in advance because they felt the members would have the same disagreements they have had for twenty-five years. They looked at models of what could be done, and they focused on how much water could be produced, regardless of how much water stakeholders might want for instream targets. Discussing instream targets will happen now that they have more data. Kimberley commented that the group could put targets in the study and show impacts on irrigation districts with a deficit model.

Adam asked why the group showed the instream water rights if targets were not established. Les replied that instream flow and instream water rights were always a part of the conversation, even if they did not set instream goals.
Niklas recommended that the BSC spend time considering how an instream flow incremental morphology (IFIM) study could inform alternatives as well as determine targets. The results, including impacts on fisheries, need to be part of the integrated report at the end of the study. He suggested that to integrate the studies, the IFIM should point to optimal stream flows. He also recommended that someone needed to read all the studies that come from the Basin Study.

Les indicated that they had subgroups, including an instream group, and they had “scope creep” because they could not do everything they wanted. He recommended that the BSC spend time thinking about how to focus on specific areas and species. Hood River chose five reaches and four species (slide 43). Niklas cautioned that everyone would have different interests and work should not be done on a species or reach that few care about. He suggested the group look at critical species and habitat, and do an area-weighted suitability (AWS) study to create an index of habitat and to show optimal habitat for certain species during critical life stages (slides 48-58). That work could inform management alternatives, and doing them separately might not be productive. Niklas then commented that their Basin Study ended with the IFIM report (slides 44-58), but he was concerned that it was very detailed and technical, almost overwhelming, and there was no clear plan on who would review the report and make sure the recommendations were implemented. He also indicated that while their IFIM focused on velocity and depth, it did not include the important variable of temperature.

Kimberley commented that instream, municipalities, and agriculture were the three legs of the stool in this work, but that the Hood River Basin Study seemed focused on agriculture and municipalities. Les replied that they had talked about instream flows and habitat needs and that the IFIM quantified the instream needs at different times of the year. Their goal was to look at quantitative information and then afterward look at what could be done for instream flow. Tod commented that he thought the BSWG was trying to do these tasks together rather than separately. Les replied that the Hood River group wanted to see what the data would tell them, especially as they considered spending millions of dollars on piping or habitat. They wanted to proceed in the most cost-effective way with cost measured in dollars per cfs.

In answer to a question, Les said that the subgroup chose PHABSIM as the input to the IFIM study and that other models were not considered. He added that per SB 839, consideration of new storage areas now requires an IFIM study. Their IFIM cost $100,000, plus an additional $20,000 for a technical consultant to integrate resulting information with other data.

Niklas reviewed the potential actions (slide 59) with the savings in cfs, the cost, and the cost per cfs. He said that they should include a column that would show benefits. He noted that on-farm conservation is inexpensive and they would be focusing there first. He reviewed the recommendations (slide 60) that the group had agreed to. Les added that the group had received a grant to develop a water conservation strategy that would be used to analyze their findings and help them decide how to proceed.

In answer to a question about a monitoring component, Les replied they have a groundwater monitoring component only. That had expanded from ten to sixty wells around the County with OWRD supporting the cost. He added their experience is that grant proposals become much more competitive after the data from the Basin Study were collected.
Kate asked if the basin has instream leasing. Les replied that irrigation districts have looked at putting water instream, but adequately priced water was an issue. He added that the Basin Study helped because the scenarios indicate the price for water per cfs.

Mike Relf asked if they had any thoughts on balancing the in-depth, hands-on technical work of technical team members with maintaining the involvement of the larger group of stakeholders. Les replied that the larger group generally received updates at the end of a study. The technical details were the purview of the consultant and Reclamation, and Niklas spent a year making presentations and doing outreach. Les heard from the irrigation districts often, while Niklas would reach out to the Tribe and ODFW.

Steve asked how the baseline level of data was defined, and how they would prioritize adding to the scope and data collection. Les replied that they were mostly a cohesive group that agreed what was lacking, and that coming up with that initial design was not difficult. He said they agreed that if they were to get mired down talking about what data they wanted, they might not get anywhere.

**OVERVIEW OF THE PLAN OF STUDY PROCESS AND OUTLINE**

Suzanne reported that the Planning Team had a productive and useful meeting that morning with Salem Opeifa and Mike Relf, and that they offered an overview of issues in the basin.

Mike Relf, Reclamation Study Lead, said that he would be closely engaged in the Upper Deschutes Basin Study process and would work with the BSC lead. While Doug DeFlitch and Dawn Wiedmeier could not be here today, he said that they too would be fully engaged. He said he does not have all of the answers but he understands the resources in Reclamation and how to access them.

He reviewed the requirements of the program, including the need to address these key points (as attached to the agenda):

1. Projections of water supply and demand within the basin, or improvements on existing projections, taking into consideration the impacts of climate change.
2. Analysis of how existing water and power infrastructure and operations will perform in the face of changing water realities such as population increases and climate change.
3. Development of structural and nonstructural options to improve operations and infrastructure to supply adequate water in the future.
4. A trade-off analysis of the options identified and findings and recommendations as appropriate. Such analysis simply examines all proposed alternatives in terms of their relative cost, environmental impact, risk, stakeholder response, or other attributes common to the alternatives. The analysis can be either quantitative or qualitative in measurement.

The outcomes of the Basin Study can vary based on need and will include an updated assessment of water needs and demands, climate change impacts, and future needs, followed by a collaborative plan for addressing those needs.

He noted that the contract is for a 50/50 cost share. There is a requirement for quarterly reports, and he would coordinate with the state to ensure the reporting would be the same for both contracts. Reclamation is required to complete the study three years from the date the MOA is signed. Within these parameters of the program, there is a lot of flexibility.
The first step for the BSC is development of the Memorandum of Agreement and the Plan of Study, which should take about six months. This defines the cost-share agreement, and will include scope, schedule, and budget. During that process, BSC and Reclamation will define key outcomes, how to obtain them (who will do what), and how to evaluate them. He said a strong focus on these items, and adequate time spent early during the development of the Plan of Study, would maximize the value of the Basin Study.

Mike noted that while the current federal budget climate is not particularly favorable for large-scale projects, creative funding approaches have been identified in other basins. Even in this environment, those involved in Basin Studies could obtain good value by examining what can be done in the most cost-efficient way.

In terms of roles, they would decide what Reclamation would do and what the BSC would take the lead on during the development of the Plan of Study. Reclamation has the resources and expertise to empower the BSC to get the results they want and stay within scope. Reclamation will provide climate change modeling, including simulations and analysis. His job is to keep the project on budget and on schedule and get the BSC what they need.

He acknowledged that much great work and collaboration has already been done in the basin, so the group would build on the past and focus on agreed-upon outcomes.

Kyle asked how much input the BSC and Reclamation would have on the Plan of Study development. Mike responded that he was not the decision-maker but he would coordinate with Doug DeFlitch on Reclamation’s input. The BSC should develop the Plan of Study by consensus. He will let the group know if they are going outside the Basin Study parameters.

Suzanne commented on the volume of work that had been accomplished over the past ten to fourteen years, and asked how they might eliminate the need to spend grant money to ensure there is agreement on those studies. She wondered whether the BSC should consider asking someone to read them and provide a synopsis. Tod suggested that had been the reason for creation of the Subgroups. He suggested that instead of seeking consensus on each study, the BSC could come to agreement on items where there was currently no consensus, such as instream flow goals. Tod said he hoped the Subgroups would inform the BSC whether a study was sufficient or needed to be redone.

Phil commented that in the Hood River Basin Study, the consultant played an important role as a liaison between Reclamation and the stakeholder group. He asked if Mike had a recommendation on how the consultant might do this effectively. Mike responded that a committed project manager serving as a representative for the group would be a good outcome for the BSC to consider. He commented that they might not need someone as technical as the Hood River consultant, and that the necessary qualifications of that position would emerge in the Plan of Study. Ryan commented that it seemed important to have someone technically proficient to understand the need for linkages when they integrated the recommendations or findings at the end of the study. He added that it would be important to ensure the consultants communicated with one another. Mike added that it would make sense to pay for the project manager from the State funds since the position would be a counterpart to the Reclamation study lead.
Dave suggested that the budget should have a contingency amount so money did not need be sought later for work that still needed to be done.

Jonathan LaMarche commented that the Hood River basin has fewer conflicts and less competition for water. He added that work done in the Upper Deschutes basin was well developed and it seemed that this project would start with more data than the Hood River Basin Study. For example, the Upper Deschutes already has a water management model and a hydrology model; they just need to be updated and integrated.

Jeff commented that the BSC should spend the time needed to complete an MOA and Plan of Study that were complete, so there was no need to rush at the end to fit something in. Mike agreed, and also noted that the BSC should be careful because if it takes too much time, it could consume too much of the available resources. He noted that the Plan of Study did not need to include all the details. Mary noted that they had spent a year in Subgroups developing ideas of what the BSC might want in the study, so they would not be starting with nothing.

Bill asked if Reclamation had a draft budget that might offer a template of how the BSC might allocate funding. Mike said the BSC could look at other budgets and the percentages allocated for different tasks, and also referred to the budget in the BSWG proposal. Bill suggested that the BSC not spend too much on the Plan of Study. Mike noted that Reclamation would not begin to spend its dedicated resources until the MOA is signed.

**OWRD PERSPECTIVE ON OWRD/DBBC GRANT AGREEMENT**

Salem said that OWRD would provide $750,000 in project funding from the State through Senate Bill 839, and he would work with the DBBC on that funding agreement. This is the first project to be initiated from this funding source so it was a new process for his department. He indicated OWRD would incorporate the MOA and Plan of Study budget in its agreement with the DBBC. OWRD would request the same information as Reclamation for invoicing, while the budget would be different because administrative costs would probably be funded by the State. His role would be to make sure all activities are consistent with the rules.

He indicated that OWRD had processed a $75,000 advance (ten percent of the grant) for the BSC to begin work on the MOA and Plan of Study. Craig reported it had been received and deposited by DBBC. Salem said that while Reclamation can take three years for the project, the State’s contract ends June 30, 2017. Adam said that in his conversations with OWRD, extending the funding authorization could be done if necessary, though it would take some work.

**CHARTER**

Suzanne noted that the Charter was on the agenda for final approval, and called on Tod to explain a change that the Planning Team had discussed that morning. Tod reported that they felt the BSC should simplify the structure of the BSWG. He proposed:

- That irrigation, instream, and municipal interests continue to meet separately as caucuses (not as Subgroups).
- That the existing Subgroups by reach – Whychus Creek, Upper Deschutes, and Crooked River – continue because they are the best venues for reviewing and making recommendations to the BSC for each sub-basin. Also, the Subgroups could define themselves as they wished and outcomes might not look identical from group to group.
  - All three sectors would continue to be represented on each Subgroup.
All ideas would be vetted by these three Subgroups.
The details of recommendations would be developed at the Subgroup level.
There would be no surprises at the BSC level.

- That the Groundwater, Deschutes Instream, and Crooked Instream Technical subgroups be eliminated.
  - This reduces the number of formal meetings while allowing all three sectors to caucus as necessary and prepare for the Subgroup and BSC meetings.
  - Subgroups could appoint subcommittees, if they wished, that would work on specific tasks.
  - The members of the Groundwater Subgroup would continue to meet until their technical task is completed, and could regroup as needed.
  - Subcommittees of Subgroups would not constitute formal Subgroups, and would have no requirements for notices and minutes.

(See Appendix 2 for the handout Tod distributed illustrating his recommendation.)

Tod said that this proposal would give members more flexibility, reduce redundancy of meetings, and allow Subgroups to vet issues before they bring them to a BSC meeting. He also encouraged all members of the BSC to talk with others informally to review proposals and garner support and improvements for ideas.

In discussion, the group agreed that there was no strict prohibition against bringing an idea first to the BSC; however, their intent is to discuss and improve recommendations at the Subgroup level before they are considered by the BSC.

**CONSENSUS:** The group approved the Charter by consensus (all green cards) with the following changes (underlining is new language and strike-through indicates deleted language):

- **Section 2.e.ii:** “The three current Subgroups are Upper Deschutes Basin, Deschutes Instream Flow, Groundwater, Whychus Creek Basin, and Crooked River Basin, and Crooked Technical Instream Group.”

- **Section 2.e.iii:** “Subgroups can create and disband subcommittees and technical committees.”

- **Section 6.b:** Delete 6.b.ii, and include language that indicates that Subgroup meetings are open to the public.

**PROFESSIONAL SERVICES AGREEMENTS WITH DBBC**
Suzanne introduced a proposal that, for the purpose of developing the Plan of Study, the BSWG would continue to have Adam Sussman and Danielle MacBain of GSI as Technical Co-Coordinator, Kate Fitzpatrick of the DRC as Process Co-Coordinator, and Mary Orton and staff of The Mary Orton Company as Facilitator. This work would occur under a contract through DBBC.
She added that the DBBC wanted the BSC approval before they executed the Professional Services Agreements (PSAs), because the Charter notes that those three positions are “appointed by the Steering Committee.” She also offered to share the PSA language with the group.

She also said that the Planning Team felt that $70,000 was reasonable for the development of the Plan of Study. While the State had not set that number as a limit, she asked for BSC feedback on that number.

Dave asked how the Project Manager fit into the $70,000 budget. Suzanne clarified the current discussion was regarding the Plan of Study period, and a Project Manager, if hired, would be for actual Basin Study work. Whether a Project Manager would be hired would be decided during the development of the Plan of Study.

Adam clarified that, in his role as Technical Co-Coordinator, he would be working for the benefit of the entire BSC and not solely for the benefit of a client. Kate added that the DRC would add funds to support Kate and Mary’s time because the proposed budget was probably not sufficient for the scope of work.

**CONSENSUS:** The BSC approved by consensus (all green cards) that, for the purpose of developing the Plan of Study, the BSWG would continue to have Adam Sussman and Danielle MacBain of GSI as Technical Co-Coordinator, Kate Fitzpatrick of the DRC as Process Co-Coordinator, and Mary Orton and staff of The Mary Orton Company as Facilitator. This work would occur under a contract through DBBC.

**CONSENSUS:** The BSC agreed by consensus (all green cards) that $70,000 would be sufficient for development of the Plan of Study.

Tod asked Kate and Adam to provide an early warning if there were budget issues during the development of the Plan of Study, and suggested to BSC members that they needed to be diligent in developing the Plan of Study so it would be completed within budget.

**SUBGROUPS REPORT**
Kate reported the Deschutes Subgroup met on September 10. Craig, Deschutes Subgroup Chair, said that they were trying to frame several approaches, and they would continue to work through them. He added they were waiting to hear back from the instream group. Kate indicated she would send out a meeting summary, and the approaches would be introduced to the BSC.

Kate also reported that:
- a groundwater work group was formed to fill out the matrix of existing and needed mitigation credits, and she would share it with the BSC when it was completed;
- the Crooked River Subgroup meeting is scheduled for October 20, and
- the Whychus Subgroup has not met.

**NEXT STEPS**
The Planning Team will meet soon to develop the next BSC agenda. The goal is to move into Plan of Study development. Mary invited the group to send Kate or her any other proposed agenda items. She commented that the BSC agreed at its August meeting to share goals at the September meeting, but the agenda was full. She hoped that would happen in the October meeting or soon thereafter.
Tod commented that he hoped that Subgroups would meet before the next BSC in order to advance their discussion on expectations, goals, and outcomes.

Adam commented that, with Mike Relf’s help, he would like to develop some structure on how the BSC would develop the Plan of Study through the Subgroup recommendations.

**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). The following comments were received.

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<tr>
<th>+</th>
<th>Δ</th>
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<tr>
<td>It was very helpful to hear from the Hood River study people.</td>
<td>Let Alan sit at the table.</td>
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<tr>
<td>Hood River presentation.</td>
<td>More seating.</td>
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<tr>
<td>Presentation by Hood River folks.</td>
<td>ODFW should have a representative.</td>
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<tr>
<td>The presentation.</td>
<td>Hashing out sentences a bit too long.</td>
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<tr>
<td>We finished the Charter!</td>
<td>Treats?</td>
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<tr>
<td>The Charter was approved.</td>
<td>I like that we were all on the same</td>
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<tr>
<td>Expedition of the Charter.</td>
<td>page about open communication. 😊</td>
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<tr>
<td>Charter was approved and lots of work completed.</td>
<td>Everything went fine.</td>
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<tr>
<td>All agenda items were addressed and decided.</td>
<td>None: pretty smooth.</td>
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<tr>
<td>Tod really helped to encourage people to talk and what the reporting lines are.</td>
<td>It’s working.</td>
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<tr>
<td>Coffee, facility, agenda volume.</td>
<td>(Nothing noted.)</td>
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<tr>
<td>Very good.</td>
<td>(Nothing noted.)</td>
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The meeting adjourned.