Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet

March 16-17, 2016 Agenda Item 14(x)

Applicant & Fiscal Agent: Dolores Water Conservancy District

Water Activity Name: SW Colorado Weather Modification Strategic Plan for

Winter Snow Pack Augmentation

Water Activity Purpose: Strategic Planning (Ag, M&I, Rec & Env)

County: All w/in Southwest Basin

Drainage Basin: Southwest

Water Source: Atmosphere

Amount Requested/Source of Funds: \$55,620 Southwest Basin Account

Matching Funds: n/a (none provided)

Staff Recommendation:

Staff recommends approval of up to \$55,620 from the Southwest Basin Account to help fund the project titled: SW Colorado Weather Modification Strategic Plan for Winter Snow Pack Augmentation.

Water Activity Summary: WSRA funds, if approved, will be expended to provide funding to: Establish a local oversight group that can actively assist and support the cloud seeding program development and improvements, and to request new sources for additional funding. This group may only meet once per year or possibly only through conference calling to control travel & time commitment. This group should also actively coordinate with CWCB and the Lower Basin funding partners; and Contract with an appropriate independent weather modification professional to help a local group develop a strategic plan for the southwest Colorado programs. The plan will focus on program improvements and efficiencies, and assist the basin in meeting "gaps" identified in our Basin Implementation Plan by adding additional or augmented water supplies. These objectives will be accomplished by: enabling the Strategic Planning Group (via the Dolores Water Conservancy District) to solicit, review, select and contract with an appropriate qualified weather modification firm, individual or team; conduct representative plume studies to guide other questions necessary to complete the strategic plan; inventory, map and evaluate existing program equipment and placement, technology and practices; review available technologies and modernize equipment then prioritize with current cost estimates; and conduct local meetings with Strategic Planning Team to review Final Reports, exhibits and conclusions.

The current Southwest cloud seeding efforts are supported by nine (9) local sponsors, the State of Colorado, neighboring New Mexico Interstate Stream Commission and three Lower Basin states. The local sponsors have committed \$151,900 with another \$86,000 from the other parties to the 2015 cloud seeding programs. The local sponsors have provided similar levels of funding for many years along with CWCB while New Mexico and the Lower Basin California, Arizona and Nevada parties are more recent contributors to the San Juan programs.

Multiple parties currently fund the existing operations, but do not have a formal organized structure to proceed as a group to guide program improvements. This funding will focus and guide the group towards an actionable plan that will improve the current weather modification programs. It will provide efforts that no single party would undertake alone. The combined \$237,900 input by the local, state and out of state participants over multiple years demonstrates significant commitments to continuing these cloud seeding programs. Additional participation of time guiding the strategic planning efforts will likewise show further interest and commitment. The end result of the plan would lead participants to increase funding sources for improving the current programs.

Discussion: This project aligns with well with several of the Southwest Basin Implementation Plan's Basin Goals and Measurable Outcomes; such as: A2. Support specific and unique IPPs important to maintaining the quality of live in this region, and to address multiple purposes including municipal, industrial, environmental, recreational, agricultural, risk management, and compact compliance needs (SWBIP, Section 1: Basin Goals and Measurable Outcomes; Table 1: Goals and Measurable Outcomes for the Southwest Basin Implementation Plan, page 12). While this effort has not been specifically identified as a Project or Methods, or an IPP in the SWBIP, funding opportunities should include efforts that have been initiated subsequent to the submission of the SWBIP.

In addition this effort advances the Critical Goals and Actions to Meet Colorado's Water Gaps (CWP Chapter 10.3, A. Supply – Demand Gap, 10-9).

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: n/a

CWCB Project Manager: Joe Busto

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.