

Interbasin Compact Committee Basin Roundtables
Rio Grande Basin Roundtable
MEETING MINUTES
May 13th, 2025
Rio Grande Water Conservation District
Alamosa, Colorado

Call to Order 2 p.m.

Amber Pacheco called the meeting to order.

Introductions were made and quorum was met for Roundtable Members.

The agenda was approved as presented.

Nikita Cooper made a motion to approve the minutes from the April 8th, 2025, meeting. The motion was seconded by Brian Puccerella. The motion was approved.

Public Comment:

Erin Minks (Senator Bennet's office) announced her retirement at the end of May. Rio de la Vista announced a celebration of Erin's service to the San Luis Valley will be held at Knee Knockers with details to follow via an email.

Paul Formisano promoted the Rio Trio event and Family Festival on May 24th in Alamosa.

Sue Swift-Miller gave an update on the Lobatos Bridge Project—signs and toilets installed; the ribbon cutting is scheduled for September; and, boat ramp project has design issues but will proceed.

Cassandra McCuen announced the Roundtable sponsorship for the Rio Trio and let the members know there are a couple registrations available for the event.

Colorado Division of Water Resources Update-Craig Cotten:

Craig presented the Stream flow update and talked about when he thought streams would be peaking. He described what date he uses to put together his streamflow forecasts. The Airborne Snow Observatory flight was being flown over the Rio Grande Basin. He was hopeful the flight could help get additional information to update forecasts. The Conejos was flown a couple weeks ago. Craigs forecasts on the rivers are 390,000 acre-feet on the Rio Grande which is 60% of the average and the Conejos is 180,000 acre-feet which is also 60% of the average.

Craig also gave an update on the Rio Grande Compact lawsuit between Texas, New Mexico, Colorado, and the United States. All parties met yesterday in a status conference with the Special Master and it is looking like we are getting close to reaching a settlement. There was a trial set for June in Philadelphia, but that has been vacated.

Mike Gibson asked Craig to talk about the reduction in pumping in Subdistrict No. 1. Craig reported pumping has decreased about one-third. It was originally around 300,000 acre-feet but

is now around 200,000 acre-feet. He did add one caveat, though pumping has decreased by that amount, the consumptive use of that probably has not decreased by that same percentage because they are being more efficient.

CWCB Updates: Kat Weismiller and Nathan Coombs

Kat reported April 2025 was the 15th driest April and 75% of the state is in drought. The next monthly Water Conditions Monitoring Committee Meeting is May 20th from 9:30 to 11 a.m. The 1051 Data deadline coming up on June 30th for previous calendar year. There is some training on how to do the audit. For more information you can reach out to CCB staff.

CWCB is requesting participation in a brief survey about training needs for Fluvial Hazard Mapping. Planning a monthly training series through this summer and the following winter.

CWCB will be hiring two newly created positions. One in the Flood and Watershed Protection section and the other in the Water Plan Special Project Managers Team.

The State's fiscal year ends on June 30th. Anyone with outstanding invoices needs to get those in for payment.

The CWCB has created a new educational infographic for each of Colorado's river basins. Printed and digital versions are available.

Upcoming Deadlines:

- WSRF deadline is June 1st. No Basin or statewide funding available at the moment.
- PEPO deadline due July 1st.
- The Water Plan Grant deadline is July 1st. Looking forward the Water Plan Grant program has \$36.77 million available in funding for the upcoming fiscal year. CWCB is encouraging project applicants to come and talk to them.

Nathan reported the CWCB meeting will be held next week in Steamboat Springs. One of the big topics being discussed is the Shoshone water right. It is the oldest water right on the Colorado. The Colorado Water District is purchasing the water right and wants to change it to an instream flow for that system to help with some of the issues on that river. If you have input please join. This is a \$99 million dollar purchase. This is an important issue because of how the Colorado River interacts with the Front Range and the transmountain diversions.

Requests for Letter of Support:

- Bird Conservancy of the Rockies-Anna Greenberg
PEPO grant to create Wetland Habitat Management Guides. Motion to approve was made by Cassandra McCuen and seconded by Mike Gibson. The motion was approved.
- ASU Salazar Center Water Fellows Program-Paul Formisano: Grant will support water curriculum, internships, Rio Grande Aerial School, and archiving water history. A motion to approve was made by Cassandra McCuen and seconded by Brian Puccerella. The motion was approved.
- Colorado Water Fellows Program-Paul Formisano: Water Plan Grant for \$115,000 to expand water fellowships statewide. A motion to approve was made by Nikita Cooper and seconded by Cassandra McCuen. The motion was approved.

- Conejos Water Conservancy District Radar-Based Snow Retrieval-Nathan Coombs: Continued development of snow forecasting tools using 3D mapping and satellite data. A motion to approve was made by Mike Gibson and seconded by Michael Carson. The motion was approved

Presentation on Dust on Snow Study: Jeff Derry of the Center for Snow and Avalanche Studies

Jeff provided an overview of the Center's research activities at the Senator Beck Study Plot near Red Mountain Pass (elevation 12,200 ft), a critical headwaters location for multiple watersheds. The Center has been collecting data at this site for over 20 years and is supported by donations. Approximately 40% of streamflow originates above the highest SNOTEL sites which is underscoring the need for more high-elevation monitoring stations. Data collected is available at snowstudies.org.

The Center also conducts independent research, including a current partnership with Colorado State University involving a Cosmic Neutron Rover. This rover uses a Cosmic Ray Neutron Sensor (CRNS) to measure soil moisture by detecting high-energy neutrons. Readings are inversely related to the presence of hydrogen (i.e., moisture). In 2024, rover operations were confined to paved roads, with off-road capabilities planned for next year. This technology helps bridge the data gap between fixed weather stations and aerial observations.

The Center collaborates with a variety of agencies, including USGS and the Cold Regions Research and Engineering Laboratory (CRREL). Emerging findings include the presence of microplastics in snowpack samples—likely from tire wear—raising concerns about their contribution to increased solar absorption and accelerated melt rates.

To expand data collection efficiently, the Center has implemented snowtopography sites using trail cameras to monitor snow depth across various snow regimes.

Dust on snow significantly affects the timing and rate of snowmelt, and ultimately reduces runoff yields. Notably, solar radiation—rather than air temperature—drives snowmelt, with dust contributing to an estimated 5% loss in runoff. Jeff reported that the current season experienced significant melt: over half an inch of snow water equivalent disappeared in a single day, primarily due to reduced April precipitation—a trend persisting for the last seven years. North-facing slopes retain more snow, but snowpack losses of 25–30% have been observed.

The Center has been working with the Wright-Ingraham Institute and a coalition of researchers and stakeholders focused on the Southwest region, San Luis Valley, and Cortez, CO. The initiative aims to synthesize cultural, scientific, and community perspectives on dust on snow.

Jeff expressed gratitude for support from the Roundtables, who each contributed \$15,000 toward a four-year project. A new proposal will be presented this September. He encouraged everyone to sign up for updates and to continue their support in the face of federal funding cuts.

Cassandra McCuen asked about the Wolf Creek snowpack. Jeff reported dust levels were low this year due to northern storm patterns and limited snow events. While dust events were few, significant snowfall can still bring dust—something he views positively when accompanied by deep accumulation.

Rio de la Vista asked about the dust sources. Jeff responded that researchers are investigating primary dust sources in the Four Corners region, particularly in northern Arizona and New Mexico. Restoration strategies are being explored but are progressing slowly due to landownership complexity.

Paul Formisano asked about the microplastics. Jeff said USGS has linked microplastics to increased melt due to their light-absorbing properties. Tire wear is a major identified source.

Annual Forest Health Report – Adam Moore, Colorado State Forest Service (CSFS)

Adam Moore presented the 2024 Forest Health Report, highlighting key findings and ongoing efforts in the San Luis Valley. CSFS collaborates with federal, state, and local partners to conduct aerial surveys using tablet-based systems to assess forest conditions and trends, with visual maps available online.

In 2024, Colorado experienced its sixth-warmest year on record. Persistent drought has left many tree species stressed and unable to recover effectively. The most significant pest issue was the Western Spruce Budworm, which affected more acreage statewide than the seven most common bark beetle species combined. These native defoliators weaken trees by consuming new growth, leaving them vulnerable to secondary infestations.

Other key observations:

- *Douglas-fir Beetle*: Incidence has doubled in the San Luis Valley.
- *Spruce Budworm*: While statewide activity declined, Saguache County was heavily impacted.
- *Mountain Pine Beetle*: Present in ponderosa pine in the Valley; does not affect pinyon pine.
- *Aspen Defoliation*: Currently remains low.

Adam reported management strategies include thinning and removal projects, forest management planning, repellent packets, educational workshops, and pest monitoring.

Adam reminded everyone of the Rock Creek Forest Treatment Tour (June 6, 9 AM–12 PM) focused on fuel load reduction.

Update on the Education Committee

Cassandr McCuren reported the Education Committee is asking for a letter of support for the annual PEPO Grant. The Education Committee applies for this grant every year and it supports the work they do. Cassanda said the Committee did get a BLM Stem grant. The PEPO request is for the full amount of \$25,000. She reported on the individual tasks being included in the request. Colorado Rio Grande Restoration Foundation will be the grant holder and are the entity applying for the grant. Mike Gibson motioned to approve the letter of support and Brian Puccerella seconded. The motion was approved.

Executive Committee Meeting Update:

Amber Pacheco reported Cary Aloia talked about a project on sheet ice up near Russell Lakes which will be coming forward for a letter of support. Amber also reported she was contacted by

Dr. Ryan Smith, who is looking into a need for an electromagnetic study of aquifer properties here in the Valley. Ryan is continuing to get more information and prices together and he will be making a request to the Roundtable in the future. Rio de la Vista mentioned the Attorney General will be here at the July Meeting and asked everyone to think about what we might want to ask him while he is here.

The meeting adjourned at 4:10 p.m.