

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
Agenda Item 11a

Applicant: Upper Arkansas Water Conservancy District

Water Activity Name: Hydrologic Water Balance Study

Water Activity Purpose: Consumptive and Nonconsumptive Study or Analysis

County: Chaffee, Lake and Saguache

Drainage Basin: Arkansas River

Water Source: Arkansas River

Amount Requested: \$180,000 (Statewide Account)

Matching Funds: Approximately \$220,000

Staff Recommendation
The proposed project may help meet a consumptive and nonconsumptive water supply need in the Arkansas Basin. Staff recommends approval of up to \$180,000 from the Statewide Account to partially fund the Hydrologic Water Balance Study for the UAWCD contingent on resolution of the items in the issues/additional needs section.

Water Activity Summary:

The study goal is to quantify the surface water and ground water components of the water budget, especially ground water recharge and to characterize the interaction between surface and ground water. Study results can be used to estimate the effects in changes in water use on the availability and sustainability of ground water resources.

The major tasks of the project are provided below:

- Task 1: Data Compilation
- Task 2: Data Collection
- Task 3: Data Analysis
- Task 4: Reporting

Funding Overview

Total project cost is approximately \$403,000 and the UAWCD is requesting 44% or \$180,000 from the Statewide Account. Other contributors identified include the USGS (\$133,000) and local water providers, municipalities and counties (\$93,000).

Discussion:

The applicant did a great job demonstrating how this project meets most of the evaluation criteria. There is recognition of the growth pressures in the upper basin and that a better understanding of the connection between the ground and surface water hydrology would allow better management of the basin's water.

The Basin Roundtable believes that this study fits within the conclusions of the Arkansas Basin Consumptive Use Water Needs Assessment: 2030 (2008) which identified a 31,500 AF M&I gap by 2030 and recommended conjunctive surface water and ground water management solutions to deal with the gap. This study will help implement conjunctive use strategies.

The applicant is working cooperatively to ensure that this study will be complimentary to a study by CSU (“Data Collection and Assessment in Support of Improved Water Management in the Arkansas River Basin”) and the CWCB’s Feasibility Study for an Arkansas River DSS.

Issues/Additional Needs:

- Please include a more detailed budget, scope of work and budget.
- Under Task 4 (page 38 application) the applicant states that deliverables will include non-proprietary data compiled for and collected by the study. Considering the use of State funds for this project, all provisional data compiled for and collected by the study shall also be available upon request.

Staff Recommendation:

The proposed study helps to meet a consumptive and nonconsumptive water supply need in the State. Staff recommends approval of up to \$180,000 from the Statewide account to partially fund the Water Balance Study for the UAWCD contingent on resolution of the items in the issues/additional needs section.

All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and will help promote the development of a common technical platform.

In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

Engineering: All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of professional engineer licensed by the State of Colorado to practice Engineering.