RIO GRANDE BASIN ROUNDTABLE NEWSLETTER VOL 1. ISSUE 3

WELCOME!

TABLE OF CONTENTS

PG. 1

- Welcome
- Article: Beneath the Surface
- Upcoming Events

PG. 2

 Article: Beneath the Surface

PG. 3

Article: RWEACT

PG. 4

 Article: Who's in Water Pt 1

PG. 5

- Article: Who's in Water Pt 1
- Links

UPCOMING EVENTS

NEXT MEETING: July 11, 2017 2 pm

SLVWCD Office 623 Fourth St Alamosa, CO 81101

0THER: July 18th, 2017

Rio Grande Water Conservation District Quarterly Meeting For more information on the Rio Grande Roundtable, visit rgbrt.org

BENEATH THE SURFACE

Written By Helen Smith

Water is the glue that holds the San Luis Valley together. It is vital to the people, the economy, lifestyle and even the physical landscape of the valley itself.

There are two aquifers that lie beneath the valley floor. One is the confined aquifer that is trapped below a series of clay lenses deep beneath the valley floor. The other is the unconfined aquifer, that is generally found within the first 100 feet of the surface. Without the water from these aquifers, the San Luis Valley would very likely not be the agricultural workhorse that we know today. There are also unique geological structures such as Rio Grande Rift that contributes to when and where water travels throughout the valley subsurface. Aquifers are key, particularly the unconfined. The water of the unconfined aquifer functions very much like surface water. The recharge of this important aquifer occurs during runoff season from snow melt.

The unconfined aquifer supplies 85% of agricultural well water. The largest concentration of these wells lie within Sub district number one.

The confined aquifer lies beneath the unconfined aquifer. A system of clay layers separate the aquifers. Historic Alamosa Lake is likely responsible for the formation of these layers. The water that lies beneath the surface is heavily relied upon by the agricultural community. There are also differences in how each of the aquifers react. In addition, any well in the San Luis Valley inevitably impacts the river flow at some point.

As a valley native from Saguache, Allen Davey, of Davis Engineering Services has studied the San Luis Valley aquifer system extensively. He also has a great deal of background on the valley's water issues. Davey points out that the aquifers and well levels have been monitored since 1970, when accurate measurements were first available. Since that time, there have been notable trends in the increase and decrease of the aquifer and well levels. The water table itself has seen a significant and steady decline partly due to the sheer number of wells that have been drilled. More water has been taken than replaced. The greatest decrease was the extreme drought that began in 2002.



Historically speaking, demand has simply outweighed supply. Because of these factors, there are now big implications for the future.

Davey explained that the aquifers are situated very much like a bowl of water. This means that there is pressure that pushes the water upward from beneath the clay and downward pressure from the surface. The result is wells in the confined aquifer have high amounts of pressure, the result of which is artesian flow. Both confined and unconfined wells are heavily relied upon especially for agricultural irrigation. This has resulted in a widening gap between the aquifer waters and the surface.

Because this gap between the water and the surface has increased, there is potential for the valley floor to begin sinking if the aquifer is not replenished. Rebuilding the aquifer system has become even more necessary than many once thought. It is also critical that the recharge process is working properly. The effort to replace the depletions and rebuild the aquifer is another piece to this puzzle. This is where Sub districts, the Rio Grande Water Conservation District, and the pending well rules and regulations for Division 3 come into play. Because of the pending regulations for Division 3, which require well users to replace their depletions, there has been a slow gain in water quantity in the northern portions of the aquifer system. These gains are shown in studies and reports that Davis Engineering Services provides to the Rio Grande Water Conservation District. Because the well owners of Sub district one have been replacing their depletions in addition to monitoring and reduced pumping, Davey believes that the aquifer is headed in the right direction. Replacing depletions will only help agriculture as well as Colorado's obligation to the Rio Grande Compact. The well rules for Division 3 and the replacement efforts are still a work in progress. However, it would appear that these measures are producing some results. The trial to finalize the rules for Division 3 is set for January of 2018. If and when these rules are approved, a great deal of change will arrive. Arguably, it is necessary change.

The future remains to be seen. There is certainly a great deal of importance in this matter when considering the agriculture, the people and the future of the San Luis Valley. This is a unique situation that will require a unique solution.



RWEACT HOSTS FORESTRY TOUR

Written by Helen Smith

On May 10th, 2017, the Rio Grande Watershed Emergency Action Coordination Team (RWEACT) hosted dignitaries from the nation of Israel!

Four representatives of the Jewish National Fund (JNF) were on a nationwide forestry tour. The Regional Foresters Office mentioned RWEACT's work in the Rio Grande basin to the representatives. Interested in learning more, the JNF representatives expressed the desire to meet with RWEACT during their time in Colorado. A tour was arranged. The party began at the Divide Ranger Station in Del Norte, and traveled up river ending at Rio Grande Reservoir. Dan Dallas, Travis Smith and Kristi Borchers provided the narrative of RWEACTs' beginnings along with an overview current operations and happenings. The concept of partnerships was also a central theme. The event concluded with dinner at the Windsor Hotel in Del Norte. The event was deemed a success.

WHO'S WHO IN WATER PART 1: THE COLORADO Water Conservation Board

Written By Helen Smith

The Colorado Water Conservation Board is a known name with an often unknown role. However, one thing is certain, it is the guiding force behind water policy in the State of Colorado and has been a key provider of financial means for many important water projects in the San Luis Valley.

The Colorado Water Conservation Board was formed over seventy five years ago. It was charged with the mission, "To conserve, develop, protect and manage Colorado's water for present and future generations." Today, the CWCB is Colorado's most comprehensive resource for water information, expertise and technical support.

The CWCB is also about those who serve. Fifteen board members govern the CWCB. Members are appointed by the governor and serve three year terms. Each member hails from one of the nine basins of Colorado which are the Arkansas. Colorado, Gunnison, Metro, North Platte, Rio Grande, South Platte, Southwest, and Yampa/White respectively. They are responsible for tasks such as protecting Colorado's streams and rivers, water conservation, flood mitigation, watershed protection, stream restoration, drought planning, water project financing, and the creation and oversight of the Basin Roundtables. In addition, the CWCB collaborates with other western states, as well as federal agencies, to protect state water apportionments.

Other personnel include over forty CWCB staff members who maintain a total of six major program areas or sections. The sections are management, finance and administration, interstate and federal, stream and lake protection, water supply planning, watershed and flood protection. These are the teams that report to the board members, make recommendations and do all of the behind the scenes work. The combined efforts of the CWCB board and staff have produced beneficial and needed results with water projects and issues throughout the state.

One example of a key initiative that was recently completed by the CWCB is the Colorado Water Plan.



Until 2015, Colorado was one of the only western states that did not have a water plan. With the population of Colorado expected to see enormous increases, the demand for water is also projected to see a huge spike. There were/are also many challenges facing Colorado including an increasing water supply gap, agricultural dry-up, critical environmental concerns, variable climate conditions, inefficient regulatory process and increasing funding needs. As a result, Governor John Hickenlooper signed an Executive Order in 2013 which tasked the CWCB with the creation of a water plan for the State of Colorado.

After three years, the completion of the Colorado Water Plan was celebrated in November of 2015. Goals in the plan include meeting the water supply gap, defending Colorado's compact entitlements, improving regulations, and exploring financial incentives. Meanwhile, the objective is to honor Colorado water values and ensure the state's most valuable resource is protected and preserved for generations to come. The implementation of the Colorado Water Plan continues by working through individual issues in each basin. This is just one of the many complex areas the CWCB tackles on a daily basis.

With the many and often difficult issues the Colorado Water Conservation Board handles, what do these efforts mean to the Rio Grande Basin and the San Luis Valley? The answer is the Rio Grande Roundtable. The Roundtable serves two critical roles, the first is to develop a comprehensive communication platform for stake holders and the second is as a conduit for funding basin water projects. The Rio Grande Roundtable itself exists because of the CWCB. The concept of the Basin Roundtables was established through the Water for the 21st Century Act with the intent of facilitating discussion and common sense solutions for Colorado's water needs.

Currently, the roundtables across the state bring over 300 individuals to the table. There is an even larger amount of needs and interests represented. To address these needs, each basin is required to have a unique basin implementation plan. These plans identify both consumptive and non-consumptive water needs as well as available water supplies and proposed projects and methods. The projects and methods require funding. This is where the CWCB Water Project Loan Program comes in. On an annual basis, the CWCB has close to fifty million dollars available for this program. These low interest loans are available to any agricultural or municipal borrower who can establish a clear need for the design and/or construction of a raw water project. Proposed projects must then clear an application process and obtain board approval. Once each of these measures are successful, the project can begin.

The Rio Grande Basin Roundtable has been the recipient of millions of dollars in funding for crucial water projects, thanks to the Colorado Water Conservation Board. One notable example is the Rio Grande Cooperative Project. As a public/private partnership between Colorado Parks and Wildlife and the San Luis Valley Irrigation District, the Rio Grande Cooperative project was presented to the CWCB as a funding request for needed repairs to Rio Grande and Beaver Reservoirs. The request was successful and in 2013, Phase 1 of the repair process at Rio Grande Reservoir was complete. Beaver Reservoir completed its dam rehabilitation in 2016. This is just one way in which the CWCB has tremendously benefited the San Luis Valley. In fact, it could possibly be argued that the Valley would be a much different place without the CWCB.

Colorado's water and water in the Rio Grande Basin is and always will be an important matter. Many can agree that it must be used wisely. The Rio Grande Roundtable and the Colorado Water Conservation Board work to ensure that this valuable resource is managed well.

WANT TO KNOW HOW YOU CAN GET INVOLVED?

Visit RGBRT.org or email Info@RioGrandeHeadwaters.org

LINK TO ARTICLES, RADIO SPOTS AND VIDEO VIGNETTES:

Please visit http://www.rgbrt.org/ education-and-outreach.html

TELL US WHAT YOU WANT TO SEE IN THE NEWSLETTER!

Email: Info@RioGrandeHeadwaters.org

PG. 5