Wind/Bighorn River Basin Advisory Group Meeting September 17, 2009 - 6:00 p.m. Powell, WY – Park County Weed and Pest Meeting Record

I. Welcome

Jodie Pavlica, Wyoming Water Development Office, called the meeting to order at approximately 6:05 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.

II. Basin Plan Update Presentation

Jerry Gibbens, MWH, was introduced as being part of the consultant team that is preparing the surface water portion of the Basin Plan Update. Mr. Gibbens described the progress on both Task 3, Surface Water Profile, and Task 4, Available Surface Water Determination.

Mr. Gibbens presented a review of several preliminary draft Task 3 products during the presentation, including estimates of stock water use, cropping patterns, consumptive irrigation requirement, municipal water use, regional projects and key boating segments. Comments received during the meeting regarding these products include:

 The percentage of crops in grass hay/pastures needs to be verified – the current estimates seem low. Lee Craig mentioned that for the most part, most of the "non-reports" in the USDA data are higher elevation irrigated hay meadows and pastures. These should be added to the crop distribution calculations.

Mr. Gibbens also presented model simulated shortage data from the previous basin plan, and asked whether there were any general comments on where shortages occur within the basin. The following comments were received.

- Carryover storage is very important when looking at modeling. If storage
 is high going into a dry year, then shortages typically are not incurred.
 However, if storage is low going into a dry year, then shortages are often
 incurred. The big 3 districts in the Wind River basin typically are not short
 unless year starts out with low storage
- The Owl Creek basins are probably more short than what was shown in previous basin plan. In years without storage in Anchor Reservoir, shortages begin to occur in July.
- The Greybull model appears correct if it did not consider storage in Greybull Valley Reservoir (which Mr. Gibbens indicated that it did not). Greybull Valley Reservoir should alleviate many of the shortages shown in this basin.

III. USDA – Lee Craig, Farm Services Agency, Park County Executive Director Mr. Craig, with the United States Department of Agricultural Services Farm Services Agency in Park County gave a summary of irrigation in Park County. Mr. Craig noted that grass hay on ranches typically is not reported, thus unreported acreage is probably mostly grass hay, and include areas above Buffalo Bill Reservoir and Roach Gulch in the Greybull Valley. In addition, the irrigated land numbers do not count small lot irrigated pastures (i.e. horse pastures) because the USDA values only count commercial acreages.

Mr. Craig then review trends in agriculture, including improvements in irrigation systems (sprinklers, surge irrigation, gated pipe), genetically modified (GMO) crops, changes in tillage, crops requiring less tillage, farmers getting older, acres farmed per farmer is increasing, and that very few young farmers entering agriculture. Because of this, irrigation systems need to become more efficient.

Mr. Craig provided his thoughts on the future of agriculture in the area, including:

- Farmers decisions will be continue to be economically based
- More reliance on GMO crops (wee control, insect & disease resistance, less compaction)
- Less tillage when possible
- Continuing changes in irrigation systems (sprinklers, drip) must pay for themselves
- Anything that will legally grow and is suited to the climate can and will be grown (the sugar program is being revisited by Congress in next few years)

The following ideas were presented by Mr. Craig regarding potential future water use:

- Develop biomass facility to convert crop residue to biofuels.
- Use crop residue for power generation
- Team crop residue with natural gas for power generation

Mr. Craig also noted that livestock production is significantly down in Park County area (no markets – closest market in Worland). In addition, the ability to market crops is affected by crop storage facilities. Currently, there is one grain elevator, one bean elevator, three bean buyers, and no wheat buyers in Park County.

IV. Economics of Regional Agriculture . Klodette Stroh, Shoshone Irrigation Ms. Stroh provided a presentation highlighting the history of basin planning within the state and the Wind-Bighorn Basin Advisory Group. Planning originally began in the 1960's, with a statewide framework water plan developed in 1973. In 1979, the Wyoming Water Development Commission was created. In the 1980's, several laws began to affect water operations and development within the state, including the Safe Drinking Water Act, the Endangered Species Act and the Clean Water Act. There was also increased speculation by downstream

states over Wyoming's compact allotment in the Green River Basin and Nebraska filed a lawsuit on the North Platte.

As a result of these issues, in 1996, the Wyoming legislature directed WWDC and the State Engineers Office to prepare recommendations to update 1973 Framework Water Plan (particularly in response to increased speculation on Green River water). Thus, the current basin planning process was established. Establishment of the BAG was a grass-roots planning process supported by governor.

Ms. Stroh presented several slides showing Wyoming's rank nationally in agricultural production, ranks of agricultural production by County within the state, and economic impacts of sugar beet industry. Overall, agriculture has over \$1 billion impact on economy statewide, and \$75.5 million impact in Park County.

Ms. Stroh also discussed the difficulties that young farmers have in getting started in the business, including the high prices of land. There are programs in other states that assist young farmers in purchasing new farms, and would like to see something similar established in Wyoming.

Ms Stroh concluded with the following remark:

"Water is Wyoming Gold and agriculture is our national treasure"

V. Issues and Strategy Development - Diane Hoppe

Ms. Diane Hoppe with MWH facilitated a discussion of Wind/Big horn River Basin Advisory Group Issues and Strategies. A handout was presented that contained issues and strategies from previous discussions. Additions and edits were made to this list during the course of the discussion. The following summarizes the changes made:

Water and Economic Development Issues:

- Added: "Limitations of Federal contracts"
- Added: "In Bighorn Basin, limited opportunity for GW development"
- Added: "Possible downstream constraints (Compacts, Tribal settlements)"

Water and Economic Development Strategies:

• Added: "Add Pick-Sloan description/education to Basin Plan"

Current and Future Water Uses Issues:

Added: "Byproduct water utilization and expansion"

Recreation: no changes

Groundwater Issues:

- Added: "Impacts of changing irrigation practices on aquifer levels"
- Added: "Effects of overdrafts on Madison aguifer levels"
- Added: "Use of geothermal groundwater"

Agriculture Issues

Added: "Benefits and drawbacks of improved irrigation efficiencies"

- Added: "when water is unavailable" to the end of "The Sugar beet acreages in the Cody, Powel, Emblem Bench, Lovel, and Worland Area are penalized for not meeting their acreage quotas."
- Added: "Federal loans on lands under Federal irrigation districts"
 Agriculture Strategies:
 - Added: "Consider possible Federal legislation to address Federal Projects issues (expansion within Projects, conveyance of non-Project water through Federal facilities, conveyance of municipal water, etc.)
 - Added: "Local research regarding effects of improved irrigation efficiencies (UW)"

Environmental Issues:

- Added: "Invasive species"
- Added: "Watershed management on Federal lands including gravel roads (siltation, erosion)"

Tribal Concerns Issues:

- Added: "(Crow Tribe)" to end of "ongoing litigation/negotiation"
- Changed last bullet to read: "Historic vs. full development of Futures water awards"

Tribal Strategies

Added: "Improved communication and understanding of issues"

VI. Public Comment

No additional public comment was received.

VI. Next Meeting

The next meeting is scheduled for Thursday, November 12, 2009 at 6:00 p.m. in Worland. The location is to be determined.

The meeting adjourned at approximately 9:00 pm.