

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

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DATE: July 19-20 2023

AGENDA ITEM: 6: Colorado Airborne Snow Measurement Group Update

This is informational only.

Background:

CWCB Staff have been using Airborne Snow Observatories (ASO) since 2014 to provide high resolution, spatial snowpack data to stakeholders. Data collection is conducted using airplane mounted LiDAR and Spectrometer units, then processed and modeled by ASO staff to provide stakeholders a highly accurate picture of the snowpack in their basins. When combined with modeling efforts such as WRF-Hydro, this data can strengthen decision making through refining streamflow forecasts. This data has always been spotty, as funding would only allow one or two basins to be flown each winter. It has always been the goal of CWCB to make this powerful data more available throughout the state. Water Year 2021/2022 was the first season that a broader scale program could be examined, developed, and implemented, thanks especially to the vision of Denver Water's Laurna Kaatz. Water Year 2022/2023 was an expansion of that previous effort,

At the November 2022 Board meeting, the Board heard an update on the successes and challenges of the Colorado Airborne Snow Measurements Group (CASM). The Board requested that CASM and CWCB staff come back to present thoughts on what may be involved in turning this into a statewide program. This Agenda item is a reintroduction to the CASM Program, and a look at some Winter 2023 Data to set the stage for a more in depth presentation on the program itself in September 2023.

CASM Website: https://coloradosnow.org/

