RENEWABLE
WATER
RESOURCES

Proposal Response:
American Rescue Plan Act

Douglas County's Future is Dependent on Securing a New Renewable Water Source for our Residents

"For the last 10 years, water consistency ranks as the #2 concern among Douglas County residents."

- Douglas County Citizen Survey

INTRODUCTION

Douglas County is an amazing place to live, work, and play. The County Commissioners have tackled tough issues in recent years making drastic improvements in transportation and open space -- yet we have fallen behind in securing non-Denver Aquifer based water.

Consider these other figures:

- More than 120,000 households in Douglas County
- The **Mean Property values in Douglas County** is $524,554

In the most recent demographer results for Douglas County, we are growing at a rate of 24 people per day. Pushed out over the next 10 years, our county will be looking at 87,600 NEW residents and a projected county population of 460,875 by 2031. Our median household income in Douglas County is the nation's 8th highest, making it an appealing place to live.

Douglas County is currently overly dependent on the Denver Aquifer as its principal water supply, which is a non-renewable source that threatens to put our property values, economic growth and quality of life at risk.

Additionally, a proposed rule change could drastically impact Douglas County's relationship with the Denver Aquifer.

Colorado's State Water Engineer recently urged Denver Metro water providers, including those located in Douglas County, to seek renewable sources of water other than the Denver Aquifer. This new guidance will limit the use of the Denver Aquifer and essentially maintain the Aquifer as a "preserve." In other words, the Aquifer will serve as a back-up option for when Douglas County needs water at times of extreme drought but NOT the main source.

For Douglas County, this ruling is an imminent and practical challenge and catalyst for necessary change.

Without forecasting for projected growth, Douglas County will encounter supply issues for its residents if we continue to rely on the Denver Aquifer as our primary water source.

Additionally, there are no viable options or alternative sources of water nearby (i.e. Cherry Creek, Plum Creek, the Platte River, etc.) More so, Douglas County's current "patchwork" system of compiling water in small amounts is not working. The Renewable Water Resources project offers Douglas County renewable water and water independence.

PROJECT OVERVIEW

The Renewable Water Resources ("RWR") Project proposes to develop up to 22,000 acre-feet per year ("ac-ft/yr") from a series of groundwater wells in the northern part of the San Luis Valley. The project is premised on the development of ***renewable*** groundwater that is replenished by the hydrologic cycle. Therefore, this groundwater supply would be a perpetual

water supply. Once produced, the groundwater supplies are proposed to be transported to the Front Range by pumping and pipelines, as well as using natural river channels as conveyance for a portion of the water transmission. The ultimate goal is to provide a reliable and sustainable water supply to Douglas County water users.

The San Luis Valley is a large valley (approximately 120 miles north-south and 75 miles east-west, or approximately 9,000 mi2) of deep unconsolidated deposits surrounded by the Sangre de Cristo Mountains and the San Juan Mountains These mountain ranges are critical to the sediment deposition in the valley as well as the renewable nature of the groundwater supplies in the valley.

The deepest unconsolidated deposits in the valley are generally interbedded gravels, sands, and clays, which are successively overlain by a thick sequence of clays, commonly referred to as the “blue clays”, which provide confinement of the underlying water-bearing strata over much of the basin. Additional deposition of alluvial materials above the blue clays from numerous streams emanating from the Sangre de Cristo and San Juan Mountains has created a near-surface alluvial groundwater system principally of sands and gravels. This upper alluvial system is commonly referred to as the “unconfined aquifer”, while the deeper aquifer system below the blue clays is commonly referred to as the “confined aquifer”. The relationship between the deep, confined aquifer, blue clay, and the overlying unconfined aquifer is shown below:

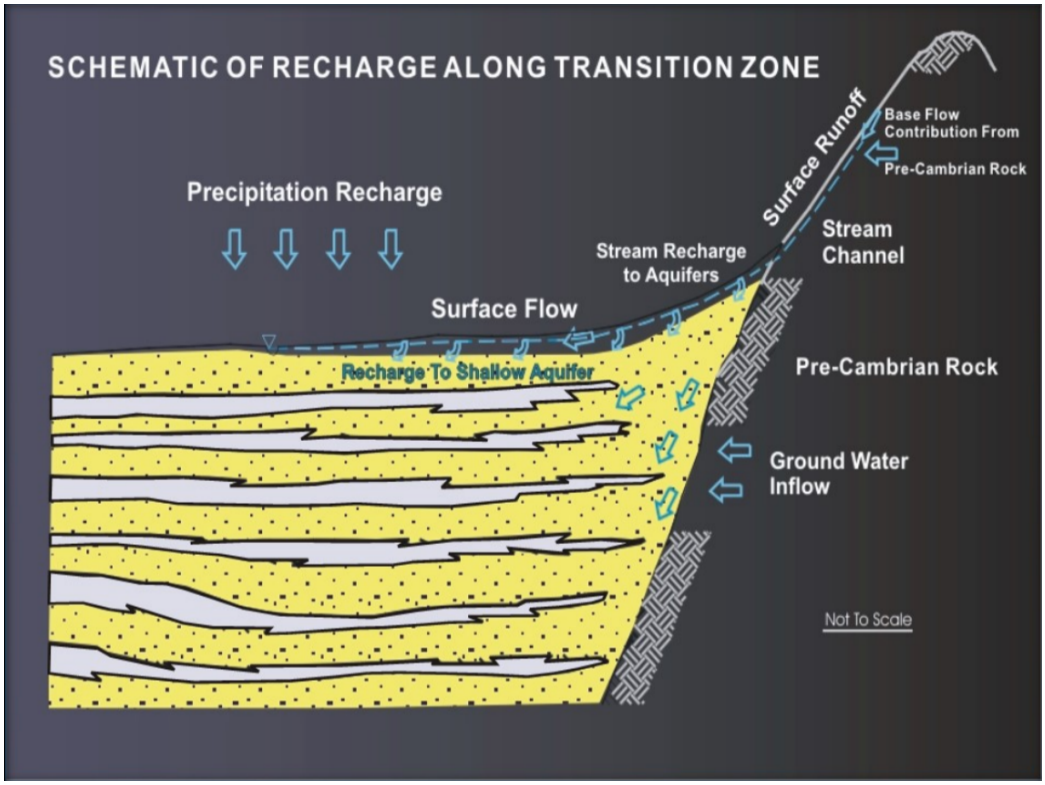


Figure 1: Recharge Along the Basin Rim

The RWR Project is designed to extract groundwater from the deep, confined aquifer of the San Luis Valley. The "deep, confined aquifer" at the RWR project site refers to the permeable strata within the Alamosa Formation (from an approximate depth of 150 ft to 1,250 feet ("ft")) and the unconsolidated sediments below the Alamosa Formation (either the Los Piños or the Santa Fe Formation) to a total depth of 2,000 ft. The blue clay that is regionally extensive over most of the San Luis Valley hydraulically separates the deep, confined aquifer from the overlying alluvial sediments of the unconfined aquifer.

However, there is one major exception to the presence of the blue clay that acts as a hydraulic separation between the unconfined and confined aquifers. This exception lies along the margins of the basin and is an important factor related to recharge to the confined aquifer. As shown in **Figure 1**, the blue clay is absent on the margins of the valley where large alluvial deposits have formed based on streams that originate high in the Sangre de Cristo Mountains depositing coarse sediments into the valley, with the coarsest sediments forming alluvial fans that have high permeability along the margins of the valley. This phenomenon is illustrated in the Rio Grande Decision Support Systems ("RGDSS") model prepared by the State Engineer's Office.

Figure 2 shows the recharge package from the RGDSS model which indicates the large recharge component along the margins of the basin, referred to in the model documentation as "rim recharge". The practical result of this recharge is that the confined aquifer is a renewable water resource that is recharged on an annual basis from runoff generated from precipitation and snowmelt runoff in the numerous streams that originate in the Sangre de Cristo and San Juan Mountains and flow into the valley.

When surface flows reach the alluvial fans along the multiple stream sub-basins, a large portion of the surface flow infiltrates into the ground, recharging both the unconfined and confined aquifers, as shown in **Figure 1**. While this recharge will vary from year to year, as with any renewable water supply, there is a distinct pathway that allows recharge into the confined aquifer. Therefore, this water supply is replenished by the hydrologic cycle along the margins of the valley.

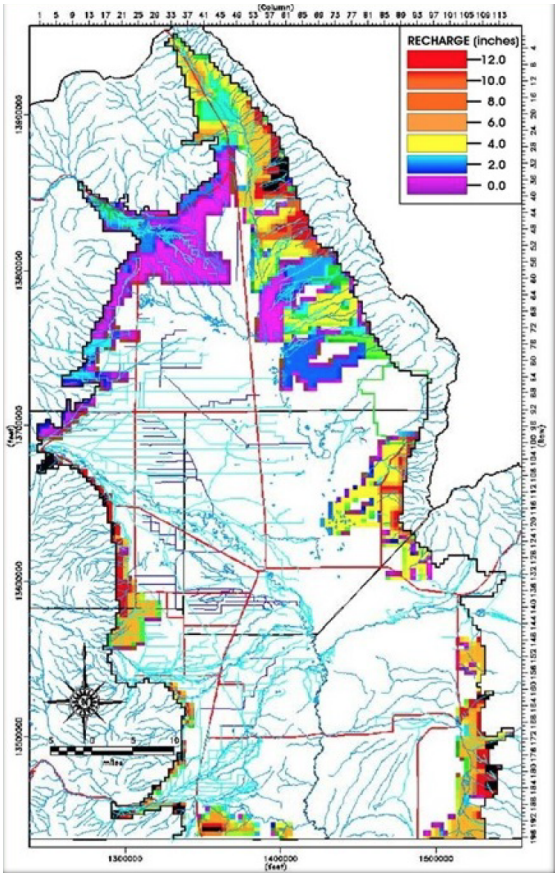


Figure 2: Rim Recharge in the RGDSS Model

Another important point related to the unconfined and confined aquifers of the San Luis Valley is that the vast majority of the groundwater pumping in the San Luis Valley is currently associated with irrigation and these wells are virtually all completed in the shallow unconfined aquifer. It is currently estimated that approximately 85 to 90 percent of the total pumping in the valley is from unconfined aquifer wells, while the remaining 10 to 15 percent is pumped from the confined aquifer. Given the hydraulic separation of the unconfined and confined aquifers in the central portion of the San Luis Valley where the concentrated irrigation is occurring and the limited use of the confined aquifer water supplies, the RWR water supply plan seeks to make use of the under- utilized water from the deep confined aquifer.

PROPOSED RWR WATER SUPPLY AND DELIVERY PLAN

It is currently anticipated that approximately 25 wells will be installed to produce the targeted project yield of 22,000 ac-ft/yr. The wells will be situated on lands owned or controlled by RWR and will be designed to optimize production by spacing wells to minimize the potential for well- to-well interference, i.e., on approximate 1-mile spacings between wells. The wells will also be situated in the northeastern portion of the San Luis Valley near the alluvial fans to obtain the benefit of being situated in the highest recharge area from precipitation received on the Sangre de Cristo Mountains. RWR's land is strategically and uniquely located in this high water recharge area allowing for a more consistent and reliable well field.

The groundwater, once pumped from deep confined aquifer wells, will be manifolded into a single pipeline to a common collection point at Moffat, and then will be transported to the Front Range by pipelines and using river systems as the conveyance mechanisms.

It is proposed that the water delivery system will provide pumping and pipeline conveyance into the South Platte River Basin. The initial project infrastructure will be a pipeline from Moffat over Poncha Springs. For delivery to Douglas County, there will be a proposed pipeline adjacent to US Highway 285 to Johnson Village, then turning east to go over Trout Creek Pass. Once in the South Platte River Basin the pipeline will either terminate downstream of Antero Reservoir or Elevenmile Reservoir, depending on the conveyance agreements for the water. Beyond these reservoirs, the water will be conveyed in the South Platte River channel to Strontia Springs Reservoir or Chatfield Reservoir. At this point, water can be distributed directly to end users or routed to other local surface storage facilities for subsequent use. The location of the RWR project and a preliminary pipeline route, and river conveyance to Douglas County (**Figure 3)**.

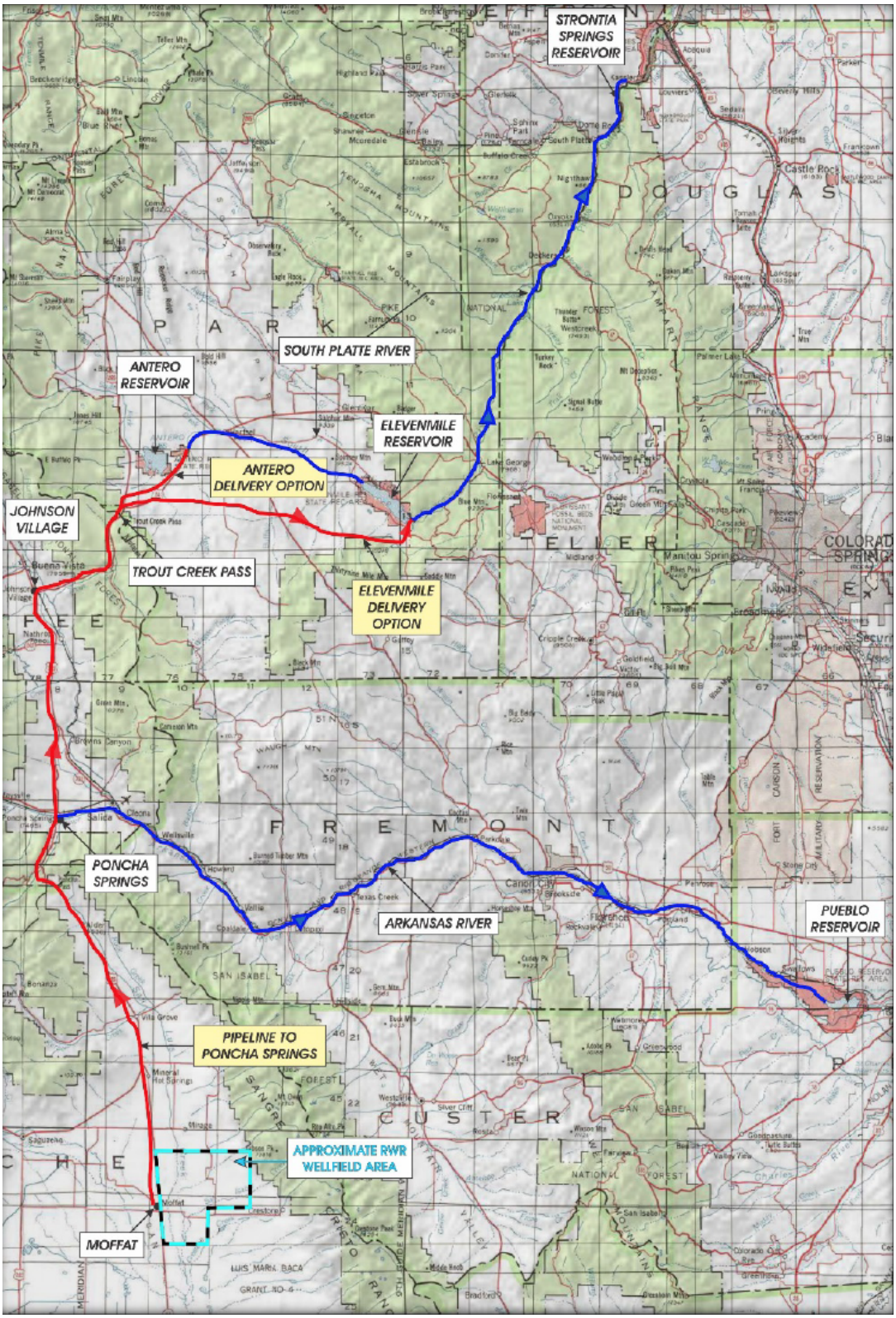


Figure 3: Potential Water Delivery Routes

Potential Water Delivery Routes

Since this water will be exported from the San Luis Valley, the water will be fully reusable. In addition to being a renewable water supply, this is an important component of the RWR water supply and delivery plan. Reuse allows first-use water to be used to extinction, which means that this water, after first use, can be reused multiple times. The cycle that allows the reuse of the water is presented below in **Figure 4**.

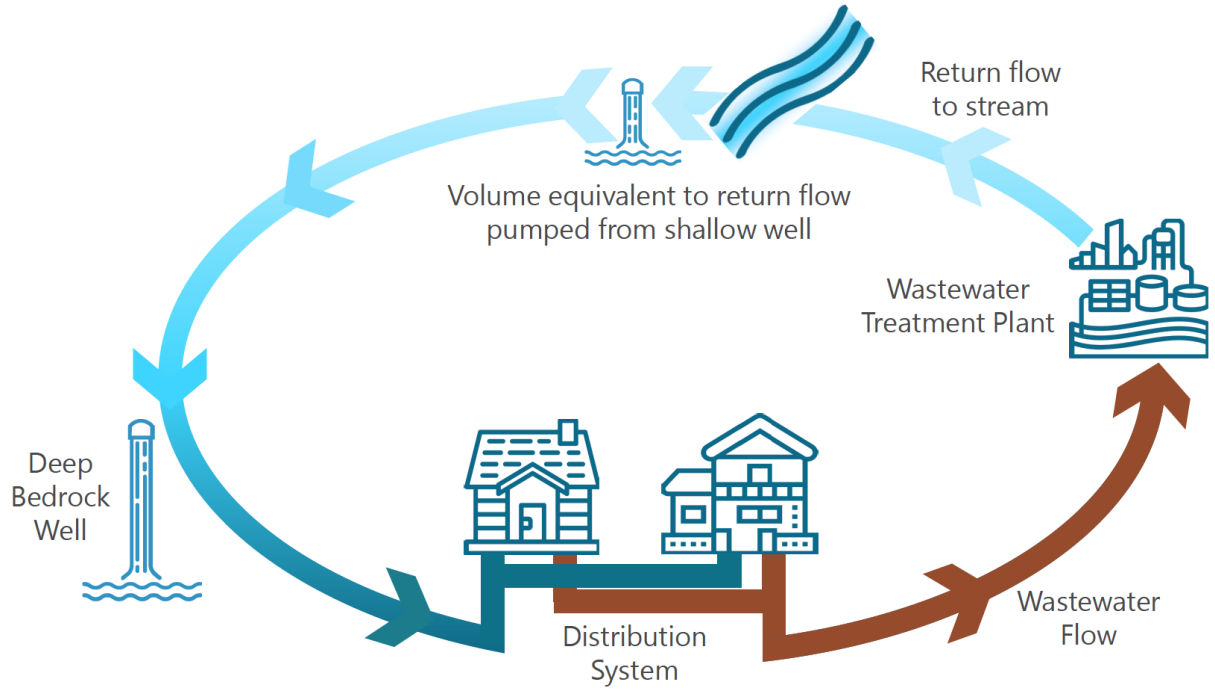


Figure 4: Schematic of a Water Reuse System

The reusability of RWR's water creates a multiplier effect so that for practical purposes, the 22,000 acre feet of water would equal up to approximately 35,000 acre feet of water usage, used to extinction.

Not only is reuse an important component of the overall RWR water supply project but a number of water supply entities along the Front Range currently have a reuse system in place. As such, the reuse system in place can replace, or supplement, current Denver Basin aquifer water use and use the in-place systems with no modifications. Therefore, the RWR project becomes not only a renewable water supply source but also a water management tool to preserve Denver Basin Aquifer water as a reserve drought-resistant supply to address hydrologic variability and potential future climate changes that affect water supply availability.

WATER COURT PATHWAY

The Water Court process for an augmentation plan such as the RWR project is relatively straightforward. If an applicant wants to develop new tributary groundwater resources it can file for an augmentation plan and as long as injurious depletions from such groundwater

development are replaced in time, location, and amount to protect senior water rights a decreed augmentation plan can be obtained.

Once an applicant files with Water Court, Colorado Water Court ensures that the San Luis Valley will not lose water. Colorado Water Court requires that any water project does not deplete water resources and does not harm or injure property or people.

The RWR project will enter the water court process and prove how the project meets these provisions of the water court. Colorado has some of the strictest laws in the nation. In the San Luis Valley, water provisions are even stricter. In fact, the San Luis Valley is the only place in the state that has a "one-for-one" law. This means that if any water is proposed to be taken out, the equal amount of water must be retired at the same amount. Colorado Water Court also mandates the provision known as "no harm, no injury." In other words, state protections are in place to guarantee "no harm, no injury," to the environment, people, and property.

We have created and drafted our proposal to meet all Water Court criteria and are prepared to go through Division 3 Water Court in Alamosa.

Anti-Speculation Doctrine

In Colorado, there is an anti-speculation doctrine that requires an applicant that wants to appropriate new tributary water rights to contractually have a specific plan to put that water to beneficial use, including an end user for the water. A new tributary water right will not be granted without bonafide end users that can demonstrate a need for the water rights sought. In essence, this doctrine requires the beneficial use of water by preventing water rights from being tied up for years on speculative plans that never come to fruition. Therefore, prior to filing in Water Court it is necessary to have bonafide contracts with water providers that can show a demonstrated need for the water being sought in Water Court, i.e. there is a known demand for the beneficial use of water.

Sub-Districting

The San Luis Valley has been subdivided into six subdistricts, aka "Response Areas" (**Figure 5**). Subdistricts are defined as an entity created pursuant to Sections 37-48-123 or 37-45-120, C.R.S. Based on this subdivision of the San Luis Valley aquifers, it is required that each subdistrict develop a Groundwater Management Plan to attain sustainability of the aquifers; however, individual applicants can also adjudicate an augmentation plan that demonstrates sustainability. Sustainability is attained in each subdistrict by either a Groundwater Management Plan or an individual augmentation plan through estimating the injurious depletive effect in time, location, and amount and then having a replacement source to offset that depletive effect. The RGDSS model is used to establish "response functions" to determine how replacements need to be made. Response functions are a calculation of the effect of pumping on depleting the groundwater system and the surface water system so it is understood how much augmentation water has to be provided and the timing and location of that replacement.

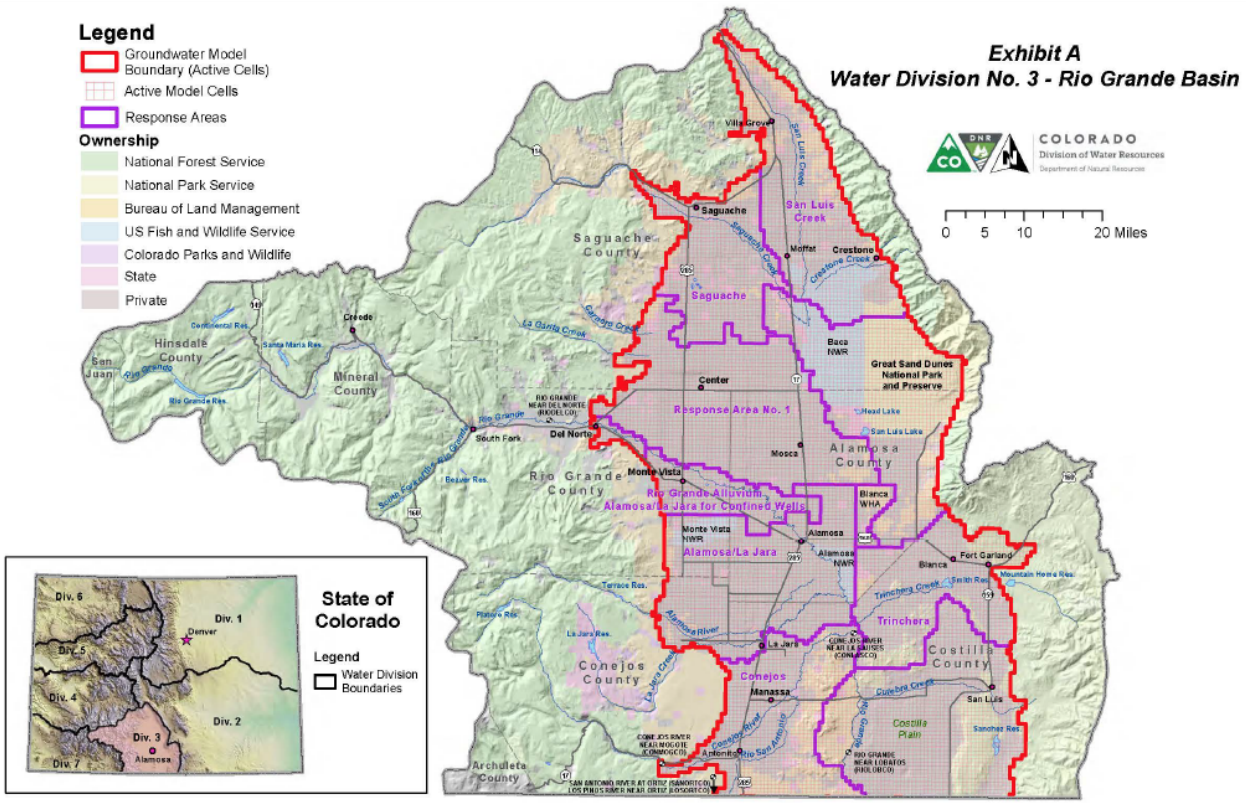


Figure 5: Subdistricts in Water Division 3

As part of establishing sustainability on a subdistrict-by-subdistrict basis, the issues that have to be addressed related to the sub-districting under the Rules, are (a) future pumping is limited to the estimated pumping during the period 1978-2000 and then compared to the current 5-year running average annual withdrawal in each individual subdistrict to assure no increase in pumping over historic levels and (b) water levels and artesian pressure have to be maintained within the range that occurred in the period 1978 to 2000. Both of these factors are derived from the calibrated RGDSS model and, therefore, could change with time if the RGDSS model is updated.

Additionally, the need to maintain historic pumping volumes and artesian pressures is arbitrary as it is not necessarily related to preventing injury to vested water rights. In addition, the selection of the 1978-2000 period for maintenance of water levels and artesian pressure is curious given that this is a period during which there are virtually no data upon which to base future changes.

The estimates for these parameters were derived from simulation results in the RGDSS model. Regardless, these criteria have to be met under the current Rules in Division 3 so they need to be modified prior to RWR proceeding to Water Court.

Subdistricts in Water Division 3

Colorado water law requires that injurious depletions be augmented but the Rules in the basin go beyond that requirement, requiring a 1:1 augmentation regardless of the injury issue. In fact, augmentation in some cases can result in a requirement of greater than 1:1 augmentation based on the cumulative depletions to groundwater and surface water supplies. These artificial boundaries and constraints are part of the current basin Rules. Because of these constraints, modifications to these Rules are necessary prior to proceeding with a Water Court application.

IMPACT ON RIO GRANDE COMPACT

There will be no impact to the Rio Grande Compact as a result of the RWR project as, not only will pumping be replaced on a 1:1 basis, it is proposed that the augmentation water to offset depletions from the project will exceed the depletions. Therefore, there will not only be no depletions to the groundwater system but there will be an accretion of available water in the San Luis Valley groundwater system. In addition, the RWR project is entirely located within the Closed Basin which, by definition, is not hydraulically connected to the Rio Grande. Therefore, there is no depletion associated with Compact delivery requirements related to groundwater pumping in the Closed Basin. As evidence of the lack of hydraulic connection, the Closed Basin Project which was authorized by Congress and is implemented by the Bureau of Reclamation, produces groundwater within the Closed Basin and delivers it to the Rio Grande in partial compliance with the delivery requirements under the Compact. If there was a depletive effect associated with this pumping, the project could not then claim credit against Compact delivery requirements to the downstream states.

SUBDISTRICT WELL CURTAILMENT

As part of the adjudication of the Subdistrict 1 Groundwater Management Plan that was approved on May 27, 2010, the Rio Grande Water Conservation District (“RGWCD”) was charged with restoring the unconfined aquifer within the subdistrict to a sustainable level within a 20-year period. According to the Division 3 Rules, the definition of sustainable is “a condition where withdrawals from the aquifer match recharge to the aquifer from all sources so that mining of the aquifer is not occurring on a long-term basis.”

This requires the RCWCD to: “achieve the recovery of a Sustainable Aquifer level measured at Unconfined Aquifer storage levels between 200,000 and 400,000 acre-feet below the storage level that was projected to exist on January 1, 1976, within 20 years after judicial acceptance of this Plan which will be no later than December 19, 2031.”

While the estimated depletion since 1976 is 200,000 to 400,000 ac-ft, it is also estimated that the unconfined aquifer has been depleted by approximately 1,000,000 ac-ft since the 2002 drought. The timeframe for the recovery of water levels in the unconfined aquifer is approximately halfway expired and, to date, no or minimal recovery of water has occurred. This has resulted in the State Engineer issuing a letter in December 2018 related to well curtailment soon so the objective of the Subdistrict 1 groundwater management plan can be achieved related to returning the unconfined aquifer to a sustainable basis within the 20-year

timeframe. This would apply to all groundwater wells completed in the unconfined aquifer being shut down for a minimum of 3 years, so it will be a severe impact on current irrigation practices in Subdistrict 1. It should be noted that the objective of returning to a sustainable level was limited to the unconfined aquifer, as that is the aquifer that is being severely depleted. Retirement of water use in the unconfined aquifer will help with water level recovery.

WATER SECURITY IS THE NUMBER ONE CONCERN IN DOUGLAS COUNTY AND IN COLORADO

External Factors Driving the Need for A Renewable, Independent, Long-term Water Supply in Douglas County

THE DENVER AQUIFER IS NOT A DEPENDABLE WATER SUPPLY
A proposed rule change will drastically impact Douglas County's relationship with the Denver Aquifer.

Colorado's State Water Engineer recently urged Denver Metro water providers to seek renewable sources of water outside the Denver Aquifer Basin. This new guidance will limit the use of the Denver Aquifer and essentially maintain the Denver as a preserve. In other words, the Aquifer will serve as a back-up, insurance option but NOT the main source. This guidance serves as a warning to all water providers in the Denver Metro area that there is no guarantee of water.

For Douglas County, this ruling is an imminent challenge. Today and without forecasting for growth, Douglas County will encounter problems with relying on the Denver Basin for water and run into a water shortage. Therein implying, Douglas County will not be able to withstand even the slightest bit of growth let alone maintain its high standard of living.

Additionally, there are no viable options nearby - (i.e. Cherry Creek, Plum Creek, and the Platte River.) Our quality of life and water security is correlated yet Douglas County's current "patchwork" system of compiling water in small amounts is not working.

Water scarcity is the County's biggest threat yet and independence allows Douglas County to control its future. The Renewable Water Resources project offers Douglas County renewable water and water independence.

BOOMING GROWTH IN COLORADO

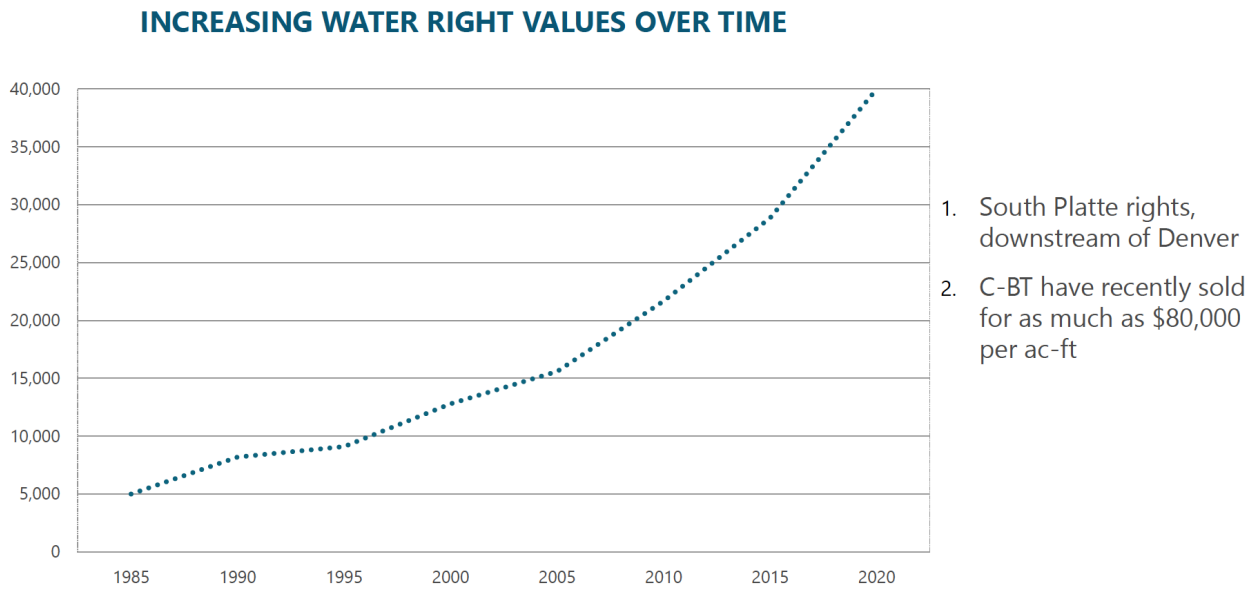
Colorado is facing environmental challenges due to climate change, growing demands on current yet dwindling water supplies, and a population boom that shows no signs of letting up.

Colorado's population grew at nearly twice the rate of the rest of the nation between 2010 and 2020, putting it among the fastest-growing states, the U.S. Census Bureau reported, according to the Colorado Sun. While the nation's population grew only 7.4 percent over that period, Colorado saw nearly 15 percent growth.

But the growth was unevenly distributed. Urban centers continued to draw more residents while rural counties -- especially those in the southeast corner of the state -- saw the biggest declines in population. As it has for the past decade, population is falling on the Eastern Plains and in the San Luis Valley and growing along the urban Front Range, especially in Adams, **Douglas**, Larimer and Weld counties, according to the *Sun*.

Adding greater complexity to Colorado's water challenges, the U.S. government this summer announced its first-ever water shortage declaration for the Colorado River. This declaration triggered future cuts in the amount of water that states who rely on the Colorado River, including Colorado. The Colorado River is in a crisis and our state is facing the perfect storm in managing current and future growth and a looming water shortage. Solutions are needed to these complex problems. Our project offers a solution for both the San Luis Valley and the state.

Cost of Water Comparison and Analysis



"Driven by an ongoing housing boom, water prices rose as much as 400% on the northern Front Range between 2011 and 2018. Based on water sold from the Colorado-Big Thompson Project (C-BT), a federal water project that allows shares to be bought and sold in public transactions."

- Water Education Colorado, May 2019

A COLLABORATION

The RWR team is composed of the state's top engineers, finance experts, water experts and public affairs and communications professionals who have studied the San Luis Valley and Denver area for decades. The team is committed to ensuring this project the right way; this means leaving the San Luis Valley better than it is today.

The key principles behind the project include former Governor Bill Owens and respected business leader/entrepreneur Sean Tonner, the latter who also served as Owen's Deputy Chief of Staff. During Owen's tenure, the two solved complex issues for the state of Colorado and understand the future problems facing the state such as including climate change, continued population growth, and the looming water shortage on the Front Range.

OUR TEAM


Gov Bill Owens


Sean Tonner


John Kim


James Yates


Hugh Bernardi


Brett Ford


Bryan Wright


Kevin Kinnear

Governor Bill Owens: Bill Owens was born in Fort Worth, Texas on October 22, 1950. He holds a master's degree in public administration from the LBJ School of Public Affairs at the University of Texas. He worked for 20 years in the private sector with the consulting staff of Deloitte and Touche, with the Gates Corporation, and as director of a trade association. He is an expert on Soviet affairs and writes and lectures often on Russia. Prior to becoming governor, Owens served in the state house and senate and as Colorado treasurer. He was sworn in as Colorado's 40th governor in January 1999 and was reelected in 2002 with the greatest majority in Colorado history.

Governor Owens pushed through the largest tax relief package in state history, amounting to $1 billion in cuts in rates of sales, personal income, and capital gains taxes, and eliminating the marriage penalty. Owens created an education accountability system, including detailed, online school report cards. He combined this model education accountability plan with five consecutive years of full state funding for public education. He also kept his commitment to transform Colorado's transportation system by accelerating road and mass transit projects, thus reducing completion times from half a century to a decade. He pushed for and signed into law the largest state commitment to transportation, which promised to invest $15 billion in the following 20 years.

In 2005, Owens led a bipartisan effort to speed Colorado's recovery from the recession. The effort led to citizen approval of a measure allowing the state to retain certain revenue for a period of five years, putting an end to serious budget cuts that were negatively impacting state services.

Sean Tonner: Sean Tonner embraces his political roots on a day-to-day basis. He is sought after by clients for his diplomatic skills in navigating complex political environments, both internationally and domestically. By marrying online and offline communications tactics, he is a mastermind in creating campaigns that not only improve the political environment but also the image and reputation of his client's brands. This often involves generating ideas and strategies for his clients that successfully exert pressure "inside and outside the dome." His track record proves it.

Over the course of his career, he has managed communications efforts for political parties and corporations around the globe. He has also served in numerous high level staff positions for Presidents, Prime Ministers, and Governors. Tonner is at home in the fast paced environment of political campaigns and has worked on the campaigns of President George W. Bush, presidential contender Bob Dole, Hungarian Prime Minister Victor Orban, French President Nicolas Sarkozy, Mexican President Felipe Calderon, Ghanaian President Nana Addo, Colorado Governor Bill Owens, Senator Ben Nighthorse Campbell and Cory Gardner of Colorado. Sean was named a national rising star by Campaigns & Elections magazine after he engineered a nationally recognized get-out-the-vote program that resulted in the largest gubernatorial vote received in Colorado history. Two years later he replicated the effort for President George W. Bush's re-election. Sean's communications work still takes him across the globe to France,

Kazakhstan, South Sudan, and Mexico. He has also managed the reputations of international companies along the likes of Newmont Mining, Noble Energy, and Walmart. He also brings experience in consumer and corporate communications representing brands such as ReMax, HCA, and Western Union.

During his service in the U.S. Army he attended reconnaissance, airborne, ranger, desert and jungle warfare training and was awarded the Army Commendation Medal for Valor for his actions during Desert Storm.

Tonner is a member of Young Presidents Organization (YPO) member, the largest CEO Organization in the World. In addition, he invested his time to serve on the executive committee of the YPO Subcommittee on Global Diplomacy and Public Policy. As chair for the Americas, he plays an instrumental role in connecting top global CEOs with international dignitaries in the Western Hemisphere. He also serves on the Colorado chapter of the U.S. Global Leadership Coalition, Colorado Business Roundtable, Council for a Strong America – Ready Nation, and is a regular attendee of the World Economic Forum in Davos and the Aspen Institute. Sean is past President of the Entrepreneurs Organization, Colorado Chapter, the largest entrepreneur focused organization in the world, former Trustee of Metropolitan State University of Denver, USO Advisory board member, and the Colorado Veterans Nursing Home Board Member.

Tonner and his wife, Laura, of over 25 years live in Douglas County and have two children Reagan and Hunter. Their family helped establish and currently serve on the board for the charity Project El Crucero which supports the needy in Nicaragua.

John Kim: Kim has over 25 years of successful real estate and private equity transactional experience. Real estate investments include commercial, retail, multi-family residential and hospitality properties. Private equity investment includes agriculture, cattle, hemp, CBD products and water rights. Kim's real estate and private equity experience encompasses the acquisition, ownership and operations of over 1.2 million square feet of commercial property and 15,000 acres of farm/ranch land over the years. Mr. Kim is the principal investment director for his family investment portfolio and actively directs the acquisition, divestment and strategic operational activities of the real estate portfolio which encompasses five states.

Kim is also a principal of Zeppelin Partners, which is focused on natural resource, agricultural, water and infrastructure development. Current portfolio of investments include retail/commercial/office real estate, municipal water, cattle ranching, commercial farming and Hemp/CBD development and vertical integration.

Kim has significant experience in real estate financing, including loans from commercial banks, CMBS lenders and life insurance companies. Mr. Kim has worked with GE Capital, CapMark Finance (now Berkadia), Bank of America, Bank of the West, Wells Fargo, N.A. , StanCorp Mortgage, Prudential, MetLife, RiverSource, Mutual of Omaha, UBS AG, Guaranty

Bank, TIAA, Premier Bank and ENT Credit Union. In addition, Mr. Kim was a successful corporate attorney counseling businesses on sophisticated transactional matters.

James Yates: James Yates is an experienced real estate professional with the proven ability to provide strategic and operational expertise in all facets of real estate development and district operations.

Before his opportunity with Sterling Ranch, Yates was the National Vice President of Finance for MDC Holdings, Inc. Yates worked for MDC for almost 15 years in several key positions where he acquired a strong understanding of the real estate market. His operational and financial capabilities are highlighted by his accomplishments as a creative, decisive and analytical manager within the homebuilding division operations. Prior to working at MDC, Yates gained valuable business experience working in public accounting.

Yates was born and raised in Burlington, Iowa. Yates graduated from the University of Denver in 1989 with a degree in accounting. Yates married a fellow University of Denver Alumni, Kay and is the father of two sons, Chris and Joe.

Hugh Bernardi Jr: Bernardi owns and operates several high growth businesses throughout the state of Colorado. He also serves as an executive consultant to firms throughout the country in the clean water, legal, distribution and digital marketing sectors. Mr. Bernardi plays an active role in philanthropy, primarily in the clean water space and is also currently a member of YPO – Young Presidents Organization.

Brett Ford: Ford is a dynamic, energetic and thoughtful financial services industry leader driving organizational strategy and competitive advantage through differentiation and customer experience. He brings valuable expertise in financial services holding multiple leadership roles. He has also been active previously serving on Castle Rock Town Council, Board member of Colorado Youth at Risk, and volunteering at local charities. Ford is also a 2002 graduate of Leadership Denver.

Bryan Wright: Wright is the Principal of AssuredPartners. Pensionmark Financial Group, LLC is an investment adviser registered under the Investment Advisers Act of 1940. Pensionmark is affiliated through common ownership with Pensionmark Securities, LLC. His areas of expertise include employee benefits, qualified plans, and commercial insurance.

Kevin Kinnear: Kinnear is committed to vigorously representing his clients as an attorney, and he is equally committed to finding solutions to difficult problems as a dispute resolution specialist. In either role, creativity and hard work are his lodestars. Kinnear is a native of Colorado, and he grew up enjoying the state's beauty and natural resources while becoming aware of the critical importance of water in the West. He and his family have been skiing, cycling, hiking, and backpacking all over Colorado for over four decades.


Mary Kay Hogan


Benjamin Teevan


Sara Cassidy


Sean Duffy


Monica McCafferty

Mary Kay Hogan: Hogan brings a 20+ year non-traditional legal career learning the ins-and-outs of all three branches of government, from the municipal to the federal level. As such, her approach to serving her clients is based on navigating the various rules, nuances, and roles of the governmental body that is critical to achieving a particular client's goals, particularly when those goals intersect multiple branches of government.

Hogan began her political career in the Legislative branch, interning for Congressman Dan Schaefer (R- 6th CD CO), then had the privilege of working for the U.S. Senator Tim Wirth (D-CO), Representative Mo Udall (D-AZ), the Democratic Senatorial Campaign Committee and the Republican caucus of the Arizona State Senate during college. These early experiences working for lawmakers from different parties taught her the nuts and bolts of the legislative process at the state and federal level, but also how to communicate effectively with members of both major parties, a skill and value that has transcended her approach to lobbying over the past two decades.

Her work in the Executive branch included a four-year stint as a senior staff member for Colorado Governor Bill Ritter, Jr. During this time as the Governor's Legislative Director, Mary Kay helped shepherd over fifty legislative agenda items through the process for the Governor. She oversaw the approval of all nineteen executive agencies' legislative agendas for four legislative sessions, and worked closely with cabinet members and executive agency senior staff. She now represents the interests of her clients in front of various Governors Offices throughout the United States.

Benjamin Teevan: Benjamin Teevan is the sole principal at Cavan Consulting, which opened its doors in 2011. Teevan has a deep breadth of experience in agriculture, business, energy, land conservation, water policy, health care, education, human services, and elections with the Colorado General Assembly. Teevan has been a registered lobbyist since 2007. Prior to lobbying, Teevan worked as a legislative aide for two state representatives and filled leadership roles in a variety of political campaigns on the local, state, and federal levels. Teevan has lobbied for a number of business and professional membership associations, including as government relations director for the Rocky Mountain Farmers Union from 2007 to 2010, which is a general farm organization representing 25,000 farm and ranch families in Wyoming, Colorado and New Mexico and on behalf of which Teevan advocated for key legislation such as the 2007 Farm Bill and the 2010 Affordable Care Act. He currently

represents several membership organizations and business entities with a track record of success with the Colorado Departments of Revenue, Regulatory Agencies, Public Health and Environment, Healthcare Policy and Financing, Education, Human Services, and Agriculture.

Sara Cassidy: Founder and Principal of Bridge Strategies, Cassidy works with companies, policymakers, community leaders and teams of experts to deliver results for clients. Cassidy began her career as a State Legislative Aide, then a Congressional staff member and was elected to serve her community as a City Council member and Mayor Pro-tem. Sara has represented business associations and a Fortune 150 company directing state and local legislative engagement and community connections across a multi-state region. She is an advocate for business-friendly public policy on a broad range of issues.

Cassidy has served on the boards of the Colfax Marathon, Colorado Front Range Rail Commission, Second Century Foundation, Trinity United Methodist Church, Women's Bean Project and Wyoming Taxpayers Association. She's been selected for many municipal, transportation and library advisory project teams. She is humbled to volunteer with Capitol Hill United's lunch service program and Girl Scouts troop leadership.
A graduate of Colorado State University, Sara is proud - to be - a CSU Ram.

Sean Duffy: Known for innovative and effective public relations strategies, Sean Duffy is President of Shamrock Strategies LLC, a Colorado-based public affairs consulting company, representing a wide range of clients in the healthcare, transportation, manufacturing, hospitality and retail sectors of the economy.

Duffy has more than 30 years of strategic communications experience in private and public sector roles. He came to Colorado in 2001 to serve as Deputy Chief of Staff to Gov. Bill Owens, where he oversaw the Administration's entire external affairs operation, including media relations, political affairs and community relations and served as the Governor's speechwriter. This followed more than a decade of work in Pennsylvania, including serving as president and CEO of the state's free market think tank where he was one of the most prominent and effective advocates for education reform. He served as the chairman of Pennsylvania's first cyber charter school in partnership with former Education Secretary William Bennett. For his work, he received a major statewide award from the Pennsylvania Family Institute.

A former business and financial news reporter, Duffy has worked in key communications roles in a number of political campaigns and in 2006 was named "Top Politician" by Denver's 5280 Magazine primarily for his bipartisan work on behalf of a statewide civil union initiative. Duffy teaches political communications to aspiring candidates around the globe for the international division of the Leadership Institute and is a member of the American Enterprise Institute's Leadership Network. He is active in a number of business organizations in the Denver Metro Area, and has been a leader in civic and charitable affairs, serving on the Board of Trustees of

Douglas County (CO) Libraries, Managing Director of The Barnabas Group – Front Range Chapter and the board of the American Transplant Foundation.

Duffy lives in Highlands Ranch with his wife, Susan and son, Brendan.

Monica McCafferty: Monica McCafferty is a communications and public affairs executive with nearly 20 years of professional experience. She currently sits on the Forbes Communications Council, has guest lectured on crisis communications at the University of Colorado at Denver, and was named a *Denver Business Journal* 40 Under 40 winner in 2016.

Her career spans industries and roles in the agency, corporate, and non-profit settings. Her clients depend on her to improve their relationships with the press, policymakers, and the communities they operate in.

Her hybrid skill set plays to today's communications era where consumers expect companies to take public stands on matters of political or societal importance. She has also worked with top consumer brands including the global ski destination of Vail, Colorado, and the common household cleaning product line of OxiClean and Kaboom. McCafferty launched MCM Strategies, LLC in 2017. In this role, parlays her expertise in PR and public affairs by working with regulated, private companies.

Funding Principles

LEGACY BENEFIT
Water scarcity is the biggest threat to Douglas County and water independence is the main attribute that will allow Douglas County to control its future. Douglas County residents have historically recognized and respected the role water plays in continuing Douglas County's legacy as a top destination to live in and raise a family.

According to the Douglas County Citizen Survey, *"For the last **10 years**, water consistency ranks as the **#2 concern** among Douglas County residents."*

- *More recent polling suggests **85 percent** of Douglas County voters support spending $20m on renewable water using ARPA federal funds.*
- *Only **3 percent** of Douglas County voters opposed spending $20m on renewable water with federal funds.*

RWR's project offers Douglas County the opportunity to secure a renewable water supply independent from the Denver Aquifer. As polling data illustrates, our residents know that

Douglas County offers outstanding jobs, schools, sports and outdoor recreations, law enforcement and public safety services, and good roads.

Yet for our quality of life to thrive, Douglas County needs a dependable, renewable water source. Douglas County Commissioners have a long track record of doing the right thing at the right time and our Commissioners today have a unique opportunity to protect the quality of life we currently know in Douglas County by securing a renewable water supply large enough to benefit the entire county. This means that both large and large towns in Douglas County can ensure safe drinking water for their residents now and into the future. Providing all factors that threaten water security from climate change to population growth to a strain on the Denver Aquifer -- the RWR project can bring a county-wide solution to a county-wide problem.

The technical aspects of the RWR project also make it a legacy project.

The water is high-quality with low total dissolved solids (TDS). TDS are organic and non-organic sediments found in water, which contribute to a difference in the taste, odor and appearance of water. It also reduces the amount of treatments needed to make it potable. A high TDS level means there is an increased amount of total dissolved solids, which can affect the taste and odor of water. A low TDS level means there are fewer dissolved solids and your water is made up of mostly pure water molecules, leaving a much better tasting water.

The water RWR will develop can also be used to extinction, extending existing water sources. More so, in contrast to the Denver Aquifer - the water from the San Luis Valley is renewable and a long-term solution.

Additionally, the 22,000 acre feet annually of renewable water actually corresponds to approximately 35,000 acre feet of renewable water for Douglas County, which in turn -- can serve up to 70,000 Douglas County households. This is enough water for every household in Douglas County to get off the Denver Aquifer. Bottom-line: No natural resource is as precious or long-lasting as water.

Values Statements from County Towns and Cities Related to Relationship with Water

> **Douglas County** - “Maintaining the quality of the county’s historic and natural resources: water, air, land and wildlife” - this point has consistently polled at over 90 percent over the last decade in the County’s annual citizen survey poll.
>
> **Parker** - “Maintain high water quality and protect water resources”
>
> **Castle Rock** - “Supplying high-quality drinking water is Castle Rock Water’s top priority.”

Centennial - *"Centennial Water strives to ensure that our water resources are used wisely. Centennial Water's strategy is to optimize the use of surface water. Over the past 25 years 90 percent of the water supplied has come from renewable river supplies."*

NEED BASED

Water scarcity is the greatest threat to Colorado. The water shortage on the Front Range is real. Water sources serving the Front Range are overused and overtapped, including the Colorado and Platte Rivers. This summer, the U.S. government announced its first-ever water shortage declaration for the Colorado River, triggering future cuts in the amount of water states will be allowed to draw from the river.

Meanwhile, more people are moving to the Front Range - numbers we've seen spike since COVID. New U.S. Census figures show Colorado is growing more urban and more diverse, Axios Denver reported. Colorado's population grew at nearly twice the rate of the rest of the nation between 2010 and 2020, putting it among the fastest-growing states, the U.S. The Census Bureau reported. While the nation's population grew only 7.4% over that period, Colorado saw nearly 15% growth. Our state's population growth is also largely uneven. As it has for the past decade, population is falling on the Eastern Plains and in the San Luis Valley and growing along the urban Front Range, especially in Adams, Douglas, Larimer and Weld counties.

Douglas County alone is adding 24 people per day. Pushed out over the next 10 years it will be 87,600 new residents and a projected county population of 460,875 by 2031.

It's clear Douglas County is lacking a renewable water supply to keep up with today's demand let alone the growing demand. The challenge is so great that we know no individual metro district or municipality entity can solve it on its own. And, water providers can't solve these issues by themselves either. This lies the opportunity for Douglas County to be the County catalyst to ensuring all Douglas County towns/cities have water.

INTEGRATION WITH BOARD PRIORITIES

The RWR water project directly correlates and impacts Douglas County's Board priorities such as overall quality of life, responsible growth for the county grows, and adhering to smart environmental priorities. Following are traits in which the RWR project aligns with the Douglas County Commissioner's priorities and principles.

Water Independence will Protect Douglas County's Constituents

Water is necessary to maintain the quality-of-life in Douglas County and preserve living standards its constituents know today. The County needs a new, renewable water supply today to maintain living standards; this can be fulfilled by the RWR project.

The RWR water project is an Innovative Water Solution

The County is adding 24 people per day. Pushed out over the next 10 years it will be 87,600 new residents and a projected county population of 460,875 by 2031. The RWR project is an innovative solution that respects environmental principles as well as the communities impacted. Together, RWR and Douglas County can solve a major problem and bring water independence to Douglas County. It also presents an opportunity to lead and innovate. Douglas County can be the catalyst to ensuring all of its towns and cities have high-quality, renewable water today and tomorrow.

Continuing a Legacy of Leadership

Douglas County Commissioners have a track record of leading the County to do the right thing especially when faced with complex challenges. Water is no different and all major Colorado towns and cities are facing water challenges.

The RWR project aligns with existing measures Douglas County Commissioners have taken to exhibit leadership for the County. Douglas County led on WISE, which allowed water providers to capture excess Denver and Aurora water. The County also created the Water Enterprise, a forward-looking mechanism to negotiate, fund, manage and construct assets.

Douglas County is the optimal location to take pressure off the Platte River and Denver Aquifer, and evenly distribute water across the county. Douglas County Commissioners can continue its legacy of leadership in protecting the County and showing the state new ways to solve complex public challenges.

Environmentally & Socially-Responsible Sound

The RWR project presents the San Luis Valley as an alternative option to water curtailment.

The San Luis Valley Aquifer is one of the largest in the United States and divided into two sections. The largest section stores one-billion acre-feet of renewable water. (An acre-foot is the amount of water that would fill an acre one foot deep, or enough water to meet the annual needs of two Colorado households.)

Yet the small section of the aquifer is shallow. We've found a solution to use the larger aquifer to help the smaller aquifer. This is because we are retiring more water than we are developing. And, this surplus of water will help heal the shallow section of the aquifer. Specifically, we are developing 22,000 acre-feet of water and retiring 31,000 acre-feet. That surplus of 9,000 acre-feet will go back into the San Luis Valley's shallow section of the aquifer.

It is imperative to understand that the amount of water we would develop - 22,000 acre-feet - represents **2.5 percent of the aquifer's annual recharge.** Imagine a full

bucket of water where the water is constantly flowing. While not withdrawing any water out of the base - the bucket is refilling and recharging. Of that recharge, our project will capture 2.5 percent of that recharge.

Given the design of our project, modern technology allows us to tap this water without harm to aquatic life.

More so, state water law in Colorado mandates that in order for water to be developed - it must be retired at the same rate. This is informally known in the water community as the “one-for-one” law. Recognizing there is a shallow section of the aquifer, the RWR project aims to accomplish “one-for-one plus.” Colorado Water Court also mandates the provision known as “no harm, no injury.” In other words, state protections are in place to guarantee “no harm, no injury,” to the environment, people, and property.

Our team has invested our time and resources in studying and developing a proposal that will be advantageous to the Valley, including:

- Attending and staffing more than **200 community meetings** and town halls in the San Luis Valley
- Educating the local community in the San Luis Valley. When people learn about the full project, local support in the San Luis Valley climbs to more than **42 percent.**
- More than **60 percent of residents in the San Luis Valley** feel the Valley is not headed in the right direction. Our project will strengthen the local economy, schools, and local area nonprofits and community groups.
- **Two-thirds of local San Luis Valley residents** are concerned the state will shut down water wells in the San Luis Valley because one section of the valley aquifer is shallow and not meeting sustainability goals set by the state. Our project will help prevent this type of water curtailment, as by developing parts of the deep aquifer, we can help replenish the shallow aquifer.

Through the **$50 million** community fund, monies will be distributed to the community and overseen by local residents. The fund will be directed based on need and as the local community wishes it to go such as funding schools, food banks, senior services, job training programs, to even connecting the Valley via dependable Wi-Fi.

We are also investing **$68 million** to compensate local farmers and ranchers who **voluntarily** wish to retire their water rights at a premium to current San Luis Valley market rates. These are farmers and ranchers who willingly want the choice and right to sell their water, RWR and its ranches are in the best, highest recharge area. This means that the project and its well field is best positioned to adjudicate the water

rights, minimize impact on other constituents and is located in the area that provides the most reliable and consistent area for the well field.

Other community aspects include establishing over **three thousand acres of new elk habitat**, an idea brought forward in one of the more than one hundred meetings RWR has held across the San Luis Valley.

We believe our proposal will not only be judged on merit, but we will also enrich the local economy, bring more jobs to the area, support essential non-profits and community groups, and improve the health of the area's aquatic habitats and wildlife.

AVOID DUPLICATION

The RWR water project is an inventive, creative solution to an incredibly complex problem facing Douglas County and Colorado. It truly stands in its own category of not only water projects, but also defines how new partnerships can be created for a new way of solving complex supply and demand issues related to natural resources like water.

Our project is unlike other water options in that we are offering a county-wide solution to sourcing a renewable water supply. Today, renewable water is not countywide. As an example, Castle Rock is using renewable water out of Plum Creek, but it is not a countywide supply. More so, the County's "status quo" approach in gathering small, patchwork systems of water is simply not working.and expensive for our residents.

The time is now for a new paradigm of how we think about water. Additionally, our larger water providers individually are being outbid for renewable water by larger communities throughout the state.

Our water proposal allows for the largest block of renewable water in Douglas County's history that can be used to extinction at the lowest cost to residents. Our water proposal does not require additional storage, is clean, and very low in total dissolved solids (TDS), meaning it will not require reverse osmosis -- further keeping costs down.

The RWR projects will bring Douglas county water independence, moving Douglas County off of its overdependence on the Denver Aquifer. Our solution is also environmentally friendly and socially responsible to the San Luis Valley.

RECOVERY FOCUSED AND FORWARD LOOKING

The RWR water project will maximize use of existing infrastructures, ultimately supporting the County's goals of enhancing solutions along the I-85 corridor as well as eliminating our dependence on the Denver Aquifer.

> *"As the County's 2040 Comprehensive Master Plan notes, "the Denver Basin alone (a non-renewable resource) cannot sustain the population's water needs long term."*

Further, additional new use of this non-renewable water supply will only speed up the depletion of the resource which is currently still relied upon by existing residents of Douglas County and will be for many years to come as water providers continue their decades long plan to transition to a renewable water supply."

Parker Water is generally opposed to the formation of new special districts providing water and sanitation services in Douglas County, particularly in areas that can be readily served by existing municipalities or special districts. Douglas County is heavily reliant on non-renewable water resources and the development of additional land imposes a heavier burden on this finite resource. Parker Water, the Town of Castle Rock, and other water providers in Douglas County have actively worked and continue to work to procure renewable sources of water for their customers. The investment in renewable water, while costly, is vital to the long term well-being of the County, its economy, and its citizens.

- *July 23, 2020 - Parker Water & Sanitation District letter to the Douglas County Commissioners regarding the Pine Canyon development*

The South Metro Denver area, including Douglas County, had previously developed using only nonrenewable groundwater resources. In the early 2000's, studies indicated that the groundwater levels were declining quickly. This research led to region-wide efforts to reduce pressure on and preserve this limited and essential resource. The water leaders at that time wanted to avoid negative impacts for present and future inhabitants, as well as any decline in economic development in this area. As you may know, this area is home to many large corporations, some of which are Fortune 500 companies. Without a sustainable water supply, this area simply cannot thrive to its fullest

- *October 5, 2020 - South Metro Water Supply Authority letter to the Douglas County Commissioners regarding the Pine Canyon development*

As the County's 2040 Comprehensive Master Plan notes, "the Denver Basin alone (a non-renewable resource) cannot sustain the population's water needs long term." Further, additional new use of this non-renewable water supply will only speed up the depletion of the resource which is currently still relied upon by existing residents of Douglas County and will be for many years to come as water providers continue their decades long plan to transition to a renewable water supply.

- *October 23, 2020 - Castle Rock Water letter to Douglas County Commissioners regarding the Pine Canyon development*

LEVERAGED THROUGH PARTNERSHIPS

Together with the RWR project, Douglas County Commissioners can create meaningful and powerful partnerships inside and outside the county.

For example, the RWR projects positions Douglas County to take on the role as a wholesaler of water and a catalyst to help other towns and cities. The County could serve as a distribution source of renewable water for the entire county, partnering with water providers inside and outside the county. The county is stronger than any individual community and has financial wherewithal to do a major water project.

This model makes Douglas County stronger. Not only will it help large water providers in larger communities fill in the gaps but it also helps smaller water districts compete. This model will also allow Douglas County to compete with Aurora, Denver, and Colorado Springs.

Douglas County will also be able to lead on its own; no longer dependent on Denver and Aurora for water.

RENEWABLE WATER RESOURCES, LLC/DOUGLAS COUNTY SUMMARY OF PROPOSED TERMS

Following is a concept-level summary of proposed terms of an agreement or agreements by and between Renewable Water Resources, LLC and Douglas County. The purpose of the contract(s) is to provide the terms and conditions under which the parties would collaborate on the acquisition of water rights in Water Division No. 3 in Colorado's San Luis Valley to provide an additional supply of renewable and clean water to be used within Douglas County.

1.	Parties:	Renewable Water Resources, LLC ("RWR"). The County of Douglas ("County").
2.	Relationship:	The Parties will enter into one or more agreements (the "Contract(s)") governing the adjudication of approximately 22,000 acre feet of water per year (the "Water Rights") in Water Division No. 3 (the "Water Case"). RWR currently owns approximately 9,800 acres (the "Ranch") and has options to acquire approximately 8,000 additional acres.

3.	Purchase and Sale:	The Parties will enter into a firm purchase and sale agreement (the "Purchase Agreement") by which the Parties will agree to purchase the Water Rights as adjudicated in the Water Case. The Purchase Agreement will set forth the terms and conditions for binding commitment to purchase the adjudicated water rights within one hundred and eighty (180) days from final, nonappealable decree.
4.	Initial Payment/Obligation for Full/Partial Repayment:	The County will pay to RWR a nonrefundable initial payment of $20 million ("Initial Payment"). The remainder of the purchase price based upon the discounted, fixed price per acre foot of water will be paid by the Parties within 180 days of the final, nonappealable decree for the Water Rights. Notwithstanding the foregoing, in the event the Water Case is unsuccessful, with success being measured by the issuance of a final, nonappealable decree for at least twelve thousand (12,000) acre feet, RWR shall repay the County up to but not more than $20 million from the sale of any adjudicated water rights or from any proceeds from a liquidation of the assets of RWR, including the Ranch. Based upon recent comparable market sales, RWR believes that the Ranch has an estimated value of approximately $15 million to $20 million.
5.	Purchase Price:	In consideration for the Initial Payment, the Purchase Price for the water rights will be fixed at $18,500.00 per annual acre foot. At that Purchase Price, the Water Rights would be substantially below their current market value, especially for trans-basin water that can be used to extinction. Currently, metro districts and other water service providers in the Colorado Front Range are acquiring water rights for more than $40,000-$50,000 per acre foot for senior rights. With an early investment in RWR, the County can take a leadership role in securing renewable water rights at a significant discount.