

**Powder / Tongue Basin Advisory Group
Meeting Record
Sheridan College, Sheridan, WY
January 16, 2002**

Welcome

The facilitators opened the meeting at approximately 6:00 pm and explained that the agenda for the meeting would be the presentation of the final results of the planning study by HKM Engineering. Jon Wade then asked the members of the BAG to stand and he thanked them for their involvement during the 18-months of the study. He then thanked the facilitators and the consulting team. Jon then introduced Wade Irion of HKM Engineering, to direct the presentation of the basin plan.

Presentation of the Basin Plan

Wade Irion stated that the presentation would: 1) describe the studies completed by the consulting team; 2) summarize the findings of the plan; and, 3) demonstrate the tools developed through the planning effort. He explained a general discussion and question and answer period will follow the presentation of each major topic.

Following a brief description of river basin planning, Wade proceeded with the presentation of the **Basin Water Use Profile**. This presentation described and summarized basin water uses under the categories of agricultural, municipal, domestic, industrial, recreational, and environmental. The water quality characteristics of the planning area were also included in the presentation. Demonstrations of the GIS (Geographic Information System) tools developed to define basin water use profiles were presented as well.

Question: What was the source of the crop data?

Response: Interpretation of aerial mapping, field verification, and USDA agricultural statistics.

Question: When can the databases be accessed?

Response: The databases will be posted on the water plan website in about six months. The data can be obtained sooner directly from the Wyoming Water Development Commission (WWDC) by special request.

Question: Where will the draft plan be available for review?

Response: Also from the WWDC by special request.

Question: Was the source of water used for oil and gas injection identified?

Response: The source information is not available on an aggregate basis. Source information for specific wells can be determined from the Oil & Gas Conservation Commission.

Question: How often will the plan be updated?

Response: Approximately every five years.

The next topic addressed in the presentation was **Available Surface Water and Ground Water Determination**. Topics included in this portion of the presentation were surface water hydrology, spreadsheet modeling, surface water availability, and ground water availability. The spreadsheet model developed for the plan was also demonstrated.

Question: How does the selected study period, 1970 to 1999, compare with long term records?

Response: The study period was selected because it is a good representation of the long-term hydrologic conditions.

Question: Will the selection of wet, normal, and dry years change as new records are collected?

Response: New data could change the years included in these categories and will be updated as the basin plan is revised.

Question: How do the average streamflow values for wet, normal, and dry years for the study period compare to the long-term record?

Response: Very closely. The study period does not, in all cases, include the extreme dry or wet years, but the averages are very close.

Question: How are irrigation return flows modeled?

Response: Available mapping was used to estimate the locations where irrigation water returns to the stream. Estimates of irrigation efficiencies and patterns were used to model the return flows. Estimated return flows were adjusted as part of the model calibration process.

Water Demand Projections were then presented for agricultural, municipal, domestic, industrial, recreational, and environmental uses.

Question: What was the annual growth rate used to project future populations?

Response: Annual growth rates were not used. However, rates resulting from the projection process were computed and will be presented in the report.

Question: Are the agricultural demands presented in the projections “totals” or “additional” demands?

Response: The values presented in the projections are total consumption demands, not additional.

Question: Were the costs and benefits associated with meeting the future demands analyzed?

Response: No.

The final portion of the presentation addressed the topics of **Institutional Constraints, Future Water Use Opportunities, and Plan Uses**.

Question: Regarding the ranking process, why wasn't the water availability criterion given a weight of ten in all instances since a water project can't proceed if there is no water available?

Response: Any of the criteria can be “deal breakers”, not just water availability. Also, it was noted that most of the projects do have a favorable water supply.

Question: What is the Sheridan Canal Project?

Response: An irrigation project proposal consisting of a new reservoir in the upper reaches of the Tongue River and a diversion from the Tongue River into the Goose Creek drainage.

Question: Was any consideration given to the development of a regional water supply system similar to the Washakie Rural project?

Response: No proposed regional water system was identified.

Closing Remarks

Jon Wade again thanked the members of the BAG for their participation. He reminded the group that river basin planning is a process, not a product, and that it begins to become outdated as soon as it is published. WWDC's intent is to update the plan on a five-year frequency and to keep the BAG involved through interim BAG meetings held three times a year. These meetings will include presentations and discussions on contemporary water issues, and proposals for water development. The first interim BAG meetings are scheduled for March 20th in Buffalo and July 17th in Dayton.

The meeting was adjourned at approximately 9:00 pm.