

Water Supply Reserve Account – Grant and Loan Program
Water Activity Summary Sheet
January 26-27, 2015
Agenda Item 22(b)

Applicant & Program Sponsor: Rural Water Authority of Douglas County.

Water Activity Name: Rural Well Monitoring in Douglas County

Water Activity Purpose: Needs Assessment

County: Douglas

Drainage Basin: South Platte

Water Source: Groundwater – Denver Basin aquifers

Total Amount Requested: \$13,977

Source of Funds: Metro Account

Matching Funds: Applicant & 3rd Party cash match (\$41,933) = 75% of total study costs (\$55,910)
(refer to *Funding Summary/Matching Funds*)

Staff Recommendation

Staff recommends approval of up to \$13,977 from the Metro Account to help fund the project titled: Rural Well Monitoring in Douglas County.

Water Activity Summary: WSRA funding will provide the opportunity for the applicant to continue monitoring the county wide groundwater-level network established during an earlier phase (2011-2013) of this multi-year project. Approximately 8,021 self-supplied private household or domestic wells in this rural portion of Douglas County pump groundwater from the Denver Basin aquifer, which is administratively known as nonrenewable. Therefore, groundwater availability in this area may be insufficient for long-term demand. The existing county-wide groundwater-level monitoring network consists of 36 domestic wells throughout the county. Water levels are measured bi-monthly in all wells and 15 of these are equipped with pressure transducers for continuous (hourly) water-level monitoring. The creation of this network and the data collected from the study has added to the current network of wells currently being used to monitor water levels in the Denver Basin. Water levels measured from wells in this network over a long period of time provide a better assessment of current water resource and provide the basis from which to monitor long-term changes of the hydrologic system. This project will help document rural areas of the county that should be considered a priority in infrastructure planning efforts.

The primary objective of this grant's work is to continue monitoring the county wide groundwater-level network, established during the 2011-2014 phase of the project, at a reduced scope. The frequency of the manual water-level measurements will be reduced from bi-monthly to tri-annual site visits and the number of wells will be reduced from 36 to the 15 wells with transducers. In addition, manual water-level measurements will be made in all 36 wells in February 2015 and 2106. The monitoring period will be from October 1, 2014 through October 31, 2016. The publication of the report from the previous agreement, scheduled for release by June 2015, will be delayed until June 2017 to include the data collected through October 2016

Discussion:

The Metro Roundtable and the CWCB have approved two previous WSRA funding requests by this applicant: \$78,262 from the Metro Account and \$84,792 from the Statewide Account during the September 2010 CWCB meeting; and an additional \$50,000 from the Metro Account during the September 24, 2013 CWCB meeting, for a total of \$163,055 in grant approvals. This request will increase that total to \$177,032.

Issues/Additional Needs:

No issues or additional needs have been identified.

Threshold and Evaluation Criteria:

The application meets all four Threshold Criteria

Tier 1-3 Evaluation Criteria:

n/a

Funding Summary/Matching Funds:

	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>
WSRA Metro Account	\$13,977	n/a	\$13,977
U.S Geological Survey	\$27,955	\$0	\$27,995
Rural Water Authority of Douglas County	<u>\$13,978</u>	<u>\$0</u>	<u>\$13,978</u>
Total Project Costs	\$55,910	\$0	\$55,910

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.