WINTER 2021
VOL. 5 ISSUE 4

RIO GRANDE BASIN ROUNDTABLE NEWSLETTER

Photo Credit: Heather Dutton

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Community Water Education at Adams State!

The Salazar Rio Grande del Norte Center is working to develop and grow the new Water Studies Minor degree program at Adams State. Community members who seek to enhance their water knowledge can "audit" the classes and join students in this in-depth learning opportunity! Join us starting on January 17th for **WATR 201**, course description found on *Page 5*.

WELCOME! HAPPY NEW YEAR!

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! Check out our website: http://rgbrt.org/

2021 Rio Grande Basin Implementation Plan Receives Public Comment, Interactive StoryMap now Live!

By Erin McWilliams

The original 2015 Rio Grande Basin Implementation Plan (BIP) was developed by the Rio Grande Basin Roundtable (RGBRT) to address the Basin's water challenges and identify multi-benefit projects to support its diverse water needs. Beginning in 2019, the RGBRT and the Colorado Water Conservation Board worked in collaboration with Brown & Caldwell and the Rio Grande Headwaters Restoration Project to update the 2015 BIP. The updated BIP, slated to be published this month, utilized data and water-use analyses from the Technical Update to the Colorado Water Plan to develop goals and strategies to meet the Basin's current and future water needs.

The update process was driven by the hard work of BIP Update subcommittee members who represent different water interests, including municipal and industrial, agriculture, education and outreach, environment and recreation, and water administration. After a Roundtable review period, the BIP was opened for public comment from October 13 to November 15, 2021. This feedback from the community and local agencies is being reviewed by the Roundtable and CWCB and will be considered in the final drafts. The BIP Volumes I and II will be published January 31, 2022.

Along with the completion of the public comment period, the BIP StoryMap is now published online. The StoryMap provides an illustrative overview of the BIP, including achievements since 2015, updated goals and data, information about the subcommittees, and a projects list. It includes maps, project photos, videos and statistics presented in an interactive and easy-to-read format. Check it out here: https://arcg.is/014DvX

VISIT OUR WEBSITE FOR MORE BIP INFORMATION: http://rgbrt.org/rgbip-update/ or READ OUR BIP 101 FACTSHEET: https://rgbrt.org/bip-101-fact-sheet/

The Application of Augmentation Plans in the San Luis Valley

By Peyton Valentine

Water in the San Luis Valley has long been a challenging and at times divisive subject, as its management is difficult. Over appropriation is the key cause, meaning there are more water rights than there is actual water. Water users want to use all of the water they hold rights to, but often cannot because of dry conditions and water restrictions. One of the most helpful solutions for this issue is water augmentation.

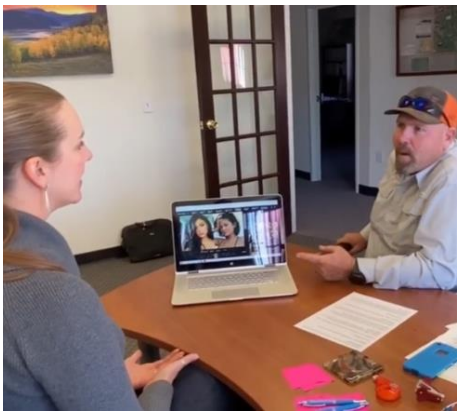
Augmentation, in simple terms, is the act of mitigating injury to senior water rights, caused by a junior water right. It is a way of ensuring equitable access to water and allowing people with varying water needs to be able to use this limited resource. Because water is managed through the lens of the prior appropriation system in the state of Colorado, water rights are appropriated by water users through a priority system- first in time, first in right. The first people who file for a water right are the first who are able to use the water, and the following priorities are served in succession. There are situations where people need access to water, but hold priorities that are junior and therefore aren't served or don't have any water rights at all. This is a case where water augmentation can be helpful.

Augmentation plans allow out of priority water rights holders to put water to beneficial use, so long as a replacement supply of water is available and utilized to prevent injury to senior water rights. The plans specify exactly how much water will be used by the augmented user, how the injury will be calculated, and how impacts to senior water rights will be accounted for and replaced.

The injury caused by the augmented water use can be replaced by a number of means. A common method is to store water decreed for the beneficial use of augmentation in reservoirs and release that water into the river to mitigate the impact, or depletion, caused by out of priority water uses. Replacement water can come from any legal means, so augmentation practices can vary widely.

Augmentation has been an effective approach to stretching a limited and valuable resource farther. This is helpful as it gives junior priority water rights holders, or new members of communities who may be building a home or business, a chance to still put water to beneficial use, it allows development and progress to continue, while ensuring impacts to senior water users are offset. *Continued on Page 5.*

WANT MORE AUGMENTATION INFO?



- Check out our Fun Fact Friday Video on Facebook: https://fb.watch/aoq4cwpVHC/
- Read our Augmentation 101 factsheet: *https://rgbrt.org/wp-content/uploads/2021/11/AUG-101_Nov-2021-.pdf*

Roundtable Member Highlight:

Photo courtesy of the Roundtable website.

Karla Shriver

Legislative Appointee

Karla Shriver owns and operates a potato/small grain/alfalfa farm between Monte Vista and Alamosa. She serves as the Legislative Appointee for the Rio Grande Roundtable. Karla has always been very active in the local and regional community as well as state wide. She serves on the San Luis Valley Federal Bank Board of Directors, Trinidad State Junior College Community Council, and the El Pomar Foundation SLV Regional Council. She is an active leader in many other organizations, including the San Luis Valley Water Conservancy District, Commonwealth Irrigation, San Luis Valley Great Outdoors, and Rio Grande Watershed Emergency Action Coordination Team. Karla just finished serving two terms as a past Rio Grande County Commissioner.

Rio Grande Basin Roundtable 2021 Project Roundup

By Judy Lopez

The Rio Grande Basin Roundtable (RGBRT) began its water advocacy efforts in 2005 as a result of the Colorado Water for the 21st Century Act. This act created nine Roundtables across the state to represent the eight major river basins and the Denver metro area. Like all the state's roundtables, the RGBRT is RGBRT is run by local stakeholders and is focused on local community values and water issues. Funding for roundtable project implementation comes from through the Colorado Water Conservation Board. With these state funds, each Roundtable can financially support local projects that further the goals laid out in the Colorado Water Plan and the respective Basin Implementation Plan. Since its inception in 2005, the RGBRT has helped fund over 50 projects, including Irrigation Infrastructure, Reservoir Improvements, River and Watershed Restoration, Conservation Easements, Water Education, Water Management and Water Research Projects. These projects addressed a variety of uses in every corner of the San Luis Valley.

This didn't stop in 2021. Despite the pandemic, work continued - allowing five amazing projects to be completed. These projects demonstrate the power that can be garnered when groups come together and create projects that benefit many users, including irrigation, water administration, recreation, the environment, municipal needs and education. The projects and their purposes are listed below.

Photo Credit: Emma Reesor

Del Norte Riverfront Project

The Del Norte Riverfront Project was a community-led effort to improve public access, create recreation infrastructure, and enhance aquatic and riparian habitat along the Rio Grande in Del Norte. The overall purpose of the project was to create connectivity between the communities and visitors of the SLV and the river that sustains it. The new Riverfront Park includes a whitewater playwave, boat ramp, fish habitat structures, pedestrian river access, parking area, an ADA accessible picnic shelter, and interpretive signage. The project has provided a significant positive benefit to the community of Del Norte and SLV by creating a welcoming, safe space for community members, boaters, and anglers, while also improving river health. The Del Norte Riverfront Project was made possible through collaboration between the Rio Grande Headwaters Restoration Project (RGHRP), Town of Del Norte, Del Norte Trails Organization, Riverbend Engineering, Trout Unlimited, San Luis Valley Water Conservancy District, Colorado Parks and Wildlife (CPW), local businesses, and countless community members.

Photo Credit: Kevin Terry

Conejos Meadows Resilient Habitat Project

The Conejos Meadows Resilient Habitat project, which was identified in the Conejos River Stream Management Plan (SMP), enhanced habitat on 9,200 linear feet of the Conejos River below Platoro Reservoir, greatly improving connectivity and habitat complexity. During low flow time periods such as winter months and during droughts, the improved instream habitat provides a low flow channel to maximize available habitat and water delivery conveyance. Additionally, the project added rocks and large wood to existing deep pool habitat features in the area, providing increased winter and refuge habitat for the high value recreational fishery. The project is a partnership between Trout Unlimited, the Conejos Water Conservancy District (CWCD), CPW, the Rio Grande National Forest, and Riverbend Engineering. The project complements the Winter Flow Program led by Trout Unlimited and the CWCD, which is an effort to increase stream flows on this section of the Conejos River during the non-irrigation season.

Continued on Page 4.

Rio Grande Cooperative Project
The Rio Grande Cooperative Project improved infrastructure and optimized management on the Rio Grande. Both Rio Grande and Beaver Creek Reservoirs were repaired to address seepage issues and improve outlet works. With upgraded infrastructure for the storage and release of water, stakeholders on these reservoirs came together to develop a management strategy that maximizes the benefits of timed reservoir releases, resulting in optimized flows that benefit aquatic habitat, irrigation supplies, augmentation demands, and Rio Grande Compact compliance. The project was a partnership between the San Luis Valley Irrigation District, CPW, and the Colorado Water Conservation Board.

Conejos River Partnership Project
The Conejos River Partnership Project (CRPP) was born out of the Conejos River Stream Management Plan (SMP) and has brought together the CWCD, RGHRP, CPW, Division of Water Resources, Bureau of Land Management, private landowners, and water users to address irrigation infrastructure and riparian and aquatic habitat degradation on the Conejos River. This multi-phased project helps meet aquatic habitat needs on the Conejos River through the rehabilitation of irrigation infrastructure, enhancement of aquatic habitat, and restoration of riparian and wetland habitats. The CRPP includes six sites along the Conejos River between Mogote and the confluence with the Rio Grande. In 2021, construction was completed at the Sabine Ditch to replace the diversion structure and headgate, revegetate and stabilize upstream streambanks, and reconnect the river with its floodplain. Construction will continue in 2022 at additional project sites.

Alamosa River Water Delivery Improvement Project
The Alamosa River Water Delivery Improvement Project was a collaborative effort between the Terrace Irrigation Company and the Alamosa-La Jara Water Conservancy District. Many diversions along the Alamosa River are manually diverted with headgates that are out-of-date and deteriorated. This project resulted in the replacement of the headgate on the Main Canal, installation of automatic controllers on the Main and Creek Canal, and installation of satellite recording devices on 5 of the larger upstream diversion structures. As a result of this project, the Alamosa River will be administered more accurately for the benefit of all stakeholders involved, including the Alamosa River Keepers, Colorado Parks and Wildlife, Division of Water Resources, the Town of Jasper, Expo Inc., and other water users along the river.

The Rio Grande Basin Roundtable continues to work on collaborative and innovative solutions that will keep the Rio Grande Basin water here and working for our communities. We want to thank the Colorado Water Conservation Board and their incredibly dedicated staff, along with other project funders that include Foundations, Agencies, Organizations and contractors who all work passionately to help us create a sustainable water future. We wish you all a Happy New Year and invite you join us at our monthly RGBRT meetings!

This article was brought to you by the Rio Grande Basin Roundtable. The roundtable meets the second Tuesday of the month. If we are in-person, we are meeting at the Rio Grande Water Conservation District, 8805 Independence Way, Alamosa, CO 81101. Due to Covid restrictions we are also offering a Zoom option. We welcome your attendance but encourage checking the Roundtable website at www.RGBRT.org prior to the meeting to see if an in-person option is available.


Photo Credit: Heather Dutton


Photo Credit: Erin McWilliams


Photo Credit: Virginia Christensen

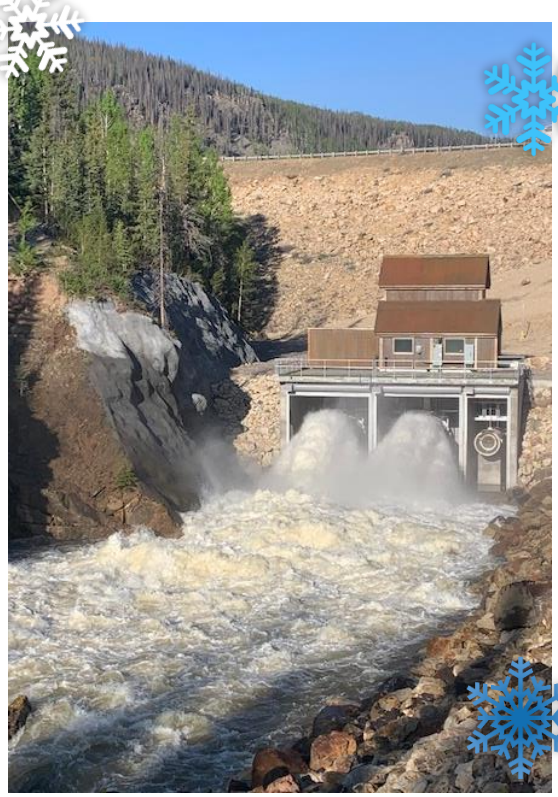
- Watch as members of our education committee race across the Basin to show off these projects in our latest Fun Fact Friday Video! https://fb.watch/aonZUxiv4j/

Application of Augmentation Plans in the SLV, Continued from Page 2.

Augmentation plans are utilized for a wide range of water uses and situations across Colorado. In the San Luis Valley, there are numerous small, private augmentation plans as well as regional augmentation plans managed by the San Luis Valley Water Conservancy District, Conejos Water Conservancy District, and the Groundwater Management Subdistricts. These entities most commonly augment new domestic or commercial wells or existing wells that are subject to the Rules Governing the use of Groundwater in Division 3.

Across the valley, augmentation is employed to remedy impacts to streams caused by well pumping. Augmentation water is either left in streams if it is native to the basin, diverted through trans-basin ditches and stored in reservoirs, or exchanged into reservoirs to be used later. Throughout the year, streamflows in the Conejos River and Rio Grande are bolstered by the addition of water to offset injury caused by well pumping or out of priority surface water diversions. Further, the confined and unconfined aquifers can be augmented. By releasing water from reservoirs and diverting it through canals and into recharge pits, the impact of well pumping on groundwater is augmented.

In Costilla County, the Trinchera Groundwater Management Subdistrict has been taking big steps and using a multi-pronged approach to effectively manage a very limited water source. To comply with the groundwater rules, subdistricts are charged with two main requirements: mitigate impacts to streams caused by well pumping and ensure sustainable aquifers are maintained. Because hydrologic conditions vary across the valley, each subdistrict is working through different challenges in complying with the rules.



Rio Grande Reservoir Outlet. Photo by Rob Phillips.

In the Trinchera Subdistrict, surface water is not abundant and groundwater is a major water supply. In order to mitigate injury to local streams, the subdistrict dried up 1,300 acres of irrigated land, which was previously irrigated with groundwater. Three associated wells became augmentation wells, which means that the roughly 2,600 acre feet of consumptive use water that was formerly used to grow crops is now being pumped into which is being used specifically to offset depletions in the lower reach of the Rio Grande.

Along with the use of augmentation wells, the subdistrict also has been employing forbearance agreements on both the Rio Grande and Conejos, utilizing pools in Beaver Reservoir and water rights from the Taos Valley #3 for aquifer recharge, and exchanging water with Subdistrict #3 (Conejos subdistrict).

Finally, to maintain a sustainable aquifer the Trinchera Subdistrict has developed a system to gauge current conditions, and determined how much water can responsibly be pumped in those conditions. It is known as the Composite Water Head Metric (linked here). This metric is divided into four tiers, each one specifying the consumptive use limits for the conditions in each tier. Each successive tier has more restrictive pumping limits, with the first having hardly any limitations, and the fourth completely limiting pumping. This year, the subdistrict fell into tier three conditions, therefore the groundwater users in the subdistrict reduced pumping by 46%, with 3,000 acre feet set aside for augmentation of injury to the Rio Grande, and 13,500 acre feet left for use by irrigators. Each farm has a pumping allocation based on their percentage of pumping. With these established restrictions and recharge occurring, the plan strives to prevent injury to the aquifer and improve conditions therein. The subdistrict's president Monty Smith is confident in this plan. "I'm proud of the fact that we have a direct way of limiting pumping, in order to take care of our aquifer," he said. With this in place, the subdistrict plans to reach a point of sustainability and improvement for the aquifer.

Using all of these tools, the subdistrict has managed, even during dry years, to continue irrigation while also maintaining a healthy, sustainable aquifer and satisfying the requirement to replace their injury to stream systems.

Moving forward, the subdistrict plans to seek more long-term, wet water solutions. They hope to find and create solutions that are more focused on surface water, and move toward using less groundwater wherever possible. Monty Smith stated "We'd like to get to where we are self-sufficient, to where we can do all of our replacement with actual wet water to lessen the amount of forbearance agreements we have to depend on. The sooner we can replace our depletions with wet water, the better off we'll all be." With self-sufficiency and groundwater health as priorities, the subdistrict continues forward. Thinking outside the box and looking at creative, new solutions will be the Trinchera Groundwater Management Subdistrict's future, and the future of the Rio Grande Basin as a whole.

Upcoming Events:

Photo Credit: Erin McWilliams

Jan. 11

The January RGBRT meeting will be held virtually on Zoom from 2-4 PM. A Zoom link will be listed on the Roundtable website if you'd like to join virtually!

Jan. 24-25

The next scheduled CWCB meeting. Time and location are to be determined. Click here for the most up to date information!

Jan. 26-28

Colorado Water Congress Annual Convention. Registration is open and is limited to 450 attendees and only to members of the Water Congress.

Feb. 2-4

The Southern Rocky Mountain Agriculture Conference and Trade Fair will be a hybrid conference, held physically at Ski Hi Park in Monte Vista.

Feb. 26

The Salazar Rio Grande del Norte Center is once again hosting this Symposium for the San Luis Valley Community, with the 2022 theme of: "In Scarcity Opportunity for Community." The public is invited to join this annual community conversation about our water future, threats and opportunities! Engage and learn how you can help sustain the agriculture, environment and economy of the San Luis Valley. This event will be held virtually and is free and open to the public. Pre-register and get updates on the Symposium at: https://mailchi.mp/80a57f097889/2022-rio-grande-state-of-the-basin

Mar. 11-13

The 2022 Monte Vista Crane Festival will feature wildlife viewing opportunities and local vendors!

WATR 201: Water Fundamentals and Functions (3 hours)

Taught by water engineer Rob Phillips, Manager of the San Luis Valley Irrigation District, this course provides essential water education. It will address fundamental concepts of ground and surface water functions and management; to explore the hydrologic processes and cycle in terms of both ground and surface water; examine the environmental aspects of watersheds that affect the hydrologic output, including forest health, precipitation accumulation, and infrastructure regulating surface water runoff; examine and analyze the administration of water and agricultural water use, with a focus and field experiences in the San Luis Valley and Rio Grande Basin of Colorado. The course will include field trips.

This noncredit in-person course is $150 for community members. Beginning January 17th, the class will meet Mondays, 3 pm - 5:30 pm in Porter Hall on the ASU campus. from Jan. 17 - May 9, 2022.

Want to stay up to date? Subscribe to our newsletter at info@riograndeheadwaters.org and follow us on our Facebook Page!

We're also happy to share statewide initiatives, events, and other water-centric programs on our Facebook Page, website calendar, and in this newsletter! Email info@riograndeheadwaters with content you wish to share!
Check our website calendar for content submission deadlines.