

**Water Supply Reserve Account – Grant and Loan Program  
Water Activity Summary Sheet  
Agenda Item 11.j**

**Applicant:** Douglas County Water Resource Authority (DCWRA)

**Water Activity Name:** Appraisal & Feasibility Studies Required for Federal Assistance under the Rural Water Supply Act in the Douglas County Region

**Water Activity Purpose:** Study of Structural Consumptive Project

**County:** Douglas County

**Drainage Basin:** Metro Basin Roundtable

**Water Source:** South Platte, Denver Basin Aquifer, transbasin waters

**Amount Requested:** 675,000 (\$500,000-Statewide Account; \$175,000-Metro Basin Account)

**Matching Funds:** Up to \$1,125,000 (potential 1:1 federal match and \$450,000 in local match)

<b>Staff Recommendation</b>
Staff recommends full funding for the statewide account portion of up to \$500,000 and partial funding from the Metro Basin account up to \$100,000. The recommendation is contingent on resolution of the items in the issues/additional needs section. The reason for partial Basin account funding is because there has not yet been the opportunity for the roundtable to vote on the \$75,000 portion of the funds which only became available after the current fiscal year began.

**Water Activity Summary:**

The proposed project will develop a feasibility study to connect existing water infrastructure of the Douglas County Water Resource Authority members to help with the delivery of surface water to the region. Examples of existing infrastructure include ECCV Barr Lake and other pipelines, and the infrastructure of Parker, Castle Rock, Castle Pines, Castle Pines North, Centennial, Roxborough, and others. The purpose of the study is to examine alternatives to meet the goals of reducing the region's reliance on Denver Basin Groundwater and to meet their growing municipal and industrial needs and to finalize the alignments and specifications of this shared infrastructure project. The feasibility study will include detailed engineering, public participation, alternatives, and environmental consequences.

Much of the municipal and industrial water needs of the South Metro area come from non-tributary groundwater supplies found in the Denver Basin bedrock aquifers that underlie it. Due to population increases over the last 20 years, demand on these groundwater sources have led to aquifer water level declines of as much as 30 feet.

The applicant, if approved, will continue to pursue Bureau of Reclamation Federal Assistance under the Rural Water Supply Act. There is potential of assisting towns like Bell Mountain Ranch, Franktown, Inverness and Meridian.

Some critical components of the proposed feasibility study include:

1. Purpose and need for action, including public involvement;
2. Study background including examination of previous studies;
3. Feasibility study process, including identification of problems, opportunities, and constraints;
4. Affected environment, including air quality, water quality, water volume, soils, plants, wetlands, fish and wildlife, threatened & endangered species, social and economic conditions, recreation, cultural resources, etc.
5. Formulation of alternatives, including cost, construction, performance, major rehabilitation, operation, maintenance, and replacement considerations and the no action alternative;
6. Evaluation of alternatives;
7. Environmental consequences of the project, alternatives, and no action alternative and the cumulative effects;
8. Comparison of the alternatives;
9. Recommended plan, which should include permitting, detailed engineering, and preliminary financing plan;
10. Consultation and coordination including public involvement.

### *Threshold and Evaluation Criteria*

The application meets all four Threshold Criteria.

The application articulates how the project meets each of the Evaluation Criteria. This water activity does an outstanding job of meeting the following Evaluation Criteria:

Promoting Collaboration & Cooperation: DCWRA is made up of 19 individual municipalities, water providers, and County government dedicated to water resource conservation, education, public policy initiatives, and the creation of a forum for the discussion of issues related to water. This project is an opportunity to bring together large and small water providers and individual well users to pursue a regional solution.

Urgency, window of opportunity: The needs of the basin are within the normal time horizon for planning and implementing a water project.

Need for Financial Assistance: Estimated total cost of a regional replacement water solution is \$3.5 billion dollars, at a time when most Douglas County citizens are still paying for their existing systems. The need for financial assistance in the form of potential Federal Loan Guarantees is great. This grant funding enables DCWRA to perform the required studies needed to move forward in getting the project financed.

The Water Activity Addresses Issues of Statewide Value: It is a benefit to the state to assist DCWRA and its members to determine viable solutions prior to them becoming a crisis. The planning effort complements other CWCB programs because when implemented, instream flows from the reuse components will provide base flows for environmental benefits in Cherry and Plum creeks. Reliability of water supply is a critical component of the region's economic success, and this project will help provide needed water infrastructure for existing and future residents that would otherwise be dependent on declining Denver Basin Aquifer water. This area has the largest identified water supply gap.

### *Funding Overview*

Grant funding in the amount of \$500,000 is requested from the State Account and \$175,000 from the Metro Basin Account. Because the grant was approved in June, \$175,000 was not available. The Metro Basin approved \$100,000 of in-basin funding, and would like to consider an additional \$75,000 from the basin account. The overall cost of the project is \$1,800,000, of which \$600,000 of WSRA funds being considered is one third. Local match is \$450,000 and potential federal match is \$675,000.

### **Discussion:**

As previously described, innovative solutions for this region need to be explored due to the gap identified for the area. The four staff who reviewed the proposal each considers this an important grant to fully fund.

### **Issues/Additional Needs:**

- Please include a detailed revised scope of work and budget to specify the costs of permitting and detailed engineering of the recommended plan.
- Conservation Plans – Project participants that deliver over 2,000 AF of water annually are required to have an approved Water Conservation Plan. Each of the covered entity members of the DCWRA has a conservation plan except for Eastern Cherry Creek Valley Water & Sanitation (ECCV). Prior to execution of a State WSRA contract, all “covered entities” participating in the project will be required to have a CWCB-approved Water Conservation Plan in place. ECCV has been notified and will be working with Veva Deheza, of the CWCB Office of Water Conservation and Drought Planning, on the plan.

### **Staff Recommendation:**

Contingent on resolution of the items in the issues/additional needs section, staff recommends full funding for the statewide account portion of up to \$500,000 and partial funding from the Metro Basin account up to \$100,000 for a total of \$600,000 in WSRA funds. The reason for partial Basin account funding is because there has not yet

been the opportunity for the roundtable to vote on the \$75,000 portion of the funds which only became available after the current fiscal year began.

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.