



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 718
Denver, CO 80203

P (303) 866-3441
F (303) 866-4474

Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board

FROM: Erik Skeie, Project Coordinator
Interstate, Federal & Water Information Section

DATE: November 16-17, 2022 Board Meeting

ITEM: 15b. 2023 Projects Bill - Non-Reimbursable Project Investments
(1) Water Forecasting Partnership Project

Staff Recommendation

Staff recommends the Board approve \$1,000,000 in funding from the Construction Fund for the Water Forecasting Partnership Project for inclusion in the 2023 Projects Bill.

Introduction

The water forecasting partnership project began in the FY2016/2017 under SB 16-174. This original authorization appropriated \$300,000, and was reauthorized for in both HB17-1248 and SB18-218 for \$800,000 each fiscal year. This project was most recently funded at \$450,000 in HB22-1316. Staff requests \$1,000,000 be appropriated for continuation of this work in FY 2023/2024. The new funds will be used to complete the projects described under the blue heading. The goal of this program is to acquire new data and refine water supply forecasting statewide.

As of November 2022, the project has leveraged over \$1,000,000 in match from local stakeholders for the 2023 season. These stakeholders created a central group called the Colorado Airborne Snow Measurement Group (CASM). \$350,000 from last year's funding provided match for 14 snow-on LiDAR/Spectrometer flights in 7 different basins, and \$100,000 to continue WRF-Hydro modeling in the Dolores and Conejos Basins. Staff anticipates at least this match level for FY23/24, and will be working to seek additional match in both local and federal funds.

Discussion

At the September 2022 Finance Committee Meeting, the Committee suggested upping the original ask of \$700,000 to \$1,000,000, with the increase being contingent on the contractor's capacity to complete work with more funding, and that the increased investment would not hinder the project's ability to leverage Bipartisan Infrastructure Law (BIL) Funds awarded to the Upper Colorado River Commission (UCRC).

Airborne Snow Observatories currently has the capacity to conduct 30 flights per year in Colorado, which is estimated to cost \$3.6M. The \$1M request for the projects bill will not exceed their capacity.

CWCB Staff has been involved in the conversations surrounding the BIL Funds, and increased investment from the CWCB will not hinder the project's ability to leverage these funds.





The water forecasting partnership project began in the FY2016/2017 under SB 16-174. This original authorization appropriated \$300,000, and was reauthorized for in both HB17-1248 and SB18-218 for \$800,000 each fiscal year. This project was most recently funded at \$450,000 in HB22-1316. Staff requests \$1,000,000 be appropriated for continuation of this work in FY 2023/2024. The new funds will be used to complete the projects described under the blue heading. The goal of this program is to acquire

new data and refine water supply forecasting statewide.

As of November 2022, the project has leveraged over \$1,000,000 in match from local stakeholders for the 2023 season. These stakeholders created a central group called the Colorado Airborne Snow Measurement Group (CASM). \$350,000 from last year's funding provided match for 14 snow-on LiDAR/Spectrometer flights in 7 different basins, and \$100,000 to continue WRF-Hydro modeling in the Dolores and Conejos Basins. Staff anticipates at least this match level for FY23/24, and will be working to seek additional match in both local and federal funds.

P R O J E C T D E T A I L S	
<i>Project Cost:</i>	\$2,000,000 (matching will be sought)
<i>NRI Funding Request:</i>	\$1,000,000
<i>Funding Source:</i>	Construction Fund
<i>Project Type:</i>	Data and Modeling Upgrades
<i>Type of Grantee:</i>	Funding for Partnerships

L O C A T I O N	
<i>Benefits:</i>	Statewide
<i>Water Source:</i>	Various
<i>Drainage Basin:</i>	All Basins

FY 2023-24 Proposed Funding			
Location	Item	Cost	Notes
Statewide	Colorado Airborne Snow Measurement Group Pilot Project Support	\$900,000	Partner with the stakeholders in the Colorado Airborne Snow Measurement group to conduct multiple LiDAR/Spectrometer flights in pilot basins to determine ideal flight numbers per season. Flights will be determined by a larger group representing areas across the State. This group includes Denver Water, Northern Water, Dolores Water, USGS, and the Colorado River District.
Rio Grande	NCAR (continuation)	\$50,000	Maintain 5 stations in Conejos basin in partnership with Conejos Water Conservancy District. Provide experimental forecasting using multi-radar multi-sensor methods to compare to official federal forecasting.
Southwest	NCAR (continuation)	\$50,000	Partner with Dolores Water Conservancy District to continue to provide experimental forecasting using multi-radar multi-sensor methods to calibrate the radar, originally established in WY20/21.
Total Request:		\$1,000,000	