

**Water Supply Reserve Account – Grant and Loan Program  
Water Activity Summary Sheet  
Agenda Item 10.f**

**Applicant:** Colorado Division of Water Resources

**Co-Applicant:** Colorado Water Conservation Board

**Water Activity Name:** Alluvial Aquifer Accretion/Depletion Analysis Tool

**Water Activity Purpose:** Non-Structural Activity

**County:** Multiple

**Drainage Basin:** South Platte

**Water Source:** South Platte River

**Amount Requested:** \$200,000

**Source of Funds:** Statewide (\$200,000)

**Matching Funds:** 20% or \$50,467 (In-kind services)

<b>Staff Recommendation</b>
Staff recommends approval of up to \$200,000 from the Statewide account to help complete the Alluvial Aquifer Accretion/Depletion Analysis Tool.

**Water Activity Summary:**

This project proposes to develop a tool to be used by the Division Engineer's Office, water commissioners and water users to quickly determine an augmentation plan's excess accretions or depletions on a daily basis. This will allow one to assess quickly if excess accretions are available for diversion or if other water rights are being impacted by the out-of-priority diversions associated with the augmentation plan. The Alluvial Aquifer Accretion/Depletion Analysis Tool (AAADAT) will use HydroBase as the primary source of input data but will store any additional information that is not currently maintained in Hydrobase.

**Discussion:**

Once developed, this tool will facilitate the administration of augmentation plans while ensuring that other water right holders are not impacted by the out-of-priority depletions as well help determine the excess accretions that may be available for other uses. This project is supported by a wide range of interests in the South Platte basin whom recognize that this tool will help support the exchange and retiming of excess accretions. Further, this project will help aid in the Lower South Platte Water Conservancy District's "Water Cooperative" which seeks to exchange between 15,000 to 30,000 acre-feet of excess augmentation water annually and has received financial support from the CWCB from both the WSRA and ATM grant programs. It should be noted that in the summer of 2010, a prototype of the Excess Accretions Tool was developed to demonstrate the ability to create such a tool as well as its functionality. This prototype was reviewed by water users and administrators and the overall sentiment was that this tool should be enhanced and designed as a basin-wide model. This application has the official support of both the South Platte and Metro Roundtables.

**Staff Recommendation:**

Staff recommends approval of up to \$200,000 from the Statewide account to help complete the Alluvial Aquifer Accretion/Depletion Analysis Tool.

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.