

**Powder / Tongue Basin Advisory Group
Meeting Record
Wagon Box Inn, Story WY
August 8, 2001**

Welcome

The facilitator opened the meeting at approximately 6:10 pm and reviewed the agenda to set the expectations for the meeting. Participants introduced themselves by stating their name, affiliation, and place of residence. The facilitator sent a sign-in sheet around the room.

The facilitator stated that the next two BAG meetings, as selected by the BAG members, would be held October 10th in Kaycee and December 12th in Sheridan. The BAG then scheduled the next meeting for January 16, 2002, in Sheridan. BAG member Don Meike of the Powder River Irrigation District offered to conduct a tour of the site of the proposed Middle Fork Powder River Reservoir in October prior to the BAG meeting. Jon Wade indicated that state staff would work with Don to arrange this tour.

Updates on Other Basin Plans

Jon Wade updated the BAG on the status of the plans for the other basins. The BAGs for the Wind/Bighorn Basins and the Snake/Salt Basins met August 6th and 7th. These groups heard presentations on local water issues and worked on issues identification. Jon indicated the BAG for the Northeast Basin would meet August 9th and a tour of a coalmine and a CBM operation would be held in conjunction with this meeting.

Review of Issues Identified during the Roundtable Work Session

The facilitator explained that at the previous meeting of the BAG, members were divided into several small groups. These groups were assigned main issues and preceded to combine and prioritize the subissues under the main issues. The facilitator distributed tables presenting the results of the work of the small groups. The BAG discussed the main issues of **Water Quantity**, **Water Quality**, and **Funding** and agreed to adjust the prioritization of some of the sub-issues for some of the sub-basins. BAG members agreed to review the tables for the other main issues and prepare to discuss them at the BAG meeting in October. One BAG member commented that all of the sub-issues could be prioritized as a "1" as they could eventually become critical. However, it was noted that the prioritization process should reflect the current situation to identify the issues critical at this time.

Consultant Update – HKM Engineering

Wade Irion reported that the work under Task 2, Basin Water Use Profile, is nearly complete and the industrial use technical memorandum has been written and submitted to the Planning Team. The Consulting Team is focusing on Task 3, Availability of Surface Water and Ground Water, and this task will be the topic of the presentation tonight. Task 4, Demand Projections, and Task 5, Future Water Use Opportunities, are currently underway and reports will be presented at the October BAG meeting.

Hydrologic Modeling – HKM Engineering

Wade Irion and Jennifer Reusser conducted a GIS presentation of the irrigated lands data theme that identified the irrigated lands polygons and the associated attributes. Wade described the attributes of the irrigated lands polygons which include: the name of the ditch serving the polygon, the source of supply, the other polygons included in the same service area, the area of the polygon, the type of crops being irrigated, the water rights associated with the land, the efficiency of the irrigation system, and the pattern of return flow from the polygon. Wade explained how the information in this GIS data theme is used in the hydrologic models developed for the basins.

A presentation was then given of the hydrologic model prepared for the Crazy Woman Creek basin, which is one of the models prepared for the plan. The presentation described how the model was developed and calibrated, and how it is used. Wade explained that under Task 3 the models would be used to establish the baseline conditions of the basins and define where the shortages and surpluses currently exist under dry, wet, and normal years. This information will be used in Task 5 to assess future water use opportunities.

Question: Does the model include CBM water?

Response: No. The model covers the period through 1999, which is about the time CBM development, really began. The model therefore represents baseline conditions prior to CBM development and can be used as a tool to analyze future water use under post-CBM conditions.

Question: How will CBM water be included in the model?

Response: An estimate of the average discharge over the life of the CBM wells in each sub-basin was developed from production data obtained from the Wyoming Oil & Gas Conservation Commission. An estimate was then made of the total production in each sub-basin under current conditions. This information will be used by Gary Watts to make projections of future water production throughout the basins.

Question: How are surface flows calculated? Is precipitation data used in this calculation?

Response: Estimated surface flows in the model are typically based on relationships to records of streamflow on nearby streams, not from precipitation data.

Question: Can the model estimate impacts of changes in irrigation efficiency?

Response: Yes.

Question: Does the model account for different types of irrigation, i.e. sprinkler versus gravity?

Response: Yes.

Endangered Species Act – Terry Root, US Fish & Wildlife Service

Terry began the presentation, titled *ESA For Non-Majors*, by defining the terms and stating the purpose of the Endangered Species Act. He then described the process followed to list a species as endangered, threatened, or candidate, and identified the factors considered in the listing process and the key elements of the listing decision. He described the determination of critical habitat for listed species.

Terry explained how threatened or endangered species can be “taken” through the various provisions of the ESA specifically through consultations under Section 7 (federal nexus) and Section 10 (private property) of the ESA. He explained how recovery plans are prepared to result in the delisting of species, and how Candidate Conservation Agreements with Assurances can prevent the listing of a species.

Terry identified listed species that currently exist in the Powder/Tongue Basins, or could possibly inhabit the area in the future. The list includes: Black-footed Ferret; Gray Wolf; Grizzly Bear; Bald Eagle; Peregrine Falcon (delisted with protections for a period of time); Canada Lynx; Mountain Plover; Swift Fox; Black-tailed Prairie Dog; Bison; Sage Grouse; Sturgeon Chub; Yellowstone Cutthroat.

Coalbed Methane Activities Update – Mickey Steward

Mickey identified several CBM issues currently being addressed by the county commissioners. These issues include: safety of workers and residents; nuisance concerns (noise, light, dust); water issues amplified to include shallow alluvial waters; road and access (surfacing, traffic, maintenance, trash); administration of the increased population; resource protection and mitigation; and impacts on property values. She indicated that there has been a significant increase in CBM activity in Carbon County. Mickey reported on research on grasses tolerant to salt in water and in soil. This research could be applicable to CBM discharge water. She then distributed an article *Recent Production Information – CBM in the PRB*.

The meeting was adjourned at approximately 9:25 pm.