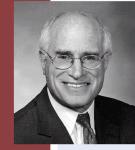


Colorado's Water Supply Future

COLORADO DEPARTMENT OF NATURAL RESOURCES

Bill Ritter, Jr. - Governor Harris D. Sherman - DNR Executive Director

Interbasin Compact Process Quarterly Newsletter



From Harris Sherman Executive Director of DNR and Director of Compact Negotiations

Thanks to all of you for being patient as the Ritter Administration becomes better acquainted with the ongoing

progress and structure surrounding the Interbasin Compact Process. Since the February 2 Interbasin Compact Committee (IBCC) meeting, I have been meeting with members of the IBCC, Roundtables, and my staff regarding the Interbasin Compact Process.

My conclusion is that we are off to a great start yet we have much work ahead of us. Over the past few months, the Basin Roundtables, the IBCC, and the Colorado Water Conservation Board (CWCB) have made significant progress in the development of basinwide water needs assessments and the utilization of the Water Supply Reserve Account (WSRA). This newsletter provides an update on these important achievements. In the coming year I feel that we should focus on certain programmatic elements that will give us a broader understanding of the water needs of each basin and potential ways of meeting those needs. Included within these efforts should be a focus on:

- Further development of each roundtable's needs assessment
- Continued implementation of the WSRA
- Identifying multiple objective collaborative solutions
- Establishing goals and milestones for the Interbasin Compact Process
- Public education and outreach

My hope is that by the end of 2009 we will have developed basinwide water needs assessments for each roundtable, and we will be utilizing the WSRA to help implement solutions to our identified needs. This work of the Interbasin Compact Process is a critical step in meeting Colorado's future water supply needs, and I want to thank the Roundtable and IBCC members for volunteering so much of their time, energy, and creative thought to this process.



Basin Roundtable Activities

Basinwide Water Needs Assessments

Over the past few months, each Basin Roundtable has actively reviewed the data from the Statewide Water Supply Initiative (SWSI) and assessed other appropriate sources of information for their basinwide water needs assessments. Based upon a review of these documents, each Roundtable has identified areas where they need more information. The State's technical assistance team (headed by CDM) is now working with each Roundtable to meet these information needs.



Arkansas Basin Roundtable

To further its needs assessment, the Arkansas Basin Roundtable has requested assistance identifying, collecting, and screening reports and studies related to water in the Arkansas Basin. The State's technical assistance team is working with the Roundtable's needs assessment subcommittee to gather this information from the Water Resources Research Institute, the CWCB, the Colorado Geological Survey, water entities within the Arkansas Basin, and other appropriate institutions. Bibliographic and summary information on relevant studies and reports will be provided for Roundtable review and possible incorporation into a GIS relational database.

Colorado Basin Roundtable

To further its needs assessment, the Colorado Basin Roundtable is developing a work plan to address non-consumptive needs and energy needs. The State's technical assistance team will undertake the following activities to develop the Roundtable's non-consumptive needs assessment:

- 1) Hold a workshop with environmental and recreational representatives and interests to coordinate non-consumptive needs assessments statewide.
- 2) Based on the results of the workshop, assist the Colorado Basin Roundtable develop a work plan. The work plan will contain:
 - a. Definition and preliminary mapping of nonconsumptive values in the Colorado Basin.
 - b. Identification of critical/prioritized stream reaches and associated value.
 - c. Identification of methods for the quantification of needs.
 - d. Identification of potential projects or methods for meeting the identified nonconsumptive needs.
 - e. Preliminary cost estimates for implementation of the work plan.

In addition to working on their non-consumptive needs, the Colorado Basin Roundtable will work with the Yampa/White Roundtable on water supply needs for energy development. The Colorado and Yampa/White Roundtables approved a WSRA application by the Colorado River Water Conservation District (River District) to study consumptive water needs associated with energy development in the Colorado, White, and Yampa River Basins. To jump start that study, the State's technical assistance team will assist subcommittees from the two roundtables in gathering existing information and data and identifying data gaps.

Dolores/San Juan/San Miguel (Southwest) Basin Roundtable

The Southwest Basin Roundtable is creating a work plan to further develop its basinwide water needs assessment. The work plan will contain the following elements:

- Consumptive use assessment—a review of consumptive use needs from SWSI and an identification of where updates or refinements are needed. This section will also include an identification of methods for updating consumptive use needs and preliminary cost estimates.
- 2) Non-consumptive use assessment—build upon efforts from SWSI Phase 2 to identify nonconsumptive needs for the basin.
- Alternatives to permanent agriculture dry-upidentify opportunities within the basin for alternatives to permanent transfers from irrigated agriculture to municipal and industrial (M&I) uses.
- Analysis and options for water conservation and efficiency—identify possibilities and methods for identifying yields from conservation and efficiency throughout the basin.

Gunnison Basin Roundtable

Over the next few months, the Gunnison Basin Roundtable, with assistance from the State's technical assistance team, will:

- Review, refine, and/or confirm the estimate of current and future water demands and supply for the smaller municipalities, water districts, and domestic water companies in the Gunnison Basin. This will involve investigating many of the smaller municipal areas of the Gunnison Basin with respect to present and future water use.
- 2) Begin to review and refine the estimate of current and future rural domestic demands and supply in the Gunnison Basin.
- 3) Identify vulnerabilities to water supply shortages for Gunnison Basin municipalities. Several municipalities in the Gunnison Basin may not have the drinking water security and level of system redundancy that is recommended to protect against unforeseen shortages. These vulnerabilities will be identified and described.
- 4) Review, refine, and/or confirm the estimate of future snowmaking demands in the Upper Gunnison Basin.
- 5) Participate in the coordination of nonconsumptive needs assessments statewide.

Metro Basin Roundtable

The Metro Basin Roundtable is creating a work plan to further develop its basinwide water needs assessment. The work plan will contain the following elements:

- 1) An update of the status of identified projects and processes from SWSI.
- 2) A strategy to collaborate with the South Platte needs assessment.
- 3) Further articulation of what the Metro Basin water users are implementing regarding conservation and reuse.
- 4) Potential opportunities for rotational fallowing/ leasing arrangements.

North Platte Basin Roundtable

The North Platte Basin Roundtable is creating a work plan to further develop its basinwide water needs assessment. The work plan will contain the following elements:

- 1) A strategy to quantify unappropriated water in the North Platte River Basin. This includes identifying unappropriated water for all beneficial uses and quantification by tributary at various locations and times of the year.
- 2) A plan to identify and quantify the nonconsumptive uses and needs in the basin.
- 3) A plan to address North Platte Basin high altitude crop consumptive use coefficients.

Rio Grande Basin Roundtable

The Rio Grande Basin Roundtable is working with the State's technical assistance team to conduct a San Luis Valley Groundwater Level Study. This study includes two areas located near the Rio Grande in the San Luis Valley and will help to characterize the hydrologic divide between the aquifer and the Rio Grande River.

South Platte Basin Roundtable

The South Platte Basin Roundtable is creating a work plan to further develop its basinwide water needs assessment. The work plan will identify strategies to:

- 1) Determine where the various providers may be looking at the same water as a future supply including both M&I providers and agricultural providers.
- 2) Determine if there is any "unappropriated water" in the Basin.
- Based on changes being made to the administration of the South Platte River by the State Engineer's Office and Water Court

estimate the impact of changes on the availability of water from the South Platte River and its tributaries.

- 4) Evaluate the impact of increased use of wholly consumable reused water on downstream water users.
- 5) Conduct a detailed supply and demand study for the Republican River Basin.
- 6) Conduct a more detailed supply and demand study for the Upper Mountain Counties in the South Platte Basin.
- 7) Complete a non-consumptive needs assessment for the South Platte Basin.

It is anticipated (but not yet approved by the full Roundtable) that the State's technical assistance team will address items 1-4. Separate WSRA applications would then be developed to execute the supply and demand studies for the Republican River Basin and the Upper Mountain Counties. The South Platte's non-consumptive needs assessment would be coordinated with other roundtable's nonconsumptive needs assessments statewide.

Yampa/White Basin Roundtable

To further its needs assessment, the Yampa/White Basin Roundtable is developing a work plan to address non-consumptive needs and energy needs. The State's technical assistance team will undertake the following activities to develop the roundtable's non-consumptive needs assessment:

- 1) Hold a workshop with environmental and recreational representatives and interests to coordinate non-consumptive needs assessments statewide.
- 2) Based on the results of the workshop, assist the Yampa/White Roundtable develop a work plan. The work plan will contain:
 - a. Definition and preliminary mapping of nonconsumptive values in the Colorado Basin.







- b. Identification of critical/prioritized stream reaches and associated value.
- c. Identification of methods for the quantification of needs.
- d. Identification of potential projects or methods for meeting the identified nonconsumptive needs.
- e. Preliminary cost estimates for implementation of the work plan.

In addition to working on their non-consumptive needs, the Yampa/White Roundtable will work with the Colorado Roundtable on water supply needs for energy development. The Colorado and Yampa/ White Roundtables approved a WSRA application by the River District to study consumptive water needs associated with energy development in the Colorado, White, and Yampa River Basins. To jump start that study, the State's technical assistance team will assist subcommittees from the two roundtables in gathering existing information and data and identifying data gaps.

Water Supply Reserve Account – Grant and Loan Program Water Activity Summary

On March 13, the CWCB Board approved over \$4 million in grants. Following is a summary of the approved grants.

Arkansas Basin

Arkansas Valley Conduit

Applicant: Southeastern Colorado Water Activity Enterprise

Amount Requested: \$200,000 (Statewide Account)

Water Activity Purpose: This grant will assist in funding a required local match to a Federal Grant administered through the Environmental Protection Agency (EPA). The conduit is designed to bring a higher quality source of drinking water to communities east of Pueblo.

Upper Black Squirrel Creek Basin - Aquifer Recharge and Storage Evaluation

Applicant: El Paso County Water Authority (EPCWA)

Amount Requested: \$70,000 (Basin Account)

Water Activity Purpose: The objective of the project is to evaluate and refine the existing knowledge of the hydrogeology of the alluvial aquifer system in the Upper Black Squirrel Creek Basin for the purposes of assessing the potential for aquifer recharge and storage.

Long-term Management of Non-native Phreatophyte Trees and Mapping Project for the Arkansas Basin

Applicant: Southeastern Colorado Water Conservancy District

Amount Requested: \$50,000 (Statewide Account)

Water Activity Purpose: The Project is designed to complete the mapping of the Arkansas Basin to inventory the infestation level of certain invasive species, to assist in the development of a Strategic Plan for the long-term management of the invasive species, and to create a plan to reduce serious impacts upon limited water resources and increase water availability to meet municipal, agricultural, environmental, and recreational needs.

Colorado Basin

Vail Ditch Project

Applicant: Grand County

Amount Requested: \$1,500,000 (Statewide Account)

Water Activity Purpose: This grant will assist in the purchase of the Vail Ditch to provide new water supplies for environmental and municipal needs in Grand County at the headwaters of the Fraser River near Winter Park.

Eagle Park Reservoir Enlargement

Applicant: Eagle Park Reservoir Company

Amount Requested: \$250,000 (Statewide Account)

Water Activity Purpose: The purpose of this grant is to cover up to 68 percent of the cost associated with final design engineering, environmental studies, permitting, construction, and mitigation of 0.27 acre of wetlands impacts for the enlargement of Eagle Park Reservoir. The proposed reservoir enlargement will provide additional water during late summer, fall, and winter months to meet growing water supply needs in Eagle County.



Colorado's Nine Basin Roundtables

Upper Colorado River Endangered Fish Recovery Program - Alternative Analysis

Applicant: Colorado River Water Conservation District

Amount Requested: \$200,000 (Statewide Account)

Water Activity Purpose: The purpose of this study is to identify a long-term source of 10,825 acrefeet of water to help meet flow recommendations under the Endangered Fish Recovery Program for the "15-Mile Reach," which extends from the confluence of the Gunnison River upstream 15 miles to the Grand Valley Irrigation Company Diversion Dam near Palisade, Colorado.

Grand County Stream Management Plan (SMP)

Applicant: Board of County Commissioner, Grand County

Amount Requested: \$30,000 (Basin Account)

Water Activity Purpose: The purpose of this study is to develop a scientifically defensible methodology for a non-consumptive water needs stream management plan for Grand County in order to determine the critical stream reaches, flow times, and key flow needs. The SMP will also develop a framework to identify problematic stream reaches and recommend approaches to determine flow solutions to address instream flow and other aquatic habitat issues to protect important environmental and recreational values, while continuing to allow for development of water needed for human consumption on both the West Slope and the Front Range of Colorado.

Roaring Fork Watershed Plan

Applicant: Ruedi Water and Power Authority

Amount Requested: \$40,000 (Basin Account)

Water Activity Purpose: The purpose of this study is to assess the entire Roaring Fork watershed and develop a comprehensive plan to determine the overall demand for consumptive and nonconsumptive water uses, to provide a mapping of local water resources, and to determine the connections between local land use decisions and local water resources.

Dolores/San Juan/San Miguel Basin

Dry Gulch AKA San Juan Reservoir

Applicant: San Juan Water Conservancy District

Amount Requested: \$1,000,000 (Statewide Account)

Water Activity Purpose: The purpose of this project is to assist in the land acquisition of the reservoir site for the Dry Gulch Reservoir.

Goodman Point Water Association Environmental Report-Preliminary Engineering Report

Applicant: Goodman Point Water Association

Amount Requested: \$7,700 (Basin Account)

Water Activity Purpose: The purpose of this study is to assist the Goodman Point Water Association in completing an Environmental Report and Preliminary Engineering Report. These reports will describe and negate impacts to environmental and cultural resources and to perform general scoping of project engineering requirement and costs. These reports are required by the U.S. Department of Agriculture-Rural Development in order to qualify for grant/loan funding and will provide a preliminary "blueprint" of the proposed pipeline project to extend two domestic pipelines by Montezuma Water Company into the Goodman Point area.

Metro Basin

Chatfield Reservoir Reallocation Environmental Impact Statement and Feasibility Report

Applicant: The Greenway Foundation

Amount Requested: \$103,000 (Basin Account)

Water Activity Purpose: The purpose of this grant is to assist in finalizing the Chatfield Reservoir Reallocation Environmental Impact Statement and Feasibility Report. The goal of the study is to determine the feasibility of reallocating up to 20,600 acre-feet of storage water from the Chatfield Reservoir to other authorized purposes including M&I water supply, agriculture, and recreation and fishery habitat protection and enhancement.

Rio Grande Basin

Terrace Reservoir Hydrologic Modeling, Site Survey, and Mapping

Applicant: Alamosa Riverkeepers

Amount Requested: \$64,500 (Basin Account)

Water Activity Purpose: This study is a critical component of the Alamosa River Instream Flow Project. The Alamosa River Instream Flow Project will purchase one or more senior irrigation water rights and place them into storage-and-release plans at Terrace Reservoir. The water rights will be used to restore flows and improve the natural environment in the Alamosa River channel.





Rio Grande Reservoir Multi-Use Enlargement and Rehabilitation Preliminary Design

Applicant: San Luis Valley Irrigation District

Amount Requested: \$288,000 (Statewide Account)

Water Activity Purpose: The purpose of this study is to provide further analysis of enlarging and rehabilitating the Reservoir to better meet Colorado's obligations under the Rio Grande Compact, to re-regulate flows to support instream and riparian needs, to increase critical water storage to meet growing domestic and commercial development in the Rio Grande Basin, and to develop a larger conservation pool within the Reservoir for fish habitat. The study will also analyze a re-design of the outlet works to provide consistent and safe water delivery, particularly during high flow periods.

South Platte Basin

Chatfield Reservoir Reallocation Environmental Impact Statement and Feasibility Report

Applicant: The Greenway Foundation

Amount Requested: \$27,000 (Basin Account)

Water Activity Purpose: The purpose of this grant is to assist in finalizing the Chatfield Reservoir Reallocation Environmental Impact Statement and Feasibility Report. The goal of the study is to determine the feasibility of reallocating up to 20,600 acre-feet of storage water from the Chatfield Reservoir to other authorized purposes including municipal and industrial water supply, agriculture, and recreation and fishery habitat protection and enhancement.

Yampa Basin

Colorado, White, and Yampa River Basins Energy Development Water Needs Assessment

Applicant: Colorado River Water Conservation District or other - pending resolution of Tabor Issues as discussed below.

Amount Requested: \$300,000 (Statewide Account)

Water Activity Purpose: The purpose of this study is to analyze consumptive water needs associated with energy development in the Colorado, White, and Yampa River Basins. The study will include an assessment of the regional hydrologic impacts of energy development, including an effort to quantify the direct use of water for extraction and development, an effort to quantify the additional municipal demand from direct/indirect worker populations and multiplier impacts from resultant growth, and an effort to quantify water demands from offsite electrical generation needed for industrial and municipal development.

Further information regarding the Interbasin Compact Process accomplishments and support provided to the basin roundtables to further their basinwide needs assessments can be found at:

http://dnr.state.co.us/Home/ColoradoWaterf orthe21stCentury/IbccHome.htm.

Information on the Water Supply Reserve Account and continuing SWSI activities is located on CWCB's webpage: http://cwcb.state.co.us/IWMD/.



For more information, please contact:

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