

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
Agenda Item 13.d

Applicant: Colorado Division of Water Resources

Water Activity Name: Data Logger Installation Project, South Platte River Basin

Water Activity Purpose: Non-structural consumptive water project

County: Multiple

River Basin: South Platte

Water Source: South Platte

Amount Requested: \$89,205 (South Platte Basin Account)

Matching Funds: In-Kind (installation of all equipment provided by DWR and participating ditch companies)

Staff Recommendation
Staff recommends approval of up to \$89,205 from the South Platte Basin Account to help complete the project titled: Data Logger Installation Project, South Platte River Basin.

Water Activity Summary:

This project would enable the installation of stage discharge data loggers on 66 diversion structures and return flow augmentation structures on 44 different ditch systems. WSRA funds would be used for purchasing the equipment with all installation and ongoing operational costs borne by the applicant and participating ditch companies.

The principle focus will be on structures on the main stem of the South Platte downstream of Denver (Districts 2, 1, and 64); and in those districts tributary to the South Platte, including District 7 (Clear Creek), District 6 (Boulder Creek), and District 3 (Cache la Poudre). Data loggers and telemetry have already been successfully installed on most major diversion structures downstream of Denver in a prior cooperative program between Northern Water, LSPWCD, SVLHWCD and DWR, partially funded by previous WSRA requests in the amount of \$48,800 and \$46,000. This WSRA application is a continuation of the project started with this previous funding.

Purchased equipment will be installed in coordination with the various water users (Ditch Companies, Augmentation Plans and Municipalities) by DWR. This in-kind contribution will include the purchase of a 12-volt cell battery (\$75) by the appropriate water user and assistance with installation and programming by DWR if needed (usually no more than 1 hour per site). There are several sites where the water user will be installing new infrastructure to accommodate the data loggers, with costs ranging from \$700 - \$10,000. In addition, DWR will work with the respective Water Commissioners to display data on the DWR FTP site as requested by water users.

Data loggers allow for continuous flow information for water users and water administrators allowing for more efficient use of administrative staff resources. The proposed project will provide an excellent complement to the State's existing diversion and stream gage satellite program. It is also complimentary to the work being done for the Colorado Decision Support System to obtain better flow and diversion data as well and for the Alluvial Aquifer Accretion/Depletion Analysis Tool (AAADAT) program which received WSRA funds.

While the installation of this equipment will help with administration through more timely availability of information on all diversions, the primary benefit of this grant will be to eliminate the workload of ditch users and water commissioners to break down charts. In addition, it would allow flexibility in administration by not requiring users to change a chart on an eight day schedule.

The data loggers allow near real time accounting to occur for augmentation of wells and diversions. This is extremely critical in the case of augmentation as real time information is necessary to determine recharge and direct flow credits to assure there is not an injury to senior water rights.

In summary, maximizing the use of existing supplies within the basin for decreed purposes with existing infrastructure is the first step in meeting the future needs of users along the South Platte and its tributaries. The increase in the use of data loggers has improved administration, allowing DWR staff to spend more time administering water rights and less time breaking down charts.

Threshold and Evaluation Criteria

The application meets all four Threshold Criteria.

Funding Overview

The applicant and numerous partnering ditch companies are providing substantial in-kind by installing and operating all data loggers in perpetuity.

Discussion:

Assisting in the funding of real-time data loggers and telemetry will facilitate the maximum use of waters in the basin. Namely, this technology will allow for the optimization of the resource, streamlining the record keeping process, providing for more precise and accurate records and providing for a more transparent environment where water users are able to verify when and how much other water users are diverting. Considering the intense competition of water in the South Platte River, every effort should be made to encourage wise and efficient use of the resource and this technology is a simple means to achieve that goal.

Issues/Additional Needs:

No issues have been identified.

Staff Recommendation:

Staff recommends approval of up to \$89,205 from the South Platte Basin Account to help complete the project titled: Data Logger Installation Project, South Platte River Basin.

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 and Final Deliverable: 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. 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.