

**Northeast Basin Advisory Group
Meeting Record
Civic Center – Hulett, WY
October 11, 2001**

Welcome

The facilitators opened the meeting at approximately 6:05 p.m. and reviewed the agenda to set the expectations for the meeting. Participants introduced themselves by stating their name, affiliation, and place of residence. The facilitators sent a sign-in sheet around the room.

The facilitators then stated that the next two BAG meetings, as selected by the BAG members, would be held December 13th in Moorcroft and January 17th in Upton. The facilitators explained that following the January BAG meeting, interim BAG meetings would be held every four months. It was noted that the first such meeting would be March 21st. The BAG then selected Newcastle as the location for this later meeting. Northeast BAG meetings are currently scheduled to begin at 1 p.m. on the selected dates.

Updates on Other Basin Plans

Barry Lawrence updated the BAG on the status of the planning process for the other basins. The BAGs for the Snake/Salt and the Wind/Bighorn Basins met October 8th and 9th. Barry discussed the status of these two studies, the schedule for future meetings, and the presentations planned for future meetings. He indicated that the BAG for the Powder and Tongue River Basins met October 10th to finish the issues identification process and receive presentations on water demand projections and future water use opportunities. Barry then noted that the BAGs for the Green River and Bear River Basins are holding interim BAG meetings and he invited everyone's participation in these meetings as well.

Consultant Update – Wade Irion, HKM Engineering

Wade Irion reported that the work under Task 2 (Basin Water Use Profile) was nearly complete and the consulting team was focusing on Task 3 (Availability of Surface Water and Ground Water), Task 4 (Water Demand Projections), and Task 5 (Future Water Use Opportunities). He indicated that Tasks 4 and 5 would be the topics for the presentations at tonight's meeting.

Coalbed Methane Activities Update – Mickey Steward

Mickey reported that the issue of fugitive dust was emerging and could impact CBM development. Mickey indicated that air quality monitors had recently recorded periods when the 24-hour standard had been exceeded and that if the standards continue to be exceeded, EPA could step in to force activities aimed at getting the air quality back into compliance, such as reducing dust emissions from county roads. It was noted that discussions were occurring between the counties and CBM producers to control dust emissions on county roads used by producers.

Question: Is surface discharge the primary method of disposing of CBM produced water?

Response: Yes, but the use of total containment and atomizers is increasing.

Question: Are containment ponds lined?

Response: Some ponds are lined, depending on the quality of the produced water.

Water Demand Projections – Gary Watts, Watts & Associates, Inc.

Gary explained that Task 4 includes preparation of water demand projections for municipal, industrial, agricultural, and recreation/environmental uses through the year 2030. The projections assume three future scenarios defined by the Water Development Commission: low growth, moderate growth, and high growth.

For municipalities, Gary compared population data from the 1960 and 2000 censuses and discussed three methodologies used to project future populations. He then presented projected 2030 populations for the basins and the associated water demand of the future populations under each of the three future growth scenarios. Gary compared the water demand projections with the current supplies available to municipalities and concluded that shortages are predicted to only occur at Gillette under the high growth scenario, and at Moorcroft, where the demand currently exceeds the supply and investigations are underway to increase the supply.

Gary explained that currently industrial water use in the basins was small and was comprised of water for electric power generation, coal mining, and oil and gas development. CBM development was a water producer considered under industrial use. Gary presented data on current industrial water use and production and then discussed assumptions used to predict the growth of industrial water use. He explained future industrial use was expected to be for coal-fired electric power generation and for coal conversion. Data from a draft EIS being prepared by the Bureau of Land Management for CBM development was presented as a projection of the water to be produced by CBM wells.

Gary went on to state that future irrigation demands would be defined by the need to satisfy shortages experienced by existing lands, and by the desire to irrigate new lands. The results of the watershed modeling performed by HKM would identify when and where the shortages to existing lands occur and the amount of water required to satisfy those shortages. Decisions to develop projects that will satisfy existing shortages and bring new lands into production will be made based on future economic conditions. Gary then presented the assumptions used to develop the low, moderate, and high growth projections of irrigation water demand, and the implications of those assumptions.

Gary next presented results of surveys conducted by the State of Wyoming that provide an estimate of current water-based recreation activity. He explained that the demand for recreation was expected to grow as a result of increases in both population and tourism. The implication of these projected recreation demands is that future water projects need to consider developing recreational opportunities.

Comment: The State Department of Parks and Historic Sites can provide data on activity-days at Keyhole Reservoir.

Comment: Water is available in the Belle Fourche River below Keyhole Reservoir and in the Redwater drainage to irrigate new lands or to re-activate idle lands. Lands currently are idle because of agricultural economics, and not because of limited water availability.

Comment: Agricultural water demand projections need to consider the fact that “non-ag” money is buying existing irrigated lands and the new owners can afford to implement improvements, i.e. install sprinklers, which were not affordable under previous operations.

Future Water Use Opportunities – Joe Lord, Lord Consulting, LLC

Joe explained that the purpose of Task 5 was to identify future water use opportunities that would satisfy present and projected demands, and to rank these opportunities according to the likelihood that the project is desirable, functional, and could receive the support required for implementation. In addition to a ranked short-list, Joe indicated that Task 5 would also produce a legal and institutional constraints memorandum and a water quality issues and opportunities memorandum. These two documents will be summarized at the December BAG meeting.

Joe stated that the four steps followed to produce the ranked short-list were: 1) developing screening criteria; 2) developing a long-list of future water use opportunities; 3) developing a short-list of future water use opportunities; and 4) ranking the short-list using the screening criteria. Joe then distributed an example of a ranked short-list that was developed for the Green River Basin, and explained the various components of the short-list and the process followed to develop the list. Joe further explained that the ranking process divides the projects into priority categories and then ranks the projects within the categories using the screening criteria.

BAG members then discussed the priority categories used in the Green River Basin and adopted the following project types for the process:

- Type 1:** Rehabilitation projects that preserve existing uses
- Type 2:** Projects that rectify existing shortages consistent with the hierarchy of preferred uses established by the Wyoming statutes
- Type 3:** Projects that meet projected future demands consistent with the hierarchy of preferred uses established by the Wyoming statutes
- Type 4:** Projects that enhance uses in other Wyoming basins through trans-basin diversions.

BAG members then discussed and adopted the screening criteria used in the Green River Basin as follows:

- Criterion 1:** Water availability
- Criterion 2:** Financial feasibility
- Criterion 3:** Public acceptance
- Criterion 4:** Number of sponsors, beneficiaries, participants

Criterion 5: Legal and institutional constraints

Criterion 6: Environmental and recreational benefits

Joe indicated that each of the criteria would be assigned a different weight for each of the four categories depending on how important that criterion is for that category. The results of the work of the BAG on issues identification will be used when assigning these weights.

Joe explained that the consulting team has developed a long-list of future water use opportunities from a review of published reports. Separate long-lists were prepared for each of the sub-basins in the study area. No specific groundwater projects were included on the long-list, however, groundwater development was included as a generic future water use opportunity for each of the sub-basins, and would be ranked along with the other opportunities identified for that sub-basin.

The projects on the long-list were then reviewed by the consulting team to determine if they should be included on the short-list, or if they should be eliminated from consideration during the 30-year planning period. Reasons used by the consulting team to eliminate projects included: 1) project construction already completed; 2) concerns with the location of project facilities (i.e. within a National Forest or wilderness area, presenting major legal, institutional, and permitting constraints); and 3) original demands for the project no longer exist and are not expected to appear within the planning period.

The long-lists for each of the four sub-basins were then presented and the BAG members were asked to review the lists to identify projects that were missed by the consulting team and should be added. Joe went on to state that the recommendation of the consulting team was that none of the projects on the long-list should be eliminated and, consequently, the long-list should become the short-list. There were no objections to this recommendation. Joe indicated that the consulting team would now begin the process of ranking the projects on the short-list using the screening criteria and would present the results at the December BAG meeting.

A BAG member then expressed concern that minimal time for BAG input has been allowed with respect to development of the long-lists. Additionally, concern was expressed that no representatives of the Little Missouri or Niobrara River Basins were in attendance at the meeting. *[It should be noted that since this meeting occurred, the consulting team attempted to follow-up on such concerns and additionally provided the revised (and ranked) long-list/short-list for mailing to the BAG members prior to the next basin advisory group meeting, at which time the whole issue would be re-visited.]*

The meeting was adjourned at approximately 9:00 p.m.