

**Platte River Basin Advisory Group (BAG)  
Meeting Record  
Douglas, WY  
August 10, 2004**

**Welcome**

Facilitator Dale Gregory welcomed the group and called the meeting to order at 10:00 am. Dale asked those in attendance to introduce themselves and reviewed the meeting agenda. A sign-in sheet was circulated to record attendance. The next Platte River Basin BAG meeting will be held on Tuesday, October 5, 2004 at 10:00 am in Rawlins.

**Planning Team Issues**

**River Basin Planning Update:** Barry Lawrence, WWDC, noted that all six of the other basin plan BAGs had met since the June 8, 2004 Platte River Basin BAG meeting. Meeting locations and discussion topics included:

- Wind/Bighorn River Basin Advisory Group  
Location: Thermopolis WY  
Date: Tuesday, July 6, 2004  
Discussion topics:
  - Yellowstone River Compact – Pat Tyrell
  - National Park Service – Bighorn Canyon water quality monitoring plan
  - Kirby Creek watershed plan
  - Midvale conservation program
  - Snow telemetry - National Resource Conservation ServiceNext meeting:
  - Tuesday, September 28, 2004, in Powell, WY at 3:00 pm
  
- Powder/Tongue River Basin Advisory Group  
Location: Sheridan WY  
Date: Wednesday, July 7, 2004  
Discussion topics:
  - Yellowstone River Compact
  - Lake DeSmet
  - Snow telemetry - National Resource Conservation Service
  - Research – modeling high mountain streamflow
  - Coalbed methaneNext meeting:
  - Wednesday, September 29, 2004, in Kaycee, WY at 6:00 pm
  
- Northeast WY River Basin Advisory Group  
Location: Moorcroft WY  
Date: Thursday, July 8, 2004

Discussion topics:

Campbell County Conservation District activities  
Instream flows - Wyoming Game and Fish Department  
Research – modeling high mountain streamflow  
Coalbed methane

Next meeting:

Thursday, September 30, 2004, in Newcastle, WY at 1:00 pm

▪ Bear River Basin Advisory Group

Location: Evanston WY

Date: Monday, July 19, 2004

Discussion topics:

Wind farm near Evanston – economic development  
Painter Reservoir reclamation project  
Bear River research – Utah State University  
Bear River Water Quality Task Force

Next meeting:

Monday, October 11, 2004, Cokeville, WY at 6:00 pm

▪ Green River Basin Advisory Group

Location: Savery WY

Date: Tuesday, July 20, 2004

Discussion topics:

Green River and Colorado River issues  
Potential water management issues in the Green River Basin  
Tour of High Savery Reservoir and presentation by the Wyoming  
Game and Fish Department

Next meeting:

Tuesday, October 12, 2004, Lyman, WY, at 10:00 am

▪ Snake/Salt River Basin Advisory Group

Location: Jackson WY

Date: Wednesday, July 21, 2004

Discussion topics:

Instream flows  
Teton County Conservation District – ongoing water resources  
projects  
UW research in collaboration with the National Park Service

Next meeting:

Wednesday, October 13, 2004, Jackson, WY, at 6:00 pm

Barry also discussed recently authorized WWDC weather modification feasibility studies in the Wind River Range and Upper Platte River Basin. He noted that a contract has been awarded for both studies to Weather Modification, Inc. (WMI), Fargo, ND. WMI will complete a six month study to assess a variety of pertinent factors in order to determine which weather modification activities may be feasible in the two study areas,

to review permitting issues, and to assess potential benefits that may be derived from ground-based and/or aerial cloud seeding technology. WMI has been charged to prepare a plan for a five-year weather modification pilot study and will do so in two separate reports, one for each study area. The National Center for Atmospheric Research in Boulder will be assisting WMI with this work. Barry then announced upcoming public stakeholder meetings regarding this project, including:

- Tuesday, August 17, 2004, in Saratoga,
- Wednesday, August 18, 2004, in Pinedale, and
- Thursday, August 19, 2004, in Dubois.

Mr. Lawrence distributed letters announcing and describing the upcoming meetings to BAG members who requested them.

### **Future BAG Meeting Scheduling**

Jodie Pavlica, WWDC, discussed future Platte River Basin BAG meeting scheduling and proposed the following meeting schedule:

- Tuesday, October 5, 2004 in Rawlins - note that this meeting will be held on the first rather than the second Tuesday of October because WWDC personnel have other commitments on October 12,
- Tuesday, December 14, 2004, in Casper,
- Tuesday, February 8, 2005, in Wheatland, and
- Tuesday, April 12, 2005, in Cheyenne – the final Platte River Basin Plan presentation will take place during this meeting.

### **Platte River Cooperative Agreement**

A scheduled presentation regarding the Platte River Cooperative Agreement did not occur.

### **Consultant Update**

Joel Farber of Trihydro Corporation introduced Chris Lidstone, Lidstone & Associates, Fort Collins, CO, who is a sub-consultant to Trihydro during preparation of the Platte River Basin Plan, and John Galbreath, an engineer with Trihydro who is working on the plan.

### **Draft recreational water use technical memorandum**

Chris Lidstone, using a PowerPoint presentation, discussed the current draft recreational water use technical memorandum. He stated that major sources of information for this draft memorandum included the Wyoming Game and Fish Department, the U.S. Fish and Wildlife Service, the U.S. Bureau of Land Management, the Wyoming Division of State Parks and Historic Sites, the U.S.D.A. National Forest Service, the U.S. Bureau of Reclamation, and the draft Platte River Environmental

Impact Statement. Noting that recreational water use varies over time and is generally non-consumptive, Chris pointed out that basin recreational water use has been impacted by the ongoing drought. He stated that the major types of consumptive recreational water use are golf course irrigation and camp ground water supplies. He then assessed recreational water use in each of the Platte River Basin subbasins, focusing on:

- Above Pathfinder Dam: boating, fishing, and tourism,
- Pathfinder to Guernsey: boating, fishing, big game hunting, and waterfowl hunting,
- Guernsey to State Line: fishing and waterfowl hunting,
- Upper Laramie: boating, fishing, big game hunting, and camping,
- Lower Laramie: boating and fishing,
- Horse Creek: boating and fishing, and
- South Platte: boating and fishing.

Chris discussed waterfowl management areas and golf courses in the basin. Following his presentation, he responded to BAG questions and comments regarding basin golf course water use, assessment of private recreational water users, and inclusion of pertinent information from the Wyoming Guides and Outfitters in the recreational water use technical memorandum.

### **Consultant work update**

John Galbreath also utilized a PowerPoint presentation to summarize recent Trihydro Corporation (Trihydro) basin plan work. After summarizing project work scope tasks, noting which task work is currently in progress, and describing the organization of all project worked based on seven Platte River Basin subbasins, he focused his presentation on work pertaining to basin water use and, specifically, to:

- Agricultural water use: irrigated lands mapping, cropping pattern determination, estimated consumptive use of irrigation water, and ongoing water right attribution;
- Industrial water use: methodology followed to collect basin industrial water use data, compilation of industrial water use data, and pending work to complete this work task;
- Environmental water use: minimum instream flows, U.S. Forest Service instream bypasses, minimum reservoir releases, and ongoing contacts with interested environmental groups; and
- Water use from storage: collection of information regarding three categories of non-stock basin

reservoirs, including those having permitted capacities between 50 acre-feet and 1,000 acre-feet, those having permitted capacities greater than 1,000 acre-feet, and federal reservoirs; information collected to date; and pending work.

At the end of his presentation, John noted that Trihydro intends to provide the BAG with more information regarding agricultural water consumptive use calculations, an educational tool update, and updates regarding other basin plan work at the October BAG meeting.

**Update from Drought Task Force – Lois Van Mark, State Executive Director, Wyoming Farm Service Agency**

Lois Van Mark became involved in the Wyoming Drought Task Force (WDTF) in 2001 and serves on the agricultural sub-committee of the WDTF. A WDTF goal is to seek ways to mitigate the impacts of the ongoing drought in Wyoming. Accomplishments of the WDTF agricultural sub-committee include:

- collaborating with a wide cross section of interested individuals and agencies,
- assisting with developing U.S. Forest Service and Bureau of Land Management practices of working closely with producers regarding management of grazing permits on federal land during the drought,
- providing FSA money to producers to maintain and improve water facilities,
- facilitating collaboration among Federal agencies to distribute drought relief funds to benefit Wyoming producers, and
- extending Internal Revenue Service (IRS) provisions regarding tax deferrals associated with drought-induced sales of producers' foundation stock.

Lois stated that the State of Wyoming does not currently administer many programs that pertain specifically to drought mitigation and relief, and that most such programs of this type are federal. Federal programs include:

- Emergency Conservation Programs (ECP),
- Secretarial Declaration (SD),
- Conservation Reserve Program (CRP), and
- Non-fat Dry Milk Livestock Feed Assistance Initiative.

| For more information on these programs contact your local Farm Service Agency.

FSA has collaborated with Jan Curtis, Wyoming State Climatologist, during work with the Community Collaborative Rain and Hail Study (COCORAHs). COCORAHs is a Colorado volunteer organization whose goal is to distribute rain gauges and other weather monitoring equipment to citizen volunteers. The volunteers then collect and transmit weather data to COCORAHs by telephone or e-mail. Lois encouraged BAG members to participate in COCORAHs and provided the organization's web site address: [www.cocorahs.org](http://www.cocorahs.org). She stated that increased participation in COCORAHs by Wyoming citizens would improve drought monitoring and administration of federal drought relief programs in Wyoming.

### **Selenium Problems in the Casper Alcova Area – Rik Gay, Natrona County Conservation District**

Rik Gay, an environmental consultant, has been working on the Kendrick Selenium Watershed Project (Project) for the past three years under contract with the Natrona County Conservation District (NCCD). This partnering project involves and receives support from NCCD, the Casper-Alcova Irrigation District (CAID), and the Wyoming Department of Environmental Quality (WDEQ).

Rik described selenium as a trace mineral that can be toxic or carcinogenic to humans and wildlife. Excess selenium intake impacts fish and wildlife reproductive cycles, a significant problem given the importance of the North Platte River as a sport fishing destination. Selenium "bio-accumulates" in living organisms – an organism releases selenium at a relatively slow rate so that, with continuing ingestion of selenium, the selenium concentration in the organism can increase to undesirably high levels faster than the organism can excrete this metal. All humans must have some selenium in their systems. Rik noted that the toxic level of selenium in an organism is only slightly higher than beneficial level.

Rik then explained ongoing selenium research, including potential use of selenium in AIDs research based on potentially positive impacts of the metal on the human immune system. He also noted that selenium can be a "mood enhancer" to humans and described research in China regarding improving human health through controlled ingestion of selenium.

The U.S. Bureau of Land Management (BLM) first identified selenium as a potential environmental hazard in 1985 following high migratory bird mortality at a BLM-administered irrigation district. BLM surveyed irrigation districts that were located in areas containing shales that were considered likely sources of selenium, and the CAID was identified as one such district. BLM conducted research regarding the presence of selenium in the CAID between 1988 and 1990 and found high selenium concentrations in some parts of the district. In 1998, WDEQ, based on BLM research, listed the North Platte River as "impaired by elevated selenium," and in 2000 WDEQ listed eight other water bodies located within or near the CAID as selenium impaired.

The goal of the Project, which is administered by a local steering committee, is to address local surface waters that have been listed as selenium-impaired and to improve

North Platte River water quality through a reduction in selenium concentrations “to the extent possible.” Achieving this goal is considered important to maintaining the continuing integrity of the CAID irrigation water conveyance system, which comprises an important component of the local economy. Among irrigation system remediation measures aimed at reducing selenium in local surface water that the Project has considered have been lining irrigation ditches and converting from flood irrigation to more efficient irrigation methods.

The Project resumed collecting and collating water quality data during year 2000. Collation and assessment of Project data has allowed the Project to begin assessing the level of contribution of various irrigation methods to selenium in local surface water. The ongoing drought has caused some problems with data collection in that some test sites have gone dry. Regardless, a large quantity of water quality data, particularly groundwater quality data, has been obtained by the Project.

The Project is developing a Geographical Information System (GIS) to map the study area and manage project data. Rik showed example maps from the project GIS that illustrated relative selenium concentrations and Project water quality sampling sites in the study area.

Rik discussed review of Project data by University of Wyoming scientists and the need to obtain additional data in order to develop valid conclusions regarding the sources, conveyance, and mitigation of selenium in and around the CAID. The Project has prepared and is monitoring a research plot where various types of irrigation system have been installed in order to assess the relationships between the presence and movement of selenium and particular irrigation methods. Experimental cropping, surface water sampling, and various other types of testing and analysis are ongoing at the site.

Rik noted that information regarding the NCCD-CAID selenium assessment project and other selenium-related topics is available on the web at [kendrickselenium.org](http://kendrickselenium.org).

### **Adjournment**

The BAG adjourned at approximately 1:00 pm.