



RIO GRANDE WATER FUND WILDFIRE AND WATER SOURCE PROTECTION



ANNUAL REPORT 2018

► By the Numbers

SINCE 2014 LAUNCH

108,000 acres treated with thinning, controlled burns and managed natural fires

300,000 acres in the planning pipeline

\$4.55 million in private funding invested

\$40 million public funding leveraged

IN 2018

1,000% increase in acres restored, with 33,000 acres of forest treated in 2018 compared to 3,000 acres per year prior to the launch of the Rio Grande Water Fund

- **19,000 acres** treated with controlled burns
- **14,000 acres** thinned
- **235 estimated forestry jobs**
- **\$23 to \$36 million** in total economic output

4 Stream, Wetland and Aquatic Restoration Projects

to treat stream erosion, increase the forest's water holding capacity and restore wildlife habitat

- **1,500 acres** of wetland restored
- **11 miles** of stream restored
- **11 new signatories** to the Rio Grande Water Fund collaborative charter



► Message From the Executive Committee

Thanks to you, the Rio Grande Water Fund is in its fourth year of operation and going stronger than ever. In 2018, the partnership grew to more than 70 agencies, businesses and organizations working together to accelerate forest, stream and wetland restoration. Planning and work on-the-ground took place in six priority areas: the headwaters for the San Juan-Chama Project, Southwest Jemez, Sandia and Manzano Mountains, Greater Santa Fe Fireshed, and Taos Valley Watersheds. Four years of effort is adding up.

After the driest winter in 125 years, the wildfire season provided the first concrete evidence that the Rio Grande Water Fund is working to change wildfire behavior. Three separate fires started by abandoned campfires and lightning strikes burned into areas that had been restored by thinning and controlled burning. Upon reaching the treated areas, fire dropped out of the tree tops to the ground where it could have a cleansing effect. As the acreage of restored forest increases, the likelihood of wildfire burning into treated areas grows higher too. That's a trend that will boost the security of our water sources for future generations.

Sustaining the momentum to restore forests takes resources. Thanks to your generous investments in the Water Fund, the annual accomplishments and cumulative benefits are on the rise. And, our collective work in New Mexico is being noticed across the nation and in the far corners of the world.

Together, the Rio Grande Water Fund partners have created a vision and program with lasting impact.

EXECUTIVE COMMITTEE

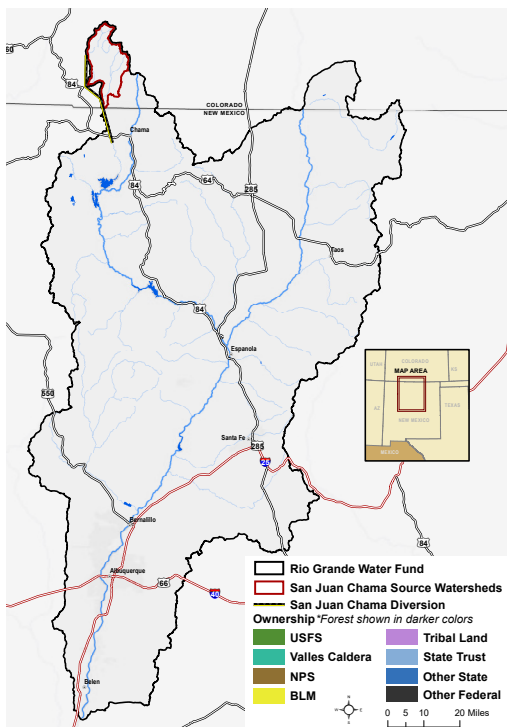
Jake Caldwell, LOR Foundation
Rick Carpenter, Santa Fe Water Division
Dale Dekker, Dekker/Perich/Sabatini
Martin Haynes, Business Water Task Force
Cal Joyner, Southwestern Region, USDA Forest Service
Laura McCarthy, The Nature Conservancy
Katherine Yugas, Albuquerque Bernalillo County Water Utility Authority



What is the Rio Grande Water Fund?

The Rio Grande Water Fund is a public-private partnership with a goal of generating sustainable funding for a 20-year program to restore 600,000 acres of forests that are at risk of extreme fire. By creating healthy forests, we are protecting New Mexico's water supply, economy and way of life for current and future generations. The Water Fund provides resources for large-scale forest and watershed restoration treatments—including thinning overgrown forests, managing fire, restoring wetlands and streams, educating youth, providing research to policy makers, and creating forestry and wood products jobs.





► More Than a River



If your summer vacation included fishing, camping or boating on the Chama River, you were likely enjoying the benefits of the San Juan-Chama water on its journey from the forest to your faucet.

Recreational flow releases started in 1992 so that water needed for farms and cities downstream was transferred between reservoirs on weekends when boaters and campers could enjoy the higher flows. But the sudden changes in water levels triggered bank erosion and stressed trout living below the dams. That's when some of the Rio Grande Water Fund partners proposed using nature as the guide for flow management.

The Rio Chama Flow Restoration Project started in 2011 to gather information about natural river flow patterns that could inform water delivery, improve river health, and support recreation. Key partners included the Bureau of Reclamation, Army Corps of Engineers, Middle Rio Grande Conservancy District, Six Southern Pueblos Coalition, USDA Forest Service, Bureau of Land Management, University of New Mexico, Rio Grande Restoration, Trout Unlimited as well as other conservation groups and several consulting firms.

River flows during weekdays are now increased, gradually tapering off until the monsoons to mimic nature. The river is optimized for all users: farmers, cities, recreationists, and the river itself as increased flows rework the river channel to create better habitat. The Rio Chama Flow Project demonstrated that diverse agencies and organizations could work together on a shared solution, guided by science, that would provide benefits to all.

**The Rio Chama
supports nature,
farmers, cities and
recreation.**

► Restoration at the Source



The San Juan-Chama Project draws water from the headwaters of three streams in Colorado: Blanco, Little Blanco and Navajo. Situated just north of the state line, the diversions carry the water in tunnels under the Continental Divide to the Rio Chama in New Mexico. From there, the water is stored in three reservoirs—Heron, El Vado and Abiquiu—before traveling south to farmers and cities. Protecting these water sources is a top priority.

Two agencies that use San Juan-Chama Project water—Albuquerque Bernalillo County Water Utility Authority and Middle Rio Grande Conservancy District—are making substantial investments in protecting the water sources through the Rio Grande Water Fund. In partnership with the Chama Peak Land Alliance (CPLA), on-the-ground work is happening in the Blanco and Navajo headwaters. Both areas have more at-risk forest on private land than on public, and CPLA reached out to dozens of land owners to engage them proactively in thinning and controlled burns.

While extremely dry conditions in the spring and early summer delayed the start of projects, good progress was made once the monsoon rains picked up. More than 400 acres were thinned on 10 ranches in 2018.

Meanwhile, groundwork was laid for restoration of nearby federal lands managed by the San Juan National Forest. A comprehensive study of risk using the USDA Forest Service's values-at-risk assessment framework identified key areas for restoration in the Blanco watershed. In the end of June, the Pagosa District Ranger signed a Decision Memo approving the Blanco Basin Vegetation Management Project under the National Environmental Policy Act (NEPA). This decision allows 2,900 acres of thinning and fuels reduction on National Forest surrounding or adjacent to private lands.



The Rio Grande Water Fund thinned more than 400 acres on 10 private ranches in 2018.



► When Lightning Strikes



The Rio Grande Water Fund restoration strategy is based on 80 years of scientific study of fire ecology in New Mexico and the Southwest. And proof of the strategy effectiveness was evident this year and last when abandoned campfires and lightening ignited forests near three recently treated areas.

The Cajete fire was started by a campfire that was not properly extinguished in June 2017, and its burn trajectory demonstrated that an increase in the scope and scale of restoration will change fire behavior as expected. By reducing fuels and creating gaps in the tree canopy, the restoration work changed the Cajete fire intensity and the fire did less damage as a result.

A year later when the David Canyon fire started with a lightning strike on a hot June afternoon, the same positive results were demonstrated. After barreling through the tree tops, the fire in David Canyon dropped to the ground when it reached areas where overgrown brush and trees were removed with thinning and controlled burns. The fire was stopped at just 15 acres.

Conditions were even hotter and drier when the Venado fire started in July 2018. Again, after racing across the tree tops, the fire dropped to the ground when it reached forests that had recently been thinned and burned. According to Dr. Tom Swetnam, Regents' Professor Emeritus of Dendrochronology at the University of Arizona and Conservancy trustee who visited the burned area, without the pro-active restoration work, the 1,600-acre Venado fire "could easily have grown to 40,000 acres."



Partner: Claunch Pinto SWCD



The Claunch-Pinto Soil and Water Conservation District in Mountainair was the first in the nation to sign a memorandum of understanding with the USDA Forest Service and state agencies. Now Claunch-Pinto is a leader in healthy forests work in New Mexico with initiatives that align perfectly with the Rio Grande Water Fund and a strong commitment to watershed health. Claunch-Pinto is proud to be a signatory of the Water Fund and work alongside its more than 70 partners to protect water for New Mexicans for generations to come.

DIERDRE TARR

District Manager for the Claunch-Pinto Soil and Water Conservation District





► Counting on Jobs

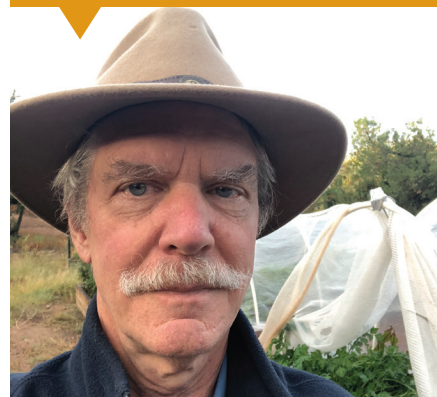
Reporting jobs was easy when the Rio Grande Water Fund first started. There were two on-the-ground projects and the thinning contractors reported their number of employees. As the Water Fund has grown and the collective impact of dollars invested directly and through the more than 70 signatory partners has expanded, capturing the impact on jobs has become more complicated. This year the Rio Grande Water Fund partnered with the U.S. Geological Survey to apply an economic model to measure the impact of the Rio Grande Water Fund on rural jobs.

The U.S. Geological Survey multiplier suggests that for every \$1 million invested in restoration, between 13 and 32 job-years are provided with \$2.2 to \$3.4 million of total economic output. For the Rio Grande Water Fund, this year the cumulative work with partners supported at least 235 jobs and generated \$23 to \$36 million in economic output.

Youth employment with Rocky Mountain Youth Corps is a key accomplishment of Rio Grande Water Fund partners. Crews based in Taos and Albuquerque employed 49 youth. The youth worked on a variety of projects from monitoring thinning before and after treatment to installing interpretive signs along the road to the Taos Ski Valley.

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at least 235 jobs and generated \$23 to
\$36 million in economic output.*

**Partner: Santa Fe
Farmers' Market
Institute**



The Santa Fe Farmers' Market Institute exists to support access to fresh, healthy local food in Santa Fe. This depends on the existence of a vibrant local farm economy able to supply the Santa Fe Farmers' Market. Our local farmers of Northern New Mexico in turn rely on water from acequias fed by the Rio Grande and its tributaries. We strongly support the Rio Grande Water Fund to restore and preserve the watersheds of Northern New Mexico that are so important to our farmers.

MIKE MCGEARY
Board Chair for the Santa Fe Farmers'
Market Institute

▶ Sharing Knowledge



News of the Rio Grande Water Fund's success is traveling far and wide. One year after the collaborative Western Water Fund Workshop in 2017, the water utility in Eugene, Oregon launched their own water source protection fund. Coaching was provided to start-up water funds in California, Colorado, Idaho, Montana, Nevada, and Cape Town, South Africa. Two

additional workshops were held, in nearby Alamosa, Colorado and on the other side of the world in Pune, India.

The circumstances in each water fund that looks to the Rio Grande as a model are different, but there is one universal feature: the water funds connect downstream water users with the places that supply their water. The model of a public-private partnership that crosses jurisdictional boundaries and gets agencies, businesses and organizations to work together to solve complex water issues is gaining traction.



Partner: Taos Ski Valley Foundation



Wildfires burn longer and hotter than ever before, devastating water supplies, livelihoods, habitats and wildlife. In the short-term, New Mexico's Rio Grande Water Fund is working to mitigate the tinder-box forest scenarios that put people's homes, businesses and lives at risk. This public-private collaboration will improve forest health, bolster local economies and protect the state's water supply. As a signatory of the Water Fund, Taos Ski Valley Foundation is signaling its ongoing support of this critical, innovative initiative to ensure healthy forests and clean water for communities across the state.

ANN COLLEY

Executive Director and Vice President of Taos Ski Valley Foundation, an affiliate of The Moore Charitable Foundation



► Investor Profile: General Mills

Jeff Hanratty, Applied Sustainability Manager for General Mills, has turned his love for the outdoors into a career that benefits business, nature and people. As part of his job, Hanratty is responsible for helping the company identify ways to increase water sustainability. The company uses a risk-based approach consisting of four phases: assessment, analysis and planning, collaboration, and transformation. Through this approach, General Mills selected the Rio Grande watershed as one of eight global priorities that could improve business goals of resiliency, reliability and risk reduction.

General Mills' support of the Rio Grande Water Fund is driven by its desire to see action and collaboration among a diverse group of water users. "We need to focus beyond

our own water use and work together at a watershed level," says Hanratty. Also appealing is the ability to replicate the water fund model in other areas facing water risks.

"Sustainability is about balancing the needs of all," says Hanratty. "By having a plan in place for tangible action, we can have meaningful impact that is good for business and good for downstream communities."



INVESTORS LIST

Founding Investors

Albuquerque Bernalillo County Water Utility Authority
Anonymous
Bernalillo County
City of Albuquerque
Ciudad Soil and Water Conservation District
Fire Learning Network
General Mills, Inc. and the General Mills Foundation
Dr. Steven Hecht and Dori Smith, MEd
LOR Foundation
Lowe's Charitable and Educational Foundation
Lowe's Companies
Julie Melton
McCune Charitable Foundation
Middle Rio Grande Conservancy District
National Fish and Wildlife Foundation
PNM
Taos Ski Valley Foundation
US Bureau of Reclamation: Southern Rockies Landscape Conservation Cooperative
US Endowments for Forestry and Communities
USDA Forest Service

Lead Investors

Anonymous
Albuquerque Metropolitan Arroyo Flood Control Authority
Buckman Direct Diversion Project
Jonathan & Kathleen Altman Foundation
New Mexico Department of Game and Fish
New Mexico Watershed and Dam Owners Coalition
New Mexico EPSCoR
Racher Resource Management, LLC
Santa Fe Community Foundation

Secure Investors

Albuquerque Community Foundation
Avalon Trust
Edgewood Soil & Water Conservation District
Lineberry Foundation
National Park Service
New Mexico Interstate Stream Commission
U.S. Geological Survey
Wells Fargo Bank/Wells Fargo Foundation

Contributors

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Bohannon Huston, Inc.
Kristen and James Hinton

Los Alamos County
Los Alamos National Bank
Los Alamos National Laboratory and Los Alamos National Security, LLC
National Forest Foundation
New Mexico Coalition of Conservation Districts
Thomas Seamster
Tides Foundation
Helen Wertheim
Williams Family Charitable Foundation

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Kelly's Brew Pub
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► Join the 100 Signatory Challenge!

Partners in the Rio Grande Water Fund sign a collaborative charter expressing their support for the goal of restoring 600,000 acres of critical forests that supply water to one million people in New Mexico. At the start of the year there were 55 signatories, and by October more than 70 organizations were on board, prompting the start of the 100 Signatory Challenge. By 2020 the Rio Grande Water Fund seeks more than 100 groups represented. Sign the Charter—make a difference today!

What is a Signatory? The Nature Conservancy and partners drafted a Collaborative Charter in 2014 to express their shared goals and make a public commitment to restoring forests and watersheds. Each year a dozen or more agencies, organizations and businesses sign on. The Collaborative Charter is a statement of intent, but it is not a legally or financially binding document. The current list of signatories is at riograndewaterfund.org/engage/signatories.

Partner: Mule Deer Foundation



The Mule Deer Foundation (MDF) was pleased to become the 65th signatory to the Rio Grande Water Fund. The purpose of joining was clear to our organization based off a tremendous partnership between the Water Fund and MDF to support critical watershed and wildlife habitat projects in New Mexico. With this partnership, we were able to develop the first MDF and USDA Forest Service stewardship project in New Mexico. The work the Water Fund has done to benefit our state is highly impactful, and with their support, we are looking forward to benefiting mule deer habitat while providing quality work to enhance our state's economy.

COLLEEN PAYNE
New Mexico Regional Director,
Mule Deer Foundation



Rio Grande Water Fund Projects



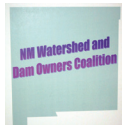
Charter Signatories



Bohannon & Huston



Business Water Task Force



For more information, visit us online at nature.org/riogrande

*Full list of investors inside