

Powder/Tongue River Basin Advisory Group  
Meeting Record  
Story, WY  
November 19, 2003

**Welcome**

Facilitator Sherri Gregory welcomed the group and the meeting was called to order at 5:57 p.m. All attendees introduced themselves, followed by a review of the overall meeting agenda. A sign-in sheet was passed around to record attendance. The next meeting is scheduled for April 7 in Buffalo.

**Water Development Commission Report**

Barry Lawrence updated the BAG on the status of the plans for the other basins. The BAG meeting for the Northeast Wyoming Basins will be meeting November 20 in Newcastle. Barry discussed the status of all basin studies, and agendas for future meetings. Handouts from the prior meeting were distributed.

A BAG member asked whether the US Forest Service could be invited to speak at a future meeting. Barry indicated that he would pursue this request from the BAG.

**An Overview of the State Engineer's Office (SEO)**

Harry LaBonde, Deputy State Engineer, presented an organizational chart of the office and discussed the responsibilities of the six divisions. The Surface Water and Engineering Division is responsible for reviewing permit applications for any request to put surface water to beneficial use as well as operating the Safety of Dams program. The Ground Water Division is responsible for reviewing and approving water well permits and managing a statewide cooperative stream gaging program. The Board of Control is responsible for the adjudication process on each water right and any changes to the adjudicated rights. The Interstate Streams Division participates in a number of interstate river compact commissions and organizations and regional water programs. Two additional divisions include the Administrative Division, which handles the general agency administration and the Support Services Division, which manages all information technology functions for the agency. The State Engineer serves by statute as the secretary/treasurer for the Board of Registration for Professional Engineers and Land Surveyors. It was also noted that the Water Well Drilling Contractors and Water Well Pump Installation Contractors Certification Board will be fully operational in 2005.

Current issues include permitting challenges in both the surface and groundwater divisions as related to coal bed methane development, the North Platte Decree Committee and Modified North Platte activities, and weather modification permitting activities. To obtain more information on the SEO, visit the website at <http://seo.state.wy.us>

### **DOE Rocky Mountain Oilfield Testing Center (RMOTC)**

Lorri Kirby, RMOTC, stated the center was originally established by the US Department of Energy as a testing alternative for the petroleum industry in 1993. It currently serves as a customer technology testing and demonstration facility for the energy industry and educational institutions. The facility is located in the Naval Petroleum Reserve No. 3, the Teapot Dome Oil Field, near Casper. It offers 666 producing wells, whose depths range from 250-6000 feet. There is an open prairie environment with abundant wildlife and flora. Lori indicated that their mission was to link vision with applications.

Some of the water management projects include formation micro imaging; fiber optics to monitor temperature changes in a well bore hole; process flow diagram for a bio-treatment facility, or a wetland; and the use of saline CBM water in raising Nile tilapia and growing tomatoes in a hydroponic greenhouse.

Lori indicated current or future CBM projects include PSI pumps, rangeland reclamation, reverse osmosis, and dust suppression. This later topic will be covered at a future BAG meeting. Discussion followed.

### **Lake DeSmet Master Plan / Reservoir Rehabilitation**

Mike Cole, HKM Engineering, indicated that the project scope of study was to

- develop a management plan for the Lake DeSmet Counties Coalition Joint Powers Board,
- assess the condition of existing facilities,
- incorporate the findings from previous studies,
- describe the reservoir system components,
- incorporate public input,
- estimate reservoir water yield, and
- identify need for future improvements to develop uses and best management practices.

Originally, Lake DeSmet was a natural lake. It was converted to an off-channel storage reservoir for agricultural users in 1921. In the late 1970's, Texaco, Inc. enlarged the lake to its current capacity. In 2001, the Lake DeSmet Counties Coalition (LDCC) acquired the reservoir.

Total capacity of the reservoir is 234,987 AF. 160,113 AF is controlled by the LDCC with 10,720 AF committed to long-term contract water users. 110,000 AF is available for development with an estimated 28,000 AF available annually on a firm yield basis. Six reservoir management scenarios were developed during the course of the study with 55,000 AF being the estimated annual firm yield to be developed. An economic analysis, as prepared by Watts & Associates, was presented. The study evaluated the economic tradeoffs among potential and competing uses of Lake DeSmet water, including recreation, irrigation, municipal and industrial uses. Mike noted that potential problems include a soft market for additional water, and the potential development of an additional 20,000 AF for

industrial use. Large demands for reservoir water would be a major impact to recreational uses.

### **Adaptive Management and Planning Models for Cultural Resources in Oil/Gas Fields**

Mary Hopkins, Wyoming State Historic Preservation Office, indicated that the project is a two-year effort between private business, federal agencies and state government in Wyoming and New Mexico. 79% of the budget is funding by the Department of Energy. The evolution of the project was driven by increased energy production, an increased need for timely permit processing of projects related to the National Historic Preservation Act and the need for better resource management and decision making tools for private business and federal and state government and private business.

Mary noted that one of the project products is geoarcheological data for the Powder/Tongue River basins, consisting of electronic images of documents for the study area, a Geographic Information System (GIS) of 10,000 sites and 13,000 research areas in 8 northeastern Wyoming counties, and a complete database on all cultural resources.

An overview of the National Historic Preservation Act, Section 106, was presented. The website is <http://achp.gov> Mary noted that only 20% of the Wyoming sites are actually eligible.

For more information on the Wyoming State Preservation Office, visit the website at see <http://wyoshpo.state.wy.us>

### **Watershed Characterization for Resource Management/"Microbag"**

Mickey Steward, Coalbed Methane Coordination Coalition, indicated the changing emphasis to watershed management is due to the BAG process, including National Pollutant Discharge Elimination System (NPDES) analysis. Mickey will be addressing a related topic in April.

The meeting adjourned at 9:05 p.m.