



Arkansas Basin Roundtable
Attention: Gerald L. Barber
P.O. Box 1976
Colorado Springs, CO 80901

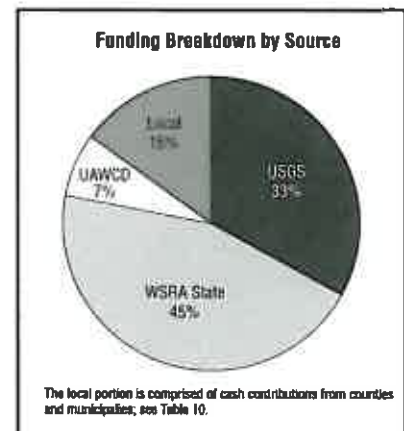
January 16, 2009

Mr. Todd Doherty
Intrastate Water Management and Development Section
COLORADO WATER CONSERVATION BOARD
1580 Logan Street, Suite 600
Denver, CO 80203

**Re: WATER SUPPLY RESERVE ACCOUNT 2009 GRANT APPLICATION FOR
THE UPPER ARKANSAS WATER CONSERVANCY DISTRICT**

Dear Todd:

The Arkansas Basin Roundtable (ABRT) met on January 14, 2009, to review the application of the Upper Arkansas Water Conservancy District (UAWCD) for a hydrological water balance study. The goal of the \$406,912 study is to quantify surface water and ground water, especially ground water recharge. Data generated will be used to meet the projected basin-wide gap of 31,500 acre-feet. Data generated will be used to deal with a range of issues including projected population growth in the headwaters region of 72% by 2030, increased demand for augmentation water due to the *Arkansas Basin Rules*, and anticipated climate change. Study results can be used to estimate the effects of changes in water use or climate – specifically drought – on the availability and sustainability of ground water resources. Additionally, the study will help identify aquifer locations conducive to conjunctive use, such as recharge and storage. Aquifers that can be utilized for storage are extremely important in filling the gap for the storage needs identified in SWSI.



The ABRT approved by consensus funding for \$180,000 from the Statewide Account. By awarding \$180,000, CWCB will leverage ~\$133,000 in federal funds and approximately ~\$93,000 in local funds. The decision to ask for Statewide funds and no Basin funds is predicated on the ABRT's desire to hold its available basin funds to complete its non-consumptive needs assessment. The ABRT's decision to ask for Statewide funds is influenced by UAWCD's success at leveraging 55% of the required funding from federal and local sources, as depicted in the pie chart.

ABRT funding approval is based on three conditions:

1. Using the form which replaced Rick Brown's name with Todd Doherty's name at three locations
2. Convening a meeting of the ABRT needs assessment committee the week of January 19, 2009, and
3. Funding will be allocated to this study only after all WSRA projects previously approved by the CWCB are funded.

In accordance with Amended WSRA Criteria and Guidelines, the following table explicates how the water activity furthers the ABRT's needs assessment:


Requirement	UAWCD Study Helps Complete Needs Assessment
Consumptive Needs	The UAWCD/USGS hydrologic water balance study fits with conclusions of the <i>Arkansas Basin Consumptive Use Water Needs Assessment: 2030 – 2008 Update</i> (June 2008), which identified a 31,500 a.f. M&I gap by 2030, and recommended conjunctive surface water and ground water management solutions to deal with the gap including enlarging augmentation plans, increased use of Fryingspan-Arkansas water, and ground water development. The UAWCD study will help implement conjunctive water management and ground water storage.
Non-Consumptive Needs	Non-consumptive environmental attributes / priorities, which the ABRT summarized in 18 maps in February 2008, include: boating, fishing, waterfowl hunting, birding trails, threatened and endangered species, special value waters, wetlands, significant riparian areas, and Audubon bird areas. The UAWCD study, by going for Statewide Funds, will allow ABRT funds to be used to complete the non-consumptive needs assessment.
Water Supply Availability	The UAWCD/USGS hydrologic water balance study will quantify both ground water and surface water supply availability and characterize the interaction between them. Study results can be used to estimate the aquifer recharge rate to identify the amount of water available for sustainable use.
Propose projects or methods to meet needs	Once the UAWCD/USGS project quantifies water availability, the ABRT can use study results to propose projects and methods to meet needs based on the recoverable amount of ground water available for sustainable use. Since future optimum use of ground water and surface water supplies could include use of aquifer storage and recovery similar to reservoir storage and recovery as an innovative way to meet multiple consumptive and nonconsumptive demands, data generated will form a basis for future studies regarding utilizing aquifers for water storage.

The ABRT urges you to fund UAWCD's hydrological water balance study. The goal of the \$406,912 study is to quantify water supply availability. The study is complementary to the implementation of CWCB's Arkansas Basin DSS. On November 18, 2008, UAWCD and USGS participated in a conference call with CWCB's Andy Moore and Tim Gates of CSU to make sure that the study will be both timely and complementary with:

- The Colorado State University three year 2009-2011 project funded by WSRA at \$875,000 for "Data Collection and Assessment in Support of Improved Water Management in the Arkansas River Basin" to gather data needed to implement the Arkansas Basin DSS; on January 12-13, 2009, UAWCD and USGS conducted field reconnaissance in the study area with CSU to jointly select locations for CSU's flow measurements at 8-12 additional streams and canals, CSU's ~30 new alluvial wells, and CSU irrigation canal data collection points. Joint decision-making ensures that data will be collected at points appropriate for both CSU and the hydrological water balance study.
- The CWCB 2009 Scope of Work for a Feasibility Study for an Arkansas River Decision Support System for a nine month 2009 project to assess data needs and data gaps by conducting ~30 interviews with water resource managers and others; this study will allow for precise delineation of data needs, especially basin-specific spatial delineation of data gaps.

Please do not hesitate to contact me if you have any questions.

Sincerely,


James W. Broderick
Vice Chairman

Cc: Executive Committee
Needs Assessment Committee
Eric Hecox
Terry Scanga