Powder / Tongue Basin Advisory Group
Meeting Record
Harold Jarrard Park, Kaycee, WY
October 10, 2001

Welcome

The facilitators opened the meeting at approximately 6:05 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 facilitators sent a sign-in sheet around the room.

The facilitators stated that the next two BAG meetings, as selected by the BAG members, would be held December 12th and January 16th in Sheridan. The facilitators explained that following the January BAG meeting, interim BAG meetings would be held every four months. The first such meeting will be March 20th in Buffalo.

Updates on Other Basin Plans

Barry Lawrence updated the BAG on the status of the plans 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 the BAG for the Northeast Basin will meet October 11th and will hear presentations on water demand projections and future water use opportunities. Barry noted that the BAGs for the Green River and Bear River Basins are holding interim BAG meetings and invited everyone's participation in those meetings as well.

Review of Issues Identified during the Roundtable Work Session

The facilitators explained that at the June meeting of the BAG, members were divided into several small groups. These groups were assigned main issues and proceeded to combine and prioritize the subissues under the main issues. At the August meeting, BAG members began to discuss and modify the results of the work of the small groups. Since the discussion was not completed at the August meeting, BAG members agreed to review the subissue prioritization tables and be prepared to discuss them at the BAG meeting in October. The facilitators then asked for comments and the BAG responded with suggestions relative to changing some of the rankings of some of the subissues within the sub-basins. The proposed changes were discussed and implemented. It was noted that the final tables of issues and prioritized subissues would be distributed before the next meeting.

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, CBMCC

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.

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

Gary explained that Task 4 included 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 the only shortage predicted to occur was at Kaycee where the demand projected under the high growth scenario would exceed the capacity of Kaycee's well.

Gary explained that current industrial water use in the basins was small and was comprised of water for coal mining and oil & gas development. CBM development is 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 is expected to be for coal-fired electric power generation. 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 stated 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 will 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, as well as the implications of those assumptions.

Gary continued by presenting 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 is expected to grow as a result of increases in both population and tourism. The implication of these projections is that future water projects need to consider developing recreational opportunities.

Question: Did the industrial demand projections consider transporting coal out of the basins using coal slurry pipelines?
Response: No, this potential use will be addressed in the plan report.

Question: Were rural areas surveyed to determine existing and projected demands?
Response: Yes, this information will be presented in the plan report.

Question: Does domestic use include all uses, or just the water used in the house?
Response: Domestic use includes all uses including incidental uses such as watering lawns and gardens.

Question: What assumptions were made to make the water demand projections for electric power generation?
Response: Future electric power generation will most-likely be coal-fired using wet cooling technology.

Question: Do the predictions of future water demands assume current groundwater supplies are sustainable?
Response: Yes

Question: Do the irrigation demand projections include the introduction of exotic crops?
Response: No

Question: Why is oil and gas production even considered when the water can't be used?
Response: Water produced by oil and gas operations is considered to define the resource.

Question: How do the projections account for the fact that water can be used for multiple purposes?
Response: The projections assume current patterns of reuse will continue in the future.

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 the project is desirable, functional, and can receive the support required for implementation.

In addition to the ranked short-list, Joe indicated that Task 5 would include 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 categories:

Category 1: Rehabilitation projects that preserve existing uses
Category 2: Projects that rectify existing shortages
Category 3: Projects that meet projected future demands
Category 4: Projects that enhance uses in other Wyoming basins

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.

Because the meeting time had ended, it was decided that the long-list and short-list would be mailed out to the BAG members for their review and to identify projects that were missed by the consulting team and should be added to the long-list. BAG members were also asked to review the suggested short-list to recommend additional projects for removal and to identify projects that were eliminated by the consulting team that should be retained on the short-list. BAG comments on the long-list and short-list were to be sent to the consulting team prior to the December BAG meeting. They would then prepare a ranked short-list based on the comments received from BAG members and present the list at the December BAG meeting.

The meeting was adjourned at approximately 9:00 pm.