

Yellowstone Basin Advisory Council Montana Water Supply Initiative Summary Report--Phase 2 January 31, 2014

Introduction

The Yellowstone Basin Advisory Council (BAC) was convened in March 2013 as part of a statewide water planning effort also known as the Montana Water Supply Initiative. The Montana legislature directed the Department of Natural Resources and Conservation (DNRC) to update the State Water Plan. The results of the planning effort will be presented to the 2015 Montana legislature.

The DNRC established a three-phase process to develop water planning recommendations for the State Water Plan using local Basin Advisory Councils for the state's major watersheds—the Clarks Fork, Missouri, and Yellowstone. The interests on the Yellowstone Basin Advisory Council include; agriculture, conservation, economic development, industry, municipalities, recreation, and first nations.



Yellowstone Basin Advisory Council Chair, Mack Cole, opening the November 2013 meeting
(Photo courtesy of Chuck Dalby)

The Yellowstone BAC concluded its work on Phase 1 (scoping and issue development) in September 2013. A final report on Phase 1 was produced to conclude that phase. The work in Phase 1 set the stage for Phase 2, Information Transfer—which began in November 2013.

Phase 2 Activities

The Yellowstone BAC met twice in Billings, on November 14-15 and December 13, 2013, to complete the work of Phase 2. The technical analyses phase was designed to provide the BAC members with the most current science and information on the topics of importance identified by the Phase 1 scoping. This was accomplished by inviting technical experts on the various issues to make presentations to the BAC and be available for follow-up questions and discussion. The presentation topics covered during this phase were initially identified by DNRC staff based on the results of Phase 1 and then approved by the BAC members.

The BAC members heard presentations from state and federal experts, legal and non-profit interests, and an experienced on-the-ground water commissioner. Taken together, the presentations provided everything from a scientific background to practical advice on what is working on the ground now, and thoughts on enhancing water management in the future. The overarching topics addressed were; water administration, reallocation tools, and drought management; climate science and water information tools; water quality and beneficial use; reservoir operations, tribal compacts, and the hydrological effects of present-day water development; instream flow programs; groundwater-surface water nexus; and the executive and legislative process for recommendations.

Yellowstone Basin Advisory Council Technical Presentations

Date	Speaker	Topic
11/14/2013	Peter Marchi, Chief Water Commissioner	Musselshell Water Distribution Project
11/14/2013	Mike Roberts, Hydrologist Montana DNRC	Water Management and Candidate Conservation Agreements
11/14/2013	Jennifer Schoonen, Blackfoot Challenge Water Steward	Blackfoot Drought Response Plan
11/14/2013	Patrick Byorth, Attorney, Trout Unlimited	Instream Flow Leasing and Forbearance Agreements
11/14/2013	Chuck Dalby, Hydrologist Montana DNRC	Introduction to Climate Science and Policy Development in Other States
11/14/2013	Greg Pederson, Climate Scientist U.S. Geological Survey	Yellowstone River Basin Climate: Past, Present and Future
11/14/2013	Troy Blandford, Water Information System Manager, Montana State Library	Montana's Water Information System
11/14/2013	Peter McCarthy, Hydrologist U.S. Geological Service	StreamStats-an Internet Accessible Hydrological Statistics Application for Hydrologists, Engineers, and Water Right and Water Quality Specialists
11/14/2013	Rusty Merritt, President Geospatial Solutions, Inc.	Water Information Systems for Irrigation District Operations
11/15/2013	Jill Frankforter, Hydrologist U.S. Geological Survey	Water Quality in the Yellowstone, A Basin-wide Perspective
11/15/2013	Mark Ockey, Water Quality Specialist, Montana DNRC	TMDLs and Beneficial Use Criteria in the Yellowstone
11/15/2013	Jim Bauder, Professor Emeritus MSU-Bozeman	Water Quality, Soils, and Beneficial Use in the Tongue and Powder River Basins

Date	Speaker	Topic
11/15/2013	Lenny Duberstein, Chief Planner U.S. Bureau of Reclamation Montana Area Office	Water Planning for Federal Reservoir Operations in the Bighorn Basin
11/15/2013	Clayton Jordan, Engineer, U.S. Bureau of Reclamation Montana Area Office	Bighorn Reservoir Operations
11/15/2013	Doug Ollerman, Engineer, U.S. Bureau of Reclamation Great Plains Regional Office	Status of the Crow Water Compact
11/15/2013	Chris Murray, Hydrologist, U.S. Bureau of Reclamation Great Plains Regional Office	Missouri River Depletions Model
11/15/2013	Kathy Chase, Hydrologist, U.S. Geological Service	Streamflow Statistics for Unregulated and Regulated Conditions for the Yellowstone River
12/13/2013	Tim Davis, Division Administrator Montana DNRC Water Resources Division	Executive and Legislative Process for Recommendations
12/13/2013	John LaFave, Montana Bureau of Mines and Geology	Aquifers, Wells, and Groundwater Use
12/13/2013	Tim Bryggman, Economist Montana DNRC	Economics of Water Resources
12/13/2013	Andy Brummond, Fishery Biologist Montana Fish, Wildlife, and Parks	Instream Flow in the Yellowstone River Basin

The BAC did not develop any formal input during Phase 2. Input from the BAC will come in the form of the recommendations in Phase 3. There was brief discussion following the presentations and during selection of the issues to advance for recommendations. The BAC discussed among other topics:

- the importance of information from monitoring,
- the difficulty of placing a monetary value on the water resource,
- the amount and use of water for fracking,
- water quality and the relationship between water quality and quantity,
- the roles of the various agencies in water management (DNRC, DEQ, etc.),
- the tools available for instream flow protection, their uses, and some of their limitations,
- the impacts of climate change on water availability,
- the benefits of local watershed groups,
- the water information that is currently available to the public,
- the operations of Yellowtail Dam in the Bighorn watershed,
- what to expect with the Crow Compact settlement,
- the relatively minor impact of groundwater withdrawals (for all uses) compared to surface water uses on water availability,
- the artificial aquifer situations created by human activity, and
- the need for communication on water management between Montana and Wyoming (especially in the Tongue watershed.)



Attorney, Patrick Byorth, addresses the Yellowstone Basin Advisory Council
(Photo courtesy of Chuck Dalby)

Developing Recommendations for Basin Plan Development (Phase 3)

There are no apparent outstanding issues hindering the BAC's understanding of relevant water issues. The BAC members heard from experts on a wide range of topics and were given opportunity to request clarification and additional information on any of the topics. BAC members--while not scientists themselves--appear comfortable with their level of understanding related to the task of developing recommendations. They also appear comfortable relying on DNRC staff and ex-officio agency experts for answers to questions that arise during discussion of specific issues. Ex-officio members with expertise in subjects under discussion related to the recommendations will likely be present during those discussions and able to answer questions as they surface.

The BAC's input and feedback was gathered at the series of meetings held during Phase 2 and between meetings by working closely with the Chair and Vice Chair of the BAC. During the three days of meetings, presentations were made and questions and discussion followed.

During the last day of Phase 2 meetings, the stage was set for Phase 3. Several things were done to prepare for the recommendation development phase. The list of all scoping issues and their previous ratings by the BAC was revisited and validated, key decisions previously made by the BAC were revisited, and proposed screening criteria for recommendations were revisited and validated.

BAC facilitator, Barb Beck, proposed a process to the BAC members for developing recommendations. The recommendations will be the ultimate and most important product of the BAC's work and will be included in the Yellowstone Basin Plan provided to the DNRC for the MWSI. Beck explained the multi-step process and then the BAC agreed to take one of their priority issues and try the process. The process was acceptable to the BAC members and recommendations will be developed in Phase 3 using the steps below;

- 1) Define the issue under consideration
- 2) Describe the ideal situation with respect to that issue (desired future condition)
- 3) Ask the following questions,
 - What did we learn about this issue during scoping in Phase 1?
 - What did we learn about this issue from the experts in Phase 2?
 - Who is affected and how?
 - Do we need to make a recommendation on this issue? If yes,
 - What do we want to recommend?
- 4) How does this recommendation meet the criteria we have agreed upon? And, do we understand the consequences of this recommendation?

DNRC staff developed a summary of the scoping issues across all of the major basins to update the Environmental Quality Council standing legislative committee and the Water Interim Policy Committee in January 2014. Prior to the legislative committee presentation, the Yellowstone BAC Chair, Mack Cole and Vice Chair, John Moorhouse reviewed and commented on the draft summary of scoping issues document for the Yellowstone Basin. *The Yellowstone Basin Advisory Committee Summary of Scoping Issues* (January 2014) and the *Montana Water Supply Initiative Summary of Phase 1-Public Scoping Process* (January 2014) were e-mailed to the BAC members in mid-January.

The summary of scoping issues addresses the eight priority issues for the Yellowstone Basin and will provide the foundation for recommendation development in Phase 3. The eight issues are;

- Drought readiness
- Water information
- Integrated water quality and quantity management
- Water administration and beneficial use
- Watershed planning
- Groundwater/surface water nexus
- Instream flow maintenance, and
- Water storage

Next Steps (steps, activities, and tasks)

The first Phase 3 BAC meeting is scheduled for February 25, 2014, in Billings. The BAC will develop recommendations on water information and water storage at the February meeting. Recommendations on the remaining topics (above) will be developed during the two additional meetings scheduled on March 12 and April 9.

The February meeting agenda and a flyer for posting and forwarding by e-mail will be sent to the BAC members, ex-officio members, conservation districts, and interested parties the first week in February. With this advance notice, it is hoped that members of the public will be aware of and choose to attend and offer comments during the public comment period on the agenda.

Based on previous discussions, the BAC members understand and take seriously their responsibility to talk with constituents between meetings both to impart information about the work of the BAC and to gather input on issues and recommendations. Each meeting begins with the opportunity for BAC members to share “what I’ve heard” since the last meeting.

All BAC members are clear on the progression of the three-phase process and that the February meeting will be devoted to work in earnest developing recommendations. “Preliminary recommendations” will be developed at one meeting, BAC members will seek input from their constituents between meetings and then the recommendations will be finalized at the following meeting considering any comments received. At the BAC’s final meeting (April 9) the entire package of recommendations will be reviewed.

As explained above, the goal of the BAC is to produce consensus recommendations. Recommendations for which consensus has not been reached will be discussed further in an attempt to gain consensus. Lacking consensus, the BAC will vote and recommendations forwarded will be accompanied by information that explains the outstanding concerns and why consensus was not reached.

Priority Tasks for Developing Recommendations

Task	Date	Who
Attend and participate in the BAC meetings to develop recommendations	February 25, March 12, April 9, 2014	BAC members DNRC staff Contractor
Discuss preliminary recommendations with constituents and report results at BAC meetings	Ongoing	BAC members
Review and guide staff and contractor in agenda development and process management as requested	Ongoing	BAC Chair BAC Vice Chair
Develop and provide agendas and supporting documents to BAC members well in advance of each meeting	February 7, March 3, March 28, 2014	DNRC staff Contractor
Document BAC meetings Provide accurate notes on timely basis	Ongoing	MSU-Billings staff DNRC staff Contractor
Review and adopt final package of recommendations	April 9, 2014	BAC
Prepare Recommendation Development Report (RDR) transmitting the recommendations of the BAC to DNRC for the MWSI and 2015 Legislature	May 15, 2014	Contractor (DNRC staff and BAC review)