



**RIO GRANDE  
BASIN**  
ROUNDTABLE

Photo Credit: Heather Dutton

# WELCOME!

The RGBRT fosters cooperation in Colorado's Rio Grande basin through support of multi-purpose projects that help us manage, protect, and sustain water use for today and into the future. The Roundtable exists to make stuff happen!

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## Upcoming Events

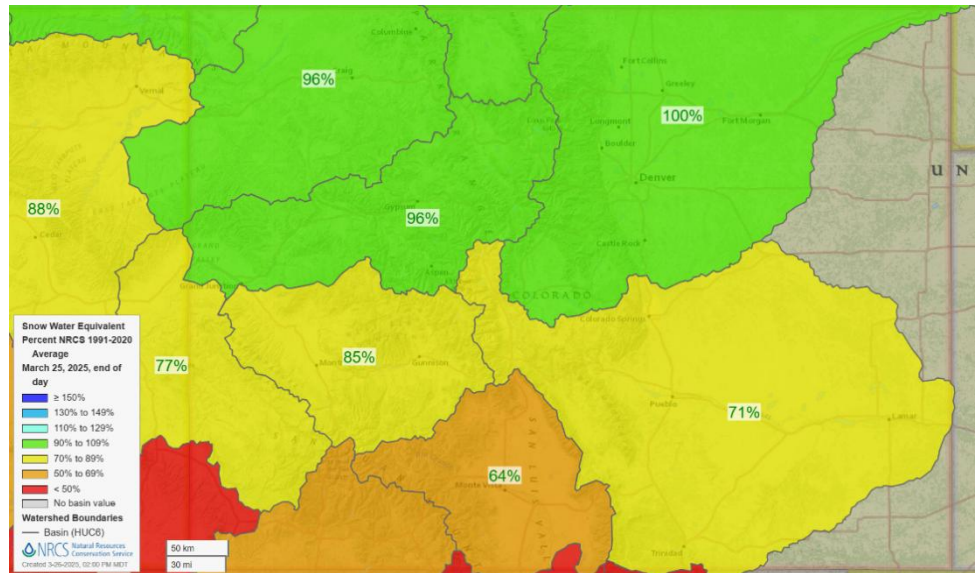
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| April 7-11         | City of Alamosa Water Week   |
| April 8            | Roundtable Meeting<br>Dr. Katherine James SLV Groundwater Quality Study update |
| April 10           | Colorado Rio Grande Compact Tour   |
| April 24           | Rio Grande Compact Talk & Reception<br>With David Robbins and Bill Paddock     |
| April 25           | Rio Grande Compact Meeting   |
| May 13             | Roundtable Meeting<br>Jeff Derry, Colorado Dust on Snow Program (CODOS)        |
| May 24             | Alamosa Rio Trio Adventure Race  |
| June 3-5,<br>10-12 | Youth Conservation Camp  |
| June 6-8           | Summerfest on the Rio  |
| June 7             | Runoff Runoff  |



# SNOWPACK and STREAMFLOW FORECASTING

## Colorado DWR Update

The snowpack in the Upper Rio Grande Basin is much below average this year. Currently, the snow water equivalent (SWE) for the Rio Grande Basin in Colorado stands at 67% of the 30 year median, while the snow water equivalent (SWE) for the Rio Grande Basin in New Mexico is only 33% of the 30 year median. The March first streamflow predictions from the NRCS show a most probable flow of 79% of the 30 year median for the Rio Grande, and 63% of median on the Conejos River.



Forecasts for other rivers and streams in the basin range from 29% to 89% of their median levels. Updated forecasts will be issued next week, and it is anticipated that those forecasts may show a drop from the March forecasted flow amounts throughout the basin.



Photo Credit: Jeff Derry

## Dust on Snow tours keep bringing snow?

The Roundtable's Dust on Snow tour, which was scheduled for March 14th, had to be canceled for the second year in a row due to a snowstorm. The education committee should keep scheduling these tours – based on strictly anecdotal evidence, they seem to summon some much needed moisture! The Center for Snow and Avalanche Studies (CSAS) Colorado Dust on Snow Program (CODOS) monitors dust-on-snow layers in Colorado to assess their impact on snowmelt timing and rates, helping water management agencies predict runoff. Kudos to Jeff Derry and his team who still ventured out to survey despite the weather. According to their latest report from Wolf Creek Pass, a short but intense storm dumped 17 in. of snow overnight on March 13th, adding 1.2 in. of snow water equivalent (SWE). The snowpack at their summit sampling location was 5.3 ft. deep, and while still deeper than usual, it was much shallower than expected. Without the new snowfall, the depth would have been only 3.8 feet. Visit [CODOS.org](http://CODOS.org) for new reports and information about the Colorado Dust-On-Snow Program.

## ASO Flights in Conejos and Rio Grande

The WSRF Grant to partially fund Airborne Snow Observatory (ASO) flights in the Rio Grande and Conejos Basins that was supported by the Rio Grande Basin Roundtable was approved by the CWCB Board on March 20th. On March 21st, the first Conejos flight of the season was completed and the Upper Rio Grande was flown on March 23rd and 24th. A second flight in both basins will be flown later in the season. Staff from the San Luis Valley Water Conservancy District collected snow depth data in remote sites throughout the Upper Rio Grande Basin to assist in ground truthing the LiDAR data. ASO will provide streamflow forecasts in the coming weeks, which will help inform water management activities such as Rio Grande Compact Administration. The ASO flights are being



# SNOWPACK and STREAMFLOW FORECASTING CONT.

coordinated and funded through a partnership between the San Luis Valley Water Conservancy District, Conejos Water Conservancy District, Rio Grande Water Conservation District, Colorado Water Conservation Board, Division of Water Resources, Colorado Rio Grande Restoration Foundation, and ASO, Inc.

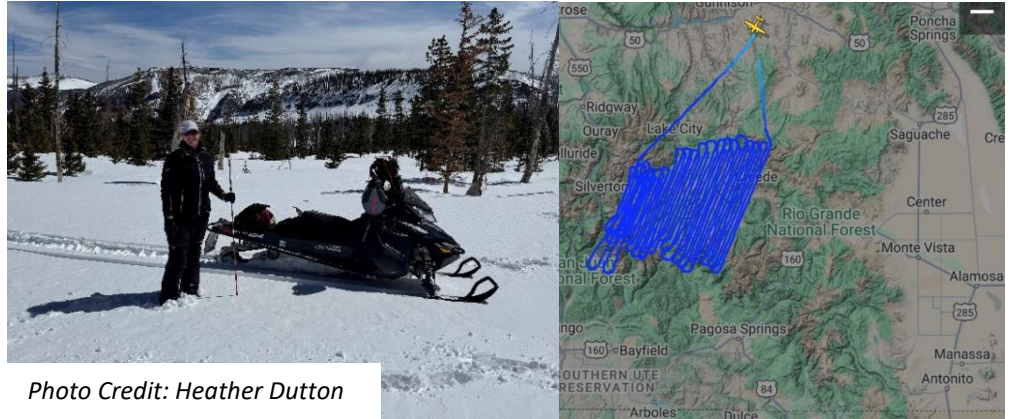


Photo Credit: Heather Dutton

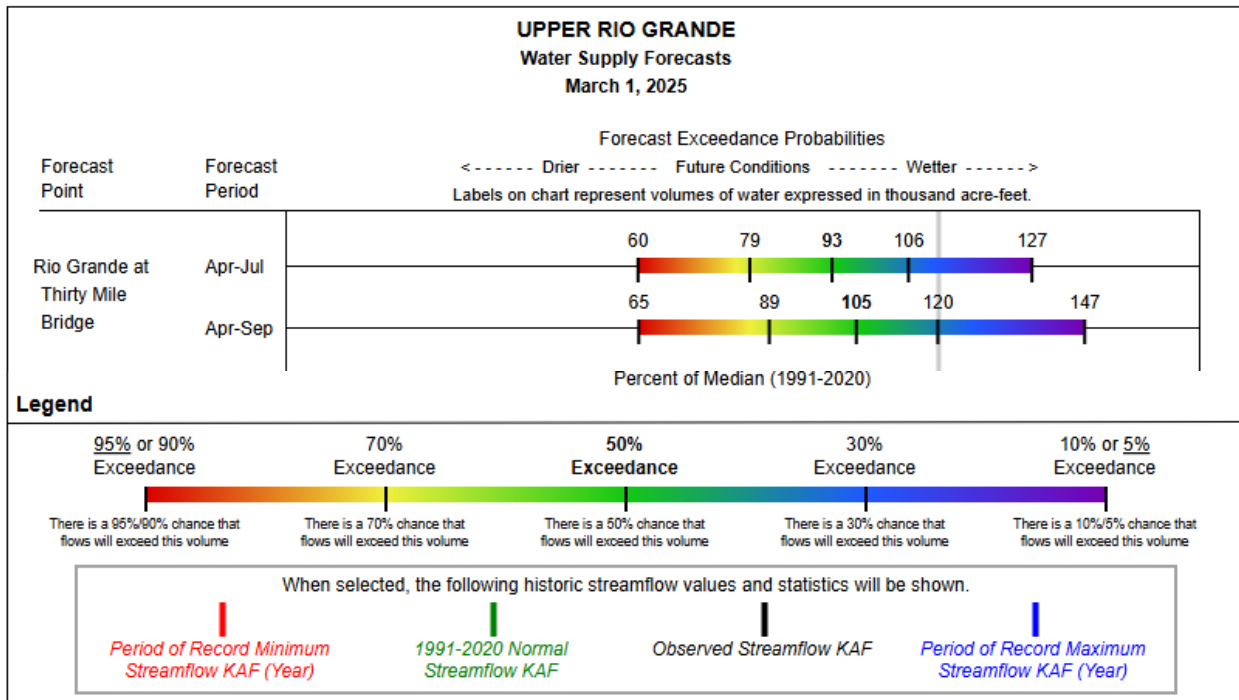
## NRCS Forecasting Resources

Thank you to Karl Wetlaufer, NRCS hydrologist, for presenting on NRCS's snow survey and streamflow forecast program at the March roundtable meeting. Here is a summary with links if you need help navigating to the forecast resources mentioned.

[NWCC \(National Weather and Climate Center\) landing page](#)

### Sources of forecast data

- [Interactive Map](#)
  - Quick view of regional trends, station data. Defaults to Snow Water Equivalent (SWE), but there are many map controls to select.
- [NWCC Apps forecast charts](#)
  - Great way to view probabilities of water volume on different river systems and how they relate to normal
  - How to find: From "NWCC Apps" > "Water Supply" tab > "Basin forecast plot" > "Colorado"



# WINTER SHEET ICE

- [Water Supply Outlook Reports](#)
  - Excellent resource for summaries of snowpack, precipitation, reservoir storage, and streamflow forecasts (come out monthly)
  - How to find it: Go to the Colorado Snow Report home page (<https://www.nrcs.usda.gov/colorado/snow-survey>) > find “Colorado Water Supply Outlook Reports” partway down the page.

Colorado  
Water Supply Outlook Report  
Latest Report



## Winter Sheet Ice at Russell Lakes State Wildlife Area

On February 21<sup>st</sup> members of the RGBRT toured the Russell Lakes State Wildlife Area (RLSWA) in Saguache County to learn about Winter Sheet Ice: what it is, how it works, why it's useful, and how it might be a tool that can be used elsewhere. RLSWA is managed by Colorado Parks and Wildlife under an agreement with the Bureau of Reclamation as mitigation for the loss of wetlands resulting from the construction of the Closed Basin Canal. Wetland Dynamics, LLC is contracted with CPW to assist in management of RLSWA and led the RGBRT tour. Winter sheet ice, or ice reservoirs, have been used historically throughout the SLV to spread water shallowly across the surface during the winter and 'store' it for early spring use. Winter sheet ice begins developing when temperatures start to freeze, usually in November, with ice forming and continuing to creep or grow throughout the winter months, developing a large ice sheet or reservoir. As the sheet ice slowly melts prior to the irrigation season, it recharges the local water table and creates optimal conditions for native vegetation growth later in the spring, while providing an integral resource for migrating cranes and waterfowl in late winter and early spring. Winter Sheet ice is a historic practice utilizing water resources at a time when evaporative loss and consumptive use by plants is very low or negligible and has been used for over 20 years on the RLSWA using groundwater wells with wildlife adjudications to simulate historic flows from Russell Springs during the late fall and winter months. Additionally, some private landowners along Saguache Creek and a few others in the SLV have decrees to divert water in the winter to create sheet ice. Public areas with wildlife decrees, river corridors, or the few private landowners with Winter Sheet Ice decrees on creeks provide most of the limited habitat available for wildlife outside of the irrigation season. The tour concluded with a visit to a wetland restoration site on RLSWA that utilized winter sheet ice to successfully restore native vegetation without re-seeding or adding water during the growing season. A pilot project using winter sheet ice to restore native vegetation on several retired circles in the SLV will be initiated in 2025. The project aims to determine if this process can aid in revegetation efforts using water resources at a time of low evaporative loss, less consumptive use, promotes native vegetation, provides multiple benefits for landowners and wildlife, and helps to develop a more resilient water table longer into the growing season.



Photo Credit: Cary Aloia

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