



Colorado Workshop

Snowpack monitoring for streamflow forecasting and drought planning

Wednesday, September 9, 2015

9:00 am – 4:00 pm

Colorado Department of Agriculture
305 Interlocken Parkway
Broomfield, CO

<http://wwa.colorado.edu/events/workshops/COsnow2015.html>

Final agenda

- 9:00 **Welcome and Setting the Stage** (Jeff Lukas, Western Water Assessment)
- 9:15 **The National Integrated Drought Information System and the Upper Colorado River Basin Drought Early Warning System** (Alicia Marrs, NIDIS, and Nolan Doesken, Colorado Climate Center)
- 9:30 **Summary of results of participant pre-survey** – How do you use snowpack information, and for what purposes? (Elizabeth McNie, Western Water Assessment)
- 9:45 **Measuring and monitoring our snow-water resource** (Jeff Deems and Noah Molotch, WWA and U. of Colorado)
- 10:20 BREAK
- 10:35 **The NRCS SNOTEL/snow course network in Colorado** (Brian Domonkos, NRCS Colorado Snow Survey)
- 11:10 **Snow-related measurements in operational streamflow forecasting at NOAA CBRFC** (Stacie Bender, NOAA Colorado Basin River Forecast Center)

11:45 **How Denver Water uses snowpack monitoring and runoff forecasts**
(Bob Steger, Denver Water)

12:00 **MODIS-modeled snowpack estimates** – How they work, advantages,
disadvantages (Noah Molotch, WWA and U. of Colorado)

12:30 *LUNCH*

1:30 **Group discussion** – Barriers and opportunities in using operational snow
monitoring and runoff forecasting data

1:45 **LIDAR- and hyperspectral-based SWE and albedo estimates from the
NASA Airborne Snow Observatory (ASO)** - How they work, advantages,
disadvantages (Jeff Deems, WWA and U. of Colorado)

2:25 BREAK

2:40 **The Upper Rio Grande project** – Fusing enhanced radar precipitation, in-
situ hydrometeorological measurements and airborne LIDAR snowpack
estimates in a very-high-resolution hydrologic model to improve seasonal
water supply forecasts (Craig Cotten, DWR; Joe Busto, CWCB; and David
Gochis, NCAR)

3:15 **Group discussion** – Barriers and opportunities in using new spatially
distributed snowpack data; envisioning the snow-monitoring network of the
future

3:45 **Summary of what we've heard today and next steps**

4:00 END

