### Wind/Bighorn River Basin Advisory Group Meeting Record Powell, WY December 17, 2002

#### Welcome

Facilitator Sherri Gregory-Schreiner of Counterpoise Consulting, Inc. in Cheyenne, opened the meeting at 3:00 p.m. She introduced herself and reviewed the agenda for the meeting. Participants introduced themselves by stating their name, place of residence, and affiliation. The sign-in sheet was passed around the room.

The next basin advisory group meetings were scheduled as follows:

January 28, 2003, 3 p.m. - Riverton April 1, 2003, 3 p.m. - Cody

### **Planning Team Issues**

Barry Lawrence, WWDC River Basin Planner, distributed copies of past presentations to be added to the basin advisory group reference notebook. Barry then updated the group on the status of the planning processes for the Snake/Salt, Powder/Tongue, Northeast, Bear and Green River Basins. He detailed the activities in each, as well as the invited BAG speakers, and consultant work in progress. He then invited interested individuals to attend any or all of the BAG meetings in the other basins.

### Population/Demand Projections - Curt Pendergraft, BRS Inc.

Mr. Pendergraft began by showing the group a table of basin populations from 1920 through 2000. He explained to the group how he used the past population numbers and rate of change to create projections through 2030. Three different population growth scenarios have been addressed in the planning process, including: high, moderate, and low population growth projections. Economic growth requirements were then discussed, as well as employment statistics for the basin, and ultimately water use requirements as relating to the various sectors of the economy. A brief discussion period followed Curt's presentation.

### Surface Water Availability - Jerry Gibbens, Montgomery Watson Harza

Mr. Gibbens began by updating the group on the basin modeling process. He indicated that the model was 90-95% complete with preliminary model calibration now taking place. He reiterated for the group exactly what the model did, and did not contain. It was noted that model delineations follow the sub-basins, including the: Wind, Bighorn, Clarks Fork, Yellowstone, and the Madison/Gallatin. Mr. Gibbens discussed the need to have the model match reality as much as possible, and noted that much could be achieved through the calibration with historical diversions and the awareness of compact allotments. It was further noted that the model does not operate storage, rather it accounts for historical

Wind-Bighorn Basin Advisory Group Meeting Record

December 17, 2002 Page 1 of 3 average conditions. Mr. Gibbens then went on to discuss the various models under wet, normal and dry year scenarios, indicating areas where shortages of water were likely to occur.

## Ground Water Availability - Chris Lidstone, Lidstone & Associates

Mr. Lidstone began by showing the group numerous maps of the area, each depicting another aspect of the ground water resources of the basin. He discussed the various wells in the basin (municipal, domestic, industrial, etc.), the aquifers encountered, the stratigraphy of the basin, the associated water quality characteristics, and the potential areas for future ground water development.

## Hydropower Study - Chip Paulson, Montgomery, Watson & Harza

Mr. Paulson began by reviewing the scope of work for the power study. He discussed the existing sites within the basin and a potential twelve additional sites refined from a long-list of alternatives, which numbered in excess of two hundred. Criteria utilized to narrow down the list of alternatives were identified through a power market study, and include potential customers, transmission capabilities, pricing structures, etc. A twenty-mile buffer was then selected around existing transmission facilities. All of this information was utilized in further refinement of a short list of potential hydropower sites within the basin. A comparison of the top fifteen sites was then made. These sites, interestingly enough, are split evenly between the Wind and the Bighorn. It was noted that the next steps in the study were to relate the top hydropower sites to the top water supply storage sites, and to develop a final short list. This list will include facility requirements and costs.

# Fossil Fuel Power Generation - Doug Beahm, BRS Inc.

Mr. Beahm began by discussing the available coal resources in Wyoming, paying particular attention to the Wind and Bighorn Basins. He further discussed current surface and underground mining operations with attention to typical coal thicknesses, annual production amounts, costs, and employee numbers. This information was then related to the available coal resources of the Wind and Bighorn Basins, and what similar operations in the basins might look like. He closed by discussing how a "mine-mouth" relationship would be feasible in the basin. A brief question and answer period followed Mr. Beahm's presentation.

# Screening Criteria - Doug Beahm, BRS Inc.

Mr. Beahm reviewed the screening criteria for future projects as discussed with the basin advisory group at an earlier meeting. It was noted that the criteria utilized were similar to those utilized in other basin planning efforts, with the exception of the criterion of "need" being added. This additional criterion reflects the ability of the project to meet existing and future water needs in the basin. Mr. Beahm went on to state that each screening criterion was then assigned a weight depending on its relative importance to assuring a successful project. Finally, the assignment of metrics to scores for individual projects was addressed.

### Project Opportunities – BRS Engineering, Inc.

The draft plan presentation was concluded with the displaying of the long-list of future water use opportunities in the basin. It was noted that projects were grouped by "type", including: development of new resources, distribution of existing sources, water conservation, water management, conjunctive use options, basin transfers, environmental/recreational, and the development of new uses. As the consulting team was reviewing the list, a considerable amount of discussion ensued relative to the scores that individual projects had received. Also, there was an equal amount of discussion relative to the handling of sites with cultural importance to the Tribes. Ideas presented by the BAG members during these discussions will be evaluated for incorporation into the final Wind/Bighorn River Basin Plan.

### **Public Comment Period**

There were no public comments at this time.

The meeting was adjourned at 6:30 p.m.