

Northeast Wyoming River Basin
Meeting Record
Newcastle, WY
April 3, 2003

Welcome

Facilitator Sherri Gregory welcomed the group and the meeting was called to order at 1:01 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 July 17 in Lusk.

Water Development Commission Report

Barry Lawrence updated the BAG on the status of the plans for the other basins. The Bear, Green, Snake/Salt, Wind/Bighorn, and Powder/Tongue River Basins met March 24 in Cokeville, March 25 in Rock Springs, March 26 in Alpine, April 1 in Cody, and April 2 in Buffalo. Open houses for the Platte River Basin will be held this spring. Barry discussed the status of all basin studies, and agenda for future meetings.

John Jackson indicated that four new commissioners had been appointed, including Bill Bensel in Division II. Nineteen new projects were authorized in the Omnibus Water Bill – Planning, including studies for the Beulah Water Supply and Canyon/Sunset Newcastle Area Water Supply. Twenty-seven projects were authorized in the Omnibus Water Bill – Construction. The projects in this basin included the following:

- Moorcroft Madison Well Water Supply, which will transfer the title of the new Level II groundwater well and provides for the connection of the new well to the town; and
- Pine Haven Madison Well, which will transfer the title of the new Level II groundwater well and provides for the connection of the new well to the town.

The Groundwater Exploration Grant Program, which was amended in 2002, was appropriated an additional budget of \$1,500,000. Eligibility for the Small Water Project Program was amended to include the entire state.

Cottonwoods on the Cheyenne River

Mickey Steward, Coalbed Methane Coordination Coalition, started taking samples at the upper end of Antelope Creek at the Bill Moore ranch, working down toward Riverview. The stretch, which is one of a few prairie rivers in Wyoming without dams, has well-developed cottonwood stands and wetlands. Even aged stands of cottonwoods, in single linear stands upbank from the stream, were most typical. However, tree stands were located in the following groupings: on the channel bottom, or above the channel 3-6 feet. The oldest

stands are 6-10 feet above. In addition, sand substrata supports the cottonwoods well on Antelope Creek and beaver debris was found supporting small ecosystems around the cottonwoods.

In summary, the cottonwood study results indicated:

- The Nine Mile to Riverview stretch had healthy and extensive populations of cottonwoods,
- Young tree stands are close to the stream level, aged are high above,
- Flooding assists tree establishment; the seeds are long-lived,
- Trees can survive beavers and livestock,
- The trees are relatively sensitive to salts in groundwater; competition with salt cedar is poor,
- The trees are sensitive to water table rise and drop,
- More cottonwoods now than at turn of century, and
- There are extensive wetlands along reach, too.

The draft study is due in late December 2003.

Belle Fourche Aerial Photography

The entire Wyoming portion of the river was flown. It was found that CBM water has made the streams perennial in the upper reaches. In addition, very few cottonwoods were seen along the upper reaches, as there is a very incised streambed. More cottonwoods were seen around Moorcroft with even more after Keyhole Reservoir. The lower reaches have more irrigated lands, and the river is perennial. The differences between the Belle Fourche River and the Cheyenne River were discussed. A lengthy discussion followed.

Cumulative Effects of CBM Discharge on the Cheyenne River

Dan Hengel, Department of Environmental Quality (DEQ), indicated that 20-25% of the total DEQ permits on Antelope Creek had been analyzed. The analysis indicated that only 20% of the permitted outfalls on Antelope Creek are discharging and have minimal impacts. Conveyance losses were then discussed. However, the Black Thunder and Little Thunder Creek discharge is showing up at the Cheyenne River monitoring stations. The sodium levels are low from Antelope Creek, and even lower from Black Thunder into the Cheyenne River. A lengthy discussion followed.

State Engineer's Office Coalbed Methane (CBM) Reservoir Policy

John Barnes, Surface Water Administrator, presented a history of water practices from 1930 through late 1950's. He indicated practices have changed from the use of headgates and diversion structures from flood or spring runoffs to the use of spreader dike systems. In addition, monies were made available from the federal government to build small reservoirs.

John summarized the revised interim policy, as updated in 2002, with regard to by-product water developed by CBM wells. He discussed the coordination with

various agencies, including the Oil and Gas Conservation Commission, Department of Environmental Quality, Bureau of Land Management and the US Corps of Engineers. Some of the areas of concern involve permitting on-channel and off-channel impoundments, sodium absorption ratio (SAR), and safety of dams for small and large reservoirs.

2,000 CBM related applications have been received since 1999, of which half have been processed. John went on to say that within the next 3-5 years, an additional 3,000 are expected. A lengthy discussion followed.

Wyoming's Drought

Jan Curtis, State Climatologist, introduced the drought website and drought related links, which included the palmer index, soil moisture and Snotel maps. Most of the state is in an exceptional drought, but due to recent snowstorms, has been upgraded to an extreme drought. He emphasized the importance of precipitation in April for the basin, which is currently 82% of average. A brief discussion followed.

Thunder Basin National Grassland

Clarks McClung, US Forest Service, indicated the grassland was originally formed in 1934 as the Northeast Wyoming Utilization project. In 1960, the area was transferred to US Forest Service management, and became known as the Thunder Basin National Grassland. The grassland is comprised of three grazing associations: Spring Creek unit, Thunder Basin, and Indian Kara. There are public (federal, state) and private lands involved, with the majority of the lands in Weston, Converse and Campbell Counties. The grasslands are commonly used for range grazing and mineral development. There are over 180 grazing allotments, 6 active coal mines, 350 oil and gas facilities, and 530 (non CBM) producing wells.

Public Comment

Tom Cook, meeting attendee, commented on the proposed permit by Phillips Petroleum with regard to high values of TDS and SAR discharged to the Cheyenne River. Discussion followed.

The meeting adjourned at 4:16 p.m.