# Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet September 21-22, 2016 Agenda Item 19(b)

**Applicant & Fiscal Agent:** Center for Snow and Avalanche Studies

Water Activity Name: Colorado Dust-on-Snow Project

Water Activity Purpose: Study/Monitoring

**County:** Multiple counties in the Rio Grande, Colorado, Southwest

and Gunnison Basins

**Drainage Basin:** Rio Grande, Colorado, Southwest, and Gunnison

Water Source: Snow

Amount Requested/Source of Funds: \$2,500 Rio Grande Basin Account

\$2,500 Colorado Basin Account \$2,500 Southwest Basin Account \$2,500 Gunnison Basin Account \$10,000 Total Basin Account Requests

\$140,000 Statewide Account \$150,000 Total Grant Request

**Matching Funds:** Basin Account Match (\$10,000) = 6.7% of total grant

request;

**Applicant Match** 

(refer to Funding Summary/Matching Funds section)

### **Staff Recommendation:**

Staff recommends approval of up to \$2,500 from the Rio Grande Basin Account; \$2,500 from the Colorado Basin Account; \$2,500 from the Gunnison Basin Account; \$2,500 from the Southwest Basin Account; and \$140,000 from the Statewide Account to help fund the Study titled: Colorado Dust-on-Snow Project.

Water Activity Summary: The Center for Snow and Avalanche Studies is an independent not-for-profit organization that operates the Colorado Dust-on-Snow (CODOS) program. Dust on snowpack events advance snowmelt timing, enhance runoff intensity, and decrease snowmelt yields. CODOS is the only organization monitoring dust-on-snow in Colorado in a comprehensive, applied manner on behalf of the water community, providing forecasts of dust-on-snow impacts on snowmelt runoff behavior throughout the state in the form of timely and actionable updates and alerts. If approved, expenditures of grant monies will be provided to:

- Conduct dust-on-snow field campaigns to track the severity and extent of dust events throughout the snow accumulation and ablation period for WY2017, 2018, and 2019;
- Provide timely and applicable updates and alerts to forecasters and the water community;
- Operate long-term snow system study sites in Colorado's San Juan Mountains;

- Manage dust-on-snow and methodological data collection, management, validation, and reporting. Ensuring correct operation of instruments, and maintain data, metadata, and sensor status files;
- Maintain project webpages and data files, graphs, and relevant information;
- Initiate website upgrades to improve access, and support data, graphics, and interpretation platforms;
- Develop visualization and interpretive tools on project webpages for easy dissemination of information, and;
- Provide educational outreach for K-12 schools in Southwest Colorado.

**Discussion:** This grant is consistent with the next steps for implementation identified by the roundtables, the IBCC, and the CWCB, as well as in Colorado's Water Plan.

**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:**

This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to WSRF Application for applicant's detailed response.

# **Funding Summary/Matching Funds:**

Funding Source	<b>Cash</b>	<b>In-kind</b>	<b>Total</b>
WSRF Rio Grande Basin Account	\$2,500	n/a	\$2,500
WSRF Colorado Basin Account	\$2,500	n/a	\$2,500
WSRF Southwest Basin Account	\$2,500	n/a	\$2,500
WSRF Gunnison Basin Account	\$2,500	n/a	\$2,500
Total Basin Account Requests	\$10,000	n/a	\$10,000
USGS	\$0	\$21,000	\$21,000
USBOR	\$37,500	\$0	\$37,500
City of Grand Junction	\$7,500	\$0	\$7,500
Colorado River Water Conservation District	\$60,000	\$0	\$60,000
Denver Water	\$18,000	\$0	\$18,000
CWCB	\$75,000	\$0	\$75,000
Dolores Water Conservancy District	\$3,000	\$0	\$3,000
Rio Grande Water Conservancy District	\$15,000	\$0	\$15,000
Southwestern Water Conservation District	\$15,000	\$0	\$15,000
Tri-County Water Conservancy District	\$7,500	\$0	\$7,500
Upper Gunnison River Water Conservancy District	\$22,500	\$0	\$22,500
Subtotal Matching Funds	\$261,000	\$21,000	\$282,000
WSRA Statewide Account	\$140,000	n/a	\$140,000
<b>Total Project Costs</b>	\$411,000	\$21,000	\$432,000

**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.