



# RIO GRANDE BASIN ROUNDTABLE NEWSLETTER

VOL 3. ISSUE 2

SUMMER 2019

## TABLE OF CONTENTS

### PG. 1

Welcome

Article: Radar in the SLV

Upcoming Events

### PG. 2

Roundtable Summit

Recharge Mapping Project

### PG. 3

Recharge Project cont.

Summer Youth Programs

Roundtable Member Profile

### PG. 4

Grant Guidelines

### PG. 5

State Water Engineer Visit

Basin Updates

## UPCOMING EVENTS

### NEXT ROUNDTABLE MEETING:

*\*Time & Place Change\**

August 13, 2019 at 5:00 pm

Saguache County Road &

Bridge Building

### COLORADO POTATO FESTIVAL

Saturday, Sept. 7, 2019

Chapman Park, Monte Vista

### C-9 SUMMIT

Sept. 25-26, 2019

Winter Park, CO

### RIO GRANDE WATERSHED ASSOC.

### QUARTERLY MEETING

September 3, 2019

## WELCOME!

For more information on the Rio Grande Basin Roundtable, visit [www.rgbrt.org](http://www.rgbrt.org)

## RADAR PROJECT READY TO GO

*adapted from the Valley Courier article by Helen Smith*

Doppler radar has arrived in the San Luis Valley thanks to the collaboration of numerous public and private partners. Starting with Joe Busto, staff member at Colorado Water Conservation Board, who recognized that the gap in forecasting ability in the Rio Grande Basin would be solved by a radar system, and continuing with staff at the National Severe Storms Laboratory at NOAA, the project began to take off. Local partners such as the Rio Grande Water Conservation District, the Conejos Water Conservancy District, the SLV Water Conservancy District, and the Rio Grande Watershed Emergency Action Coordination Team (RWCEACT) recognized that a permanent system in place, rather than the seasonal radar, would enable SLV agencies to better predict snowpack in the high mountains surrounding the area.

Alamosa County Commissioners were approached about the possibility of providing land for the radar system structure, with Heather Dutton, SLVWCD, Nathan Coombs, CWCD, and Cleave Simpson, RGWCD, leading the way. A site was chosen adjacent to the San Luis Valley Regional Airport, a central point in the Rio Grande Basin, and the winning contractor's bid, EWR Weather Radar Systems of St. Louis, MO, began construction. The new radar system is expected to improve local forecasting, provide data for use by the National Weather Service, and be accessible to the public by means of a data collection website (soon to come). The SLV has long utilized Snotel sites to measure snowpack, but this method struggles with ease of access, accurate information for water flow predictions, and depends on other types of technological measurements rather than satellite imagery. With radar technology, Compact obligations on the Rio Grande and Conejos rivers will be easier to measure much further in advance of April irrigation. A ribbon cutting ceremony will be held for the radar on Sept. 18, 2019.



The NRCS monitors current Snotel sites (such as this site on the left), which can be difficult to reach as they are often located in high elevation wilderness areas if they are being physically monitored, and whose technology relies on aerial and local instruments.

*Photo by Peter Stegen, Platte Basin Timelapse*



September  
25th-26th  
2019

BASIN  
ROUNDTABLE  
STATEWIDE  
SUMMIT

HEADWATERS CENTER  
730 BAKER DRIVE  
WINTER PARK, CO 80482

The CWCB is planning an incredible opportunity for roundtable members from all basins in Colorado this September to discuss basin implementation planning, integration of the Water Plan technical analysis, and more.

**Registration Fee:**

Free for Roundtable, CWCB board, and IBCC members, \$75 for others.

Register at [eventbrite.com](http://eventbrite.com) under C-9: Statewide Summit of Colorado's 9 Basin Roundtables

A **transportation stipend** is available, but you **MUST** notify either vice chairman Emma Reesor or chairman Nathan Coombs by August 30th to be considered!

## SLV RECHARGE OPTIMIZATION PILOT PROJECT: PART ONE

By Bethany Howell, PEPO

The Mosca Hooper Conservation District is taking a different approach when it comes to understanding groundwater recharge in the San Luis Valley's unconfined aquifer. Particularly, what are the "sweet spots" of groundwater recharge, the geologic phenomenon that we rely on so heavily to help sustain our unconfined aquifer? This question is more important than ever in Colorado, but especially in the San Luis Valley, where our aquifer system and geology are still not completely understood. On the eastern side of the Valley, close to the Sangre de Cristo range, farmers have long pumped groundwater when surface water couldn't be used for irrigation. Until 2002, it worked pretty well. But after that disastrous drought year, when wells ran dry and the unconfined aquifer took a hard hit, farmers have worked harder to understand the relationship between surface water and groundwater. Even with modern technology and more extensive aquifer mapping in the past twenty years, the relationship between groundwater recharge from surface water flows is still a largely mysterious phenomenon. What exactly do we have under our feet that sometimes draws the surface water to a particular area for that recharge "sweet spot," and why does it sometimes head in a totally different direction? These are the questions that Patrick O'Neill, board member of the Mosca Hooper Conservation District, wanted to answer. Through a grant with the Colorado Water Conservation Board last spring, Patrick and his fellow conservation district board members and staff are hoping to uncover at least some of the mystery. They're working with Dr. Kate Ziegler and associates of Ziegler Geologic Survey, LLC, a company based in northern New Mexico and dedicated to delving beneath us to create above ground solutions. After spending years studying well logs and groundwater recharge in Union County, New Mexico, Dr. Ziegler and her

**ROUNDTABLE PROJECT FUNDS: \$43,100**



Above: Geologists explain the project to Nathan Coombs, RT chair, and Patrick O'Neill of the Mosca Hooper Conservation District.

Below: Geologic arrays set up on the Nissen Farm in eastern Alamosa County



Photo credit: Bethany Howell



continued from page 2

were excited to work in the unique geology of the San Luis Valley's aquifer system.

On a blustery spring day west of Mosca, off the 106N, Dr. Ziegler's team is setting up arrays with electrodes. Covering approximately 80 acres and using an electromagnetic current, these arrays stretch along east-west well lines to correlate with existing well logs. Eighty feet of depth into the subsurface yields 3D data from resistive ties illustrating the formations present under the surface (water, clay, sandstone, etc.). These data maps, plus the patterns from wells drilled in different areas at different times, helps the geologists determine how far certain layers extend and what their resistance to recharge might be. In addition to understanding the layers and their resistivity, the geologists are also studying whether the current method of encouraging recharge, circular pits, are as conducive to recharge as a canal. The traditional recharge pit allows for less surface area, and thus less recharge, than the long and linear canals.

While this particular project is currently a pilot, there is definite room for many similar mapping projects across the Rio Grande Watershed. Additional funding has been requested and approved from the Rio Grande Water Conservation District in order to study the trans passivity, or ability of water to pass through the layers, of the area as well. As the project nears completion, we'll continue to update the Rio Grande Basin on the progress of this timely research.

## YOUTH CONSERVATION SUMMER PROGRAMS

Summer education programs in the Rio Grande Basin were hoppin'!

Kicking off June, the youth conservation camp in the Rio Grande National Forest had 55 campers, 10 teen counselors, and over 15 different agency presenters for the three day camp. Four days of mini-day camp for 20 kids in Center's summer youth program took place the next week on the Bill Miller Ranch, a conservation easement through the Rio Grande Headwaters Land Trust. And a new collaboration for teens with Adams State University's Adventure Program featured five days (and one overnight) of recreation and stewardship activities throughout the Rio Grande Watershed.



**Top:** Up close & personal with tree ID

**Top R:** Teens hiking Lost Creek near the Rio Grande Reservoir.

**Bottom R:** Experimental forage with different types of "bird beaks"



## ROUNDTABLE MEMBER HIGHLIGHT

We are proud of our Rio Grande Basin Roundtable members. They are community leaders with an investment in water use, conservation, and beneficial projects. We'll feature a member in each newsletter in an effort to help our community get to know us a little better! You can also find a complete list of members at our website, [www.rgbrt.org](http://www.rgbrt.org).

### CLEAVE SIMPSON, RGWCD & IBCC REPRESENTATIVE

Cleave is a 4th generation farmer who resides south of Alamosa. He joined the Rio Grande Roundtable in April 2016 and serves the Rio Grande Water Conservation District (RGWCD) as the general manager. Cleave serves as an InterBasin Compact Committee representative for the Rio Grande Basin. He also works hard with his father and brother on the family farm and cattle operations. Cleave spent almost 20 years in surface coal mining operations in Texas & Australia and has been married over 30 years. His hobbies include hot rods & car shows, and he owns a 1957 Chevy Cameo. His son is continuing with the family farming legacy.



# COLORADO WATER CONSERVATION BOARD GRANT INFORMATION

What's the difference between a Water Reserve Fund Account State grant and a Basin grant? Quite a bit, and it can be very confusing. If you throw in water planning grants - whew! These grants are worth the time to explore, though, as Colorado Water Conservation Board funds are specifically earmarked for a multitude of water projects, as long as they align with Colorado's 2015 Water Plan.

For information about grants, visit our NEW user friendly website at [www.rgbrt.org/funding-opportunities](http://www.rgbrt.org/funding-opportunities) or go to Colorado Water Conservation Board's website at [www.cwcb.state.co.us/LoansGrants/Pages/LoansGrantsHome.aspx](http://www.cwcb.state.co.us/LoansGrants/Pages/LoansGrantsHome.aspx)

## STATEWIDE VS. BASIN APPLICATIONS: WHAT'S THE DIFFERENCE?

### STATE GRANTS

Funds are in state WSRF account



Overseen by the CWCB



Funds projects across the state = more competitive with evaluation criteria



Requires approval by the Roundtable

### BASIN GRANTS

Funds are in the Basin account and grants are overseen by the Roundtable



Applications are reviewed by the CWCB to confirm the Threshold Criteria is met



Requires approval by the Roundtable

**WATER SUPPLY RESERVE FUND (WSRF)**  
Money set aside by the state to complete projects meeting Basin Implementation Plan (BIP) & Colorado Water Plan (CWP) objectives. Used for both state and basin grants

This program requires Roundtable approval of applications.

**NEED A LOAN OR HAVE A PROJECT THAT NEEDS EXTRA FUNDING? CHECK OUT THE OTHER 11 FUNDING OPPORTUNITIES THROUGH THE CWCB, INCLUDING THE COLORADO WATER PLAN GRANTS!**

## STEPS FOR APPLYING FOR A WSRF GRANT:

- 1 PROJECT DEVELOPMENT**  
contact a RT Executive Committee member to discuss proposal idea & receive feedback.
- 2 PRELIMINARY PRESENTATION TO RT**  
At least 3 months before submission, present proposal at regularly scheduled RT meeting for feedback.
- 3 FINAL PRESENTATION TO RT**  
Incorporate feedback and refine proposal. Deliver final presentation at next RT meeting. Include all application requirements in full.
- 4 CWCB REVIEW & APPROVAL**  
CWCB BOD reviews applications bi-monthly. Applicants should plan to attend the meeting to answer questions as needed. Contracting may take 45-60 days. A final report on the project to the Roundtable is required.

## GRANT APPROVAL CYCLES

### F A L L

*prepare project proposal with Roundtable*

DEC	JAN	FEB	MAR
preliminary proposal presented	final proposal voted on	Application due on the 1st	CWCB votes on application

### S P R I N G

*prepare project proposal with Roundtable*

JUNE	JULY	AUG	SEPT
preliminary proposal presented	final proposal voted on	Application due on the 1st	CWCB votes on application

## COLORADO WATER CONSERVATION BOARD CONTACTS

**RIO GRANDE BASIN CONTACT: MEGAN HOLCOMB** [MEGAN.HOLCOMB@STATE.CO.US](mailto:MEGAN.HOLCOMB@STATE.CO.US)

**CWCB REPRESENTATIVE: HEATHER DUTTON** [HEATHER@SLVWCD.ORG](mailto:HEATHER@SLVWCD.ORG)

**CWCB GRANT CONTACT: ELGIN TURNER** [ELGIN.TURNER@STATE.CO.US](mailto:ELGIN.TURNER@STATE.CO.US)

**COLORADO'S  
WATER PLAN**

[HTTP://CWCB.STATE.CO.US](http://cwcb.state.co.us) PG. 4

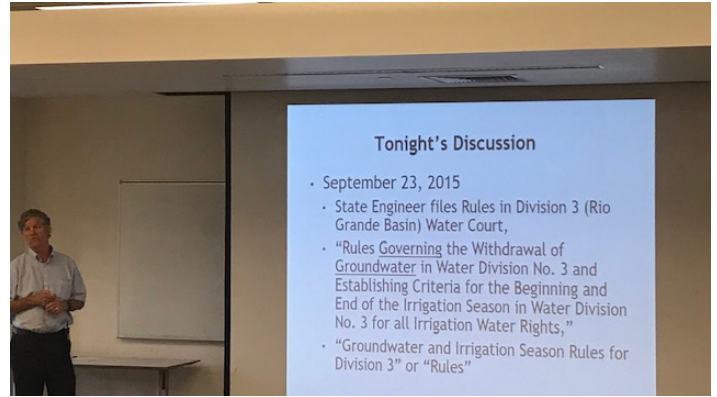
# SLV WELCOMES STATE WATER ENGINEER VISIT

By Bethany Howell, PEPO

Thanks to the Adams State University's Salazar Rio Grande del Norte Center's Water Education Initiative, state water engineer Kevin Rein gave a well-attended talk on Monday, July 15th. The event, "The State's Role in the Rio Grande Basin: Our Shared Water Future," was timely given the District 3 groundwater well rules & regulations recently approved by Judge Pattie Swift in March.

Rein was in the San Luis Valley to address subdistrict board members & their constituents during the regular quarterly meeting of the Rio Grande Water Conservation District board the next day, but agreed to speak the night before to the community.

During his talk with community members on Monday evening, Rein addressed the role of the State Engineer's office, the history of its inception, and gave a brief overview of water administration in Colorado. He concluded by walking the community through the court approved well rules and regulations, the history behind the need for groundwater regulation across Colorado, and the issues facing subdistricts with aquifer sustainability. Chiefly, Rein explained the difference in quantifying injurious depletions as they relate to water rights versus the long term, perpetual strategies needed for aquifer sustainability. Questions were then posed by audience members, ranging from the distinction between exempt and non-exempt wells to the strategies employed by water division employees to mitigate surface water depletions. Community members were also interested in hearing how the Division of Water Resources planned to implement consequences if the 2030 unconfined aquifer goals were not met, which Rein deferred answering fully, acknowledging that the process is lengthy and will



Kevin Rein addresses the audience in McDaniel Hall Room 101, which was standing room only.

be influenced by climate and other uncontrollable weather conditions. Rein noted that his recent letter to the subdistricts, published for public consumption in the Valley Courier, came as no surprise to the subdistrict members or to Cleave Simpson, the general manager of the Rio Grande Water Conservation District. Rein concluded by lauding the SLV for its willingness to work hard on addressing their groundwater and surface water uses, and honoring the hard work of Division 3 engineer Craig Cotten and his employees to implement well rules and regulations for the benefit of water users. The Salazar Rio Grande del Norte Center will continue to work to bring notable speakers on water topics to the San Luis Valley, so please contact director Rio de la Vista at [riodelavista@adams.edu](mailto:riodelavista@adams.edu) for more information about upcoming presentations.

## DON'T FORGET TO CHANGE YOUR CALENDAR!

Next month's Roundtable Meeting will be in a different location and at a different time than usual. We want to hear from Saguache County residents about the recently proposed water export by Renewable Water Resources. After the regular business meeting for the Roundtable, join us for a conversation about the proposed project.

**Tuesday, August 13th at 5:00 pm in the Saguache County Road & Bridge Building**

Does the San Luis Valley have water to spare?  
Read facts, not fiction.

Visit the Rio Grande Water Conservation District website to see unconfined aquifer data mapping from the 1970's to the present.

Download streamflow information from the Colorado Division of Water Resources dating back a hundred years.

And much more!

[WWW.RGWCD.ORG](http://WWW.RGWCD.ORG)

[WWW.DWR.STATE.CO.US](http://WWW.DWR.STATE.CO.US)

**LIKE WHAT YOU READ? LET US KNOW, OR GIVE US MORE NEWS TO SHARE! CONTACT BETHANY HOWELL, PEPO**  
[RGWCEI@GMAIL.COM](mailto:RGWCEI@GMAIL.COM)