

Yellowstone Basin Advisory Council  
Membership &  
Report of 2013 Public Scoping Activities

Appendix I:  
Kick-Off Meeting Agenda and Round Table Notes





## Kick-Off Meeting Agenda and Round Table Discussion Notes

**Welcome to the Yellowstone BAC**

Prosperity in Montana depends on meeting water demands for population growth and economic development while satisfying existing beneficial uses. As directed by the Montana Legislature, DNRC WRD is launching an initiative to update the State Water Plan (§85-1-203 MCA). The Montana Water Supply Initiative (MWSI) engages citizens in a planning process that identifies options to meet future needs, satisfy existing beneficial uses, and protect the state's water resources.

As the MWSI advisory board for the Yellowstone basin, the Yellowstone BAC is in a unique position to advise DNRC WRD on the development of strategies and recommendations for meeting the water resource needs of the Yellowstone basin.

Thank you for your efforts.  
Sincerely,  
**Paul Azevedo**  
Water Management Bureau Chief




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**Yellowstone Basin Advisory Council**

*Kick-Off Meeting  
March 18, 2013*



Billings, Montana



<p><b>Session 1</b> 9:00-10:15</p>  <ul style="list-style-type: none"> <li>• Welcome— Susan Gilbertz</li> <li>• History and Purpose of Water Planning—Jim Robinson</li> <li>• BAC Membership— Susan Gilbertz</li> <li>• Yellowstone Water Budget— Jim Robinson and Chuck Dalby</li> </ul>	<p><b>Lunch: 12:00-1:00</b></p> <p><b>Session 3</b> 1:00-1:45</p> <ul style="list-style-type: none"> <li>• Facilitated Round Table Discussions— Collecting Insights from BAC Members</li> </ul> <p><b>Session 4</b> 2:00-3:15</p> <ul style="list-style-type: none"> <li>• Purposes of Regional Meetings</li> <li>• Proposed Formats and Activities</li> <li>• Data Exercise: BAC Q-Sort</li> </ul>	<p><b>Session 6</b> 4:00-4:30</p> <ul style="list-style-type: none"> <li>• Public Comment</li> </ul>  <p><b>Regional Meetings</b></p> <p>Wednesday, March 27, 2013 Glendive Regional Meeting Dawson College</p> <p>Friday, April 12, 2013 Big Timber Regional Meeting Public Library</p> <p>Wednesday, April 24, 2013 Forsyth Regional Meeting Public Library</p>
<p><b>Session 2</b> 10:30-12:00</p> <ul style="list-style-type: none"> <li>• Water Rights— Regional Managers</li> <li>• Water Uses— Jim Robinson</li> <li>• Water Availability— Chuck Dalby and Jim Robinson</li> </ul>	<p><b>Session 5</b> 3:30-4:00</p> <p>BAC Business Meeting</p> <ul style="list-style-type: none"> <li>• Regional Meetings Format Approval</li> <li>• Expenses and Reimbursements</li> <li>• Committees/Regional Assignments</li> <li>• Selection of BAC Chair and Vice-Chair</li> </ul> 	<p><b>Wrap-Up Meeting</b></p> <p>Wednesday, May 8, 2013 Final Scoping Meeting Billings MSUB Downtown Campus</p>

Q1: Pressing & Immediate Concerns:

**Information Needs**

- Consolidation of information and getting the same baseline understanding; identifying information gaps. The information is held in the heads of a few key individuals
- Information needs: From Bureau of Reclamation for dam management; “Rule curves” – look at storage, flow conditions that impact how you manage the flow. These are based on current flows, but what about when water scarcity increases? We have a concern about existing demands and those already on the books.
- How do we keep water in the state of MT without creating a number of reservoirs
- Improve availability: physical availability-actual water vs. legal availability- over-appropriated water: Whatever group comes up with they must grapple with the fact that we are over- appropriated
- The difference between what the law is versus what is being practiced; There is a lack of Enforcement that will become problematic
- Enforcement- There are no sideboards to the county conservation district water reservations- how are these going to function in our driest years
- Concerns/Questions about enforcement- How do I as a senior water holder at the end of the river; How am I able to shut junior water rights holders off. By the time you shut them off, you have lost your job. Then you’d have to spend years in court. How do you do that and do that fairly. There needs to be monies set aside.
- If people start drawing their legal rights what will happen to availability
- How technology is changing the availability of water. How it will change the water budget.

**Systems Understanding**

- Need to understand the connection between groundwater and surface interaction: the effects of groundwater on surface waters
- Having some hydrologic profiles for the system; historical inflows; what is annually taking out; how much water is allocated in water reservations/Federal reserve rights; and paper rights (legal availability) and what would it look like if all of those were taken out;
- Need a baseline understanding of the quantification of water use and water withdraws (we are currently reliant upon USGS figures)
- Need a better monitoring system for water use- headgate meters, flow meters
- Important for having more USGS Gauging stations on the Yellowstone River. We need more information. Having more Gauges will help with the future enforcement needs. The BAC could support more gauges. We [DNRC] use these quite a bit.
- While we are getting an adjudication done; there is a lack of finality in the decrees that are coming out as far as what acres are irrigated; when people come in for a change applications, 9 out of 10 they think we are reducing their right but it is a paper right; that has way more acres on it than what could have been irrigated. It makes it difficult to estimate what water is available. We need something to hone in on what is irrigated (LandSat and LIDAR) we may be able to see what the irrigation actually is.
- Storage: Urban development that builds recharge zones in new neighborhoods versus storm drains
- Cities and towns: due to the new wastewater and stormwater regulations, Re-use- is going to become a larger issue over time. We are forced to reuse our effluent which is water that is not going to go back to the river. In some places, the effluent is the creek (Bozeman wastewater is 60% the Gallatin or Prickly Pear Creek is 100% the Helena’s wastewater):

- Agricultural practices need to be addressed from the perspective of water use- differences between flood irrigation and sprinkler systems in terms of return flows
- Knowing what we have in relation to irrigation needs because it is so highly consumptive
- Identify users and how the water is used: Water rights allocated, adjudicated, versus what is being used
- Future availability of water
- Availability and use; there seems to be a perception that the energy industry today is using a lot of water; but we've been drilling wells in this state since 1904; Water is a limiting factor for development; I want to make sure the energy industry can get the water it needs; To sell water in a "closed basin"- Not an issue where the basin is open—someone is in the business of selling water. Requires an elaborate "change of use process" to buy water. The availability is the issue. If you want Oil & Gas development in MT you need a smooth process for getting water.

#### **Quality**

- **Quality** of Water coming from Wyoming: Low quality impacts soil quality- mineralization of soil: Coal-bed methane- salt water going into the river and the impacts agricultural production; saline infiltration
- Coal mining: Coal development's impact on water quality
- Water quality is essential for marketing water
- Subdivisions and septic systems
- There is a public health issue here too
- Migration of invasive/exotic species (i.e., zebra shell mussels; Asian milfoil; salt cedar): How these species use water
- Instream values need to be adequately protected: Like to see a water plan that gives appropriate consideration to instream flow needs
- Concern about the health of the river; Habitat for fish species diversity
- We are having a wrestle in our area between recreation and irrigation. Smaller streams get dewatered in the summer when recreationalists want it. Water got warm, people stopped patronizing fishing and people blame agriculture.

#### **Urban Water Uses & Growth**

- Cities have to figure out how to accommodate growth-- through a [water rights framework] box designed for agriculture
- Population increase- big money is coming in our area
- Cumulative effects of "permitted water right exemptions" on supply;
  - Exempt Wells- smaller than 35 gal./min- Less than 10 ac/ft. easier to permit; relatively unregulated
  - Nonconsumptive use permits- fish ponds not used for a beneficial use; concerned about evaporation and seepage

#### **Water Markets: Water is Big Money**

- Choice to sell water –and how that changes water rights
- Concern about the Oil Fields coming our way. Millions of gallons of water being used. Particularly, when tribes can sell water rights to oil companies and their rights are older than mine. Water is big money.
- Those who are selling water to oil companies are exceeding their water rights; one water depot can make a person a millionaire; there are 7 up there now; If they do exceed these rights they will exceed the

#### **Other**

- Managing river waters from a “**Water Use-perspective**” – where are we going to go with water consumption versus “**water right-priority**”
- Long-term effects of climate change: Changes in timing of run-off; increasing variability
- What are the data that we need to ask questions of to make decisions?
- Drought management vs. Demand as the population increases

Q2: Long-term Concerns: “We have a month to do this and we are looking at a future of how long??”

#### **Policy**

- Changes in one aspect of the hydrologic system has hydrologic consequences. There should be a statewide policy about these types of changes. For example, lining agricultural canals have unintended consequences.
- MT should: Stop handing out (moratorium) water appropriations and get the market involved in allocating water. Because it is hard enough to get an appropriation. That would be more efficient. “Water Market transfers”

#### **Future**

- Demand for domestic and residential use will increase; Decreasing water supply increasing demand,
- Subdividing land for development: urban sprawl; Individual wells- because of the polluting their own well water with their septic systems
- Anticipate Climate change

#### **Organizational**

- There is no enforcement arm at the DNRC- there is no water police: Need Enforcement
- Wyoming as a model for water management: they have hundreds of people assigned to the source and are responsible for turning on diversions
- Need Informational improvements
- Resource allocations for Basin Planning- thinking about the relation between YBAC and other BACs
- Emergency planning- lack of planning and management
- Funding for long-term water planning; WY paid \$1M for recent water planning; MT needs to put money into planning
- Need to have a plan for how to use our water: Water conservation planning
- Sustainability- this is the goal; that water is like a checking account; we have to have money in the back.
- Need flexibility in planning when considering :
  - climate change;
  - emergent changes in water/energy extraction technology and water needs for energy needs
  - Increased residential development
  - Organizational changes due to budgetary restrictions/Multiple jurisdictions

#### **Studies Needed**

- We need to understand a baseline/reference point. If we understand systems now- identifying relationships between various usages and interests
- Water availability- find out water we have first
- ESA- Species Pallid Sturgeon, has not been a lot of discussion about instream flow. NRCS should do a section 7 consultation on irrigation pumps should consider cumulative effects and mitigation mechanism

- Long-term storage considerations/study
- Biological thresholds in changing ecosystems as habitats change in fluctuating waters ; are current instream flows sufficient for future species migration needs?
- **Storage-** for big storage; almost all the good sites are taken; Need deep and narrow spaces; Storage does not work well unless you have a lot of water. We cannot store our way out of climate change.
- There are many streams along the YR that could be used for storage; We Need to explore Underground water storage

#### **Educating Water Usage**

- Education for all water users about water use; particularly as populations increase; Especially for water conservation

#### Q3: What sort of Time Horizon should BAC

- 5 to 10 years- It is tough to predict past 20 years
- 100 years: At least Three generations:
- Time horizon should have both short-term and long-term objectives that are: (1) politically viable (2) Long-term actionable items
- Focus on the low-hanging fruit for solutions- local governments, conservation districts that can worked on these solutions
- People in Agriculture have a long-perspective of land use compared to industry which has a shorter view of the land-use
- *“It is one thing to understand the problem, it is another thing to handle the politics in order to do something about it”*

#### Q4: Obvious Pitfalls the BAC should avoid

- Picking winners and losers in technology problem solving- (ex. Emerging technologies that solve problems) Rather than ban certain technologies
- Water quality vs. water quantity: I think water quality discussions are outside of the scope of this meeting- Scope Creep
- Accuracy of forecasting water availability
- Accuracy of water use/demand
- Trans-Boundary management issues with Wyoming
- Ensure the BAC does not get bogged down with bureaucracy and consensus-dependent approaches
- We cannot get lost in the data: we should spend a significant amount of time on solutions. To develop suggestions for the legislature for solving problems. Need deliverables want products.
- To not have an actionable end
- Legislators may need a longer timeframe for policy recommendations: these may be more politically viable
- Climate change impacts and effects must be anticipated in a focused way in order to be able to deal with changes
- Need to have an adaptation plan for a range of changes without getting lost in the science and politics of it all
- The cause of climate change is immaterial to the discussion; we need to discuss what water resources will look like in the future and what we can do about it
- A Pitfall would be a rigid structure for planning; not leaving room for amendments and changes in conditions (development, growth, changing climate, etc.)

- Pitfall would be inflexibility in the DNRC & other agencies
- Discussing changing the Compacts is a waste of time to attempt to change these it would take an Act of Congress
- A Pitfall would be if you mess with my water rights
- You wouldn't want to mention a dam on the Yellowstone
- "The resource has to be as good as when you started or better than when you leave"

Q5: How can BAC ensure a citizen-based (bottom-up) beginning?

- Communicate with other BACs
- Publish the bullets from these meetings- write these up somewhere
- Have a broader outreach to constituency groups : Work with the people who know the water the best
- Use Incentives to get people involved
- Get the word out: Televised press releases
- Radio ad campaign
  - Montana Watershed News
  - The Breeze/the Moccasin telegraph
  - REA magazine: Rural \_\_\_\_\_
  - Conservation News (County and State level)
  - Work with MT Watercourse- MSU-Bozeman
  - Resource Advisory Council- Bureau of Land Management
  - Reporters from High school newspapers – will ensure that parents who normally would not hear, do
- Brings Guests Speakers to fill knowledge gaps

Q6: Ways to ensure success of BAC.

- Examine what other states have done in similar processes
- Make sure there are clear objectives and sideboards for what we are doing
- Focus on shared interests
- Improve Oil & Gas information- needs more discussion about Oil & Gas development
- Agricultural water-users will be more open to technological monitoring of water uses if it is equal across the board

**Success in Outreach**

- Make the public and interest groups familiar with the BAC; Educate interested and constituency groups (e.g., legislators) by BAC "leaks"
- An organization like this is good for getting the word out to legislators; trying to sell it to legislators. Even getting people out to speak to local groups
- Plan for outreach for the BAC: Budget and Spend money on outreach for the BAC (WY spent \$900k on outreach for similar meetings)
- Assure interested people that they can participate; Get local people involved; You have to have local people; but "some people are better left in the bars" but others can help
- Network with credible sources to speak to new audiences (e.g., YR Conservation Districts; Community Development; Farm Bureau; City planners; Economic development boards, etc.)
- We need to open up lines of communication; Publicize local meetings; More notices (Early notices)

