Platte River Basin Advisory Group (BAG) Meeting Record Casper, WY February 8, 2005

Welcome

Facilitator Sherri Gregory welcomed the group and called the meeting to order at 10:00 am. All attendees introduced themselves, followed by a review of the overall meeting agenda. A sign-in sheet was circulated to record attendance. The next meeting is scheduled for April 12, 2005 in Saratoga.

Planning Team/Consultant Update

Jodie Pavlica, WWDC, reviewed a modified project calendar. At the April 12 meeting in Saratoga, Trihydro Corporation will review a draft basin plan for the BAG. The final basin plan presentation will occur June 14 in Cheyenne.

Population/Demand Projections

Mr. Andy Fritsch from Harvey Economics (HE, Denver) presented information regarding ongoing HE work, and he encouraged BAG members to ask questions during the presentation

The role of HE is to look at future water use, compare it to existing supplies, and try to determine potentially unmet water supply needs in the basin. The results of this work should allow WWDC and local planners to decide what types of water projects to consider in the future.

HE has two major forecasting objectives:

- Projecting long-term economic and demographic activity under uncertain conditions, and
- Assessing the different economic development scenarios in order to consider what water demands would be under different conditions, i.e., an average year and a maximum year.

Mr. Fritsch showed a schematic of HE's overall methodology, which is fairly typical for any water planning project and includes:

- Economic base analysis, including identifying the key economic sectors of the Platte Basin, trying to understand what the future trends might be, and trying to determine the characteristics of different economic scenarios;
- Assessment of the basin economy based on the economic base analysis,
- Economic modeling, including linking basin economic drivers to employment, demography, population, etc.;
- Looking at current economic and demographic relationships and projecting future relationships and activities; and

Subbasins

Since the Platte River Basin is large and contains about 60 percent of the population in the state, economic and demographic data on a subbasin level were prepared. Subbasins are separate from each other topographically, demographically, and economically. HE has reviewed county-level data for those counties located within the Platte River Basin, including Niobrara, Converse, Natrona, Fremont, Carbon, Albany, Platte, Goshen, and Laramie Counties.

Agriculture

Mr. Fritsch noted that:

- Agriculture is the single largest water use in the basin and a major economic driver for the basin, but it has not been a growth sector over the past 20 years;
- Cash receipts in the basin from livestock have varied over time but have been generally steady overall;
- Cash receipts from crops in the basin have been steady;
- In addition to looking at baseline agricultural conditions, HE will prepare economic forecasts with help from BAG members and by interviewing individuals in the basin;
- State projections regarding agricultural job growth between now and 2010 were reviewed:
- HE's basic formula for estimating water use in the agricultural sector is to consider both crop and livestock consumptive use as well as losses to evaporation and to groundwater and canal conveyance losses; and
- HE will talk with agricultural extension agents during pending work. BAG members suggested that HE also contact the U.S. Natural Resources Conservation Service (NRCS) and conservation districts.

Other Economic Drivers:

Mr. Fritsch discussed other economic drivers, including:

- Historical population by subbasin between 1970 and 2000,
- Personal income, and
- Employment sectors.

Future of the Sectors:

Discussion regarding the future of basin economic sectors included consideration of:

- Municipal and domestic water use;
- Population;
- Economic drivers such as mining and mineral production, the oil and gas industry, power generation, manufacturing, government, and construction;
- Water use, including determination of where major economic drivers obtain water, how much water they use, and how water use might change in the future:
- Employment;
- Recreation; and
- Environmental water use.

Summary:

HE will develop three economic scenarios for the basin: 1) the high scenario (most optimistic outlook for the economy), 2) the low scenario (minimum expectations and negative growth), and 3) the mid scenario (the most realistic level of growth). HE's economic assessment will include state projections as well as on-the-ground input from local experts. HE projections will be for year 2035, 30 years into the future.

<u>Technical Memorandum Update - Future Water Use Opportunities</u>

Mr. John Galbreath from Trihydro Corporation (Trihydro) led discussion regarding ongoing basin plan work pertaining to future water use opportunities and other technical memoranda. He asked for BAG input regarding his presentation.

Trihydro's goal is to compile a list of potential structural and nonstructural opportunities to meet current and projected water demand in the Platte River Basin. "Structural" water use opportunities include reservoirs, water distribution system enhancements, groundwater development, aquifer storage, and in-basin and trans-basin diversions. "Nonstructural" opportunities include conservation management, improved water efficiencies, and water rights transfers and exchanges.

Mr. Galbreath presented a preliminary draft list of water use opportunities and asked for input from BAG members. The list included:

- Drought response planning,
- Weather modification, including WWDC's current five-year cloud-seeding project,
- Trans-basin diversions,
- Groundwater augmentation of surface water supplies,
- Water conservation,
- Water rights transfers, typically from agricultural use to municipal use,
- Upper Laramie River storage opportunities,
- Snow fences,
- Stormwater capture, storage, treatment, and management,
- Irrigation with treated municipal wastewater,
- Municipal irrigation using untreated water,
- Enhancing recreational use of water resources,
- Modification of Pathfinder Dam and Reservoir,
- Improved agricultural irrigation system and control efficiencies,
- Coal bed natural gas (methane) development,
- Increasing runoff from national forests,
- Water exchange and banking,
- Multipurpose flood control programs, and
- Additional topics offered by BAG members, including regionalization of public water systems; competition for resources between rural and urban development; economic viability of municipal projects that extend to rural areas; and WWDC small water projects.

Mr. Galbreath reviewed and asked for input regarding the criteria that have been used in other basin plans for assessing future water use opportunities, including:

- Water availability,
- Financial feasibility,
- Public acceptance,
- Number of sponsors and beneficiaries,
- Legal and institutional issues, and
- Environmental or recreational benefits.

Mr. Galbreath discussed ongoing Trihydro work and conclusions developed to date, including:

- The Technical Memoranda concerning surface and groundwater determinations are complete although the groundwater memorandum has not been reviewed. A BAG member noted that using data from the last four or five drought years could dramatically change basin plan conclusions. The BAG engaged in discussion regarding specific stream flow gauges.
- The contents of the environmental water use technical memorandum were reviewed. Pertinent complicating factors resulting from recent and ongoing agreements, litigation, and negotiations were noted. This tech memo includes discussion regarding instream flow filings. The last part of the environmental water use tech memo summarizes ongoing activities related to the Cooperative Agreement.
- Trihydro's photography of irrigation diversions was reviewed.

Mr. Galbreath stated that Trihydro Corporation was not yet prepared to discuss agricultural consumptive use of irrigation water and would do so at the next BAG meeting.

<u>Adjournment</u>

The meeting adjourned at 1:00 pm.