



RIO GRANDE WATER FUND WILDFIRE AND WATER SOURCE PROTECTION

▶ **ANNUAL REPORT 2017**



► BY THE NUMBERS

SINCE 2014 LAUNCH

\$3.64 million in private funding invested

\$30 million in public funding leveraged

70,000 acres restored via thinning, controlled burns, and managed natural fire

IN 2017

\$9 leverage from public funding for every private Water Fund dollar invested

125% increase in acres restored with 49,000 acres of forested land treated in 2017, with investments by the Rio Grande Water Fund and leveraged by partners.

- 18,000 acres thinned
- 9,000 acres treated with controlled burns
- 22,000 acres via managed natural fire
- 200,000 acres in the planning pipeline
- 5% increase in forestry jobs in New Mexico

“The Rio Grande Water Fund has taken the ingredients for success—a compelling vision, dedicated partners and financial resources—and created an organizational framework that gets results.”

- Brian Burnett, Senior VP and CEO Emeritus, Bohannon Huston, Inc.



► MESSAGE FROM THE EXECUTIVE COMMITTEE

THANK YOU

What a year it has been! Established in 2014, the Rio Grande Water Fund continues to demonstrate that partnerships and shared work are keys to accelerating the pace and scale of forest restoration that protects New Mexico's precious water sources. Last year, we tripled the pace of restoration. This year, we have doubled that yet again! Our leveraging of private investment to public funding nearly tripled, too—from \$9 million in 2016 to \$21 million this year. Thanks to you, we are getting strong results that demonstrate how strategic public-private partnerships work.

Rio Grande Water Fund partners are setting the stage for significant new work in the coming years as well, having invested record amounts in planning. In some areas, collaborative groups focused on science-based analysis of large tracts of land, identifying the highest restoration priorities. In others, partners helped complete National Environmental Policy Act (NEPA) planning, laying the groundwork for thinning and controlled burning.

This annual report demonstrates the complexity of the Rio Grande Water Fund. We have 60 signatory organizations, five focal areas, and more than two dozen on-the-ground treatment and deep-dive planning areas—as well as a roving monitoring team that crisscrosses the region, collecting data before and after restoration.

Your generous investments in the Water Fund are why the projects, people and places highlighted in this report are successful. While we single out a few heroes for their incredible work, everyone who participates is a superstar. The challenges we face are bigger than any one person or agency can solve. Together, we are securing New Mexico's water for the future.

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 Yuhas, Albuquerque Bernalillo
County Water Utility Authority



What is the Rio Grande Water Fund?

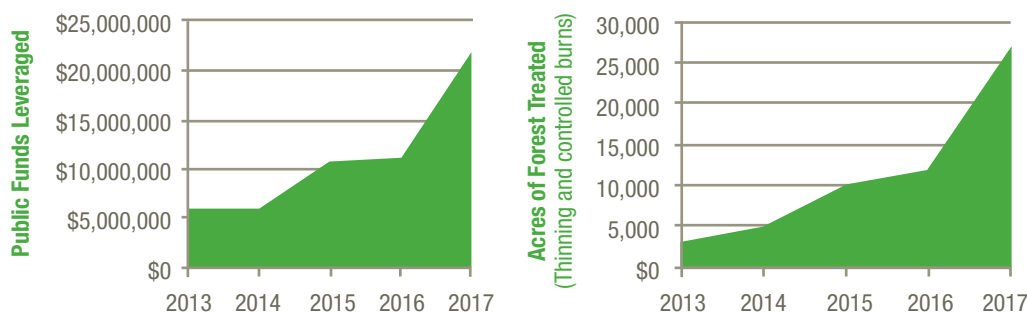
The Rio Grande Water Fund is a public-private partnership with a goal of generating sustainable funding for a 20-year program of large-scale forest and watershed restoration treatments—including thinning overgrown forests, managing fire, restoring wetlands and streams, educating youth, providing research to policy makers, and creating forestry and wood products jobs.



► WALK, RUN, GALLOP!

This was a year of sustained growth for the Rio Grande Water Fund. The Comprehensive Plan, created by partners in 2014, envisioned that restoration work would accelerate slowly, picking up momentum over time. In our third year, we proved that vision to be true.

For the Water Fund's 2014 launch, we used data from the year prior to establish a baseline of thinned and burned acres. In 2015, we started collecting data from projects funded directly by the Water Fund and tallied partner activities on adjacent lands and in high-priority areas. In 2017, we hit our stride.



FOREST HERO



CHRIS FURR

**Natural Resources
Staff Officer, Carson
National Forest**

Chris Furr is more than a forester; he is a pipeline builder. Over the last five years, he has been the catalyst for several large-scale NEPA analyses, supporting projects to thin overgrown, fire-adapted forests and safely reintroduce fire. These projects and others have let National Forest staff seize new opportunities quickly—like managing two naturally ignited fires this summer, where nearly 15,000 forest acres burned in places largely already approved for restoration. “Some of these projects, like prescribed burning, impact communities, and there’s still important follow-up needed to show the value of this work. Hopefully by engaging in collaborative restoration and continuing to encourage active participation, we can build the project pipeline.”

► WHERE THE WATER COMES FROM

The **Rio Chama Watershed** is critical to New Mexico's water supply. Snow accumulates in the headwater areas, releasing much-needed water in spring and summer. The river itself is a "natural pipeline" for the San Juan–Chama Project water on its journey from Colorado to the Rio Grande. The bottom line: If there is one important place for the Rio Grande Water Fund to invest, this is it! Project highlights include:

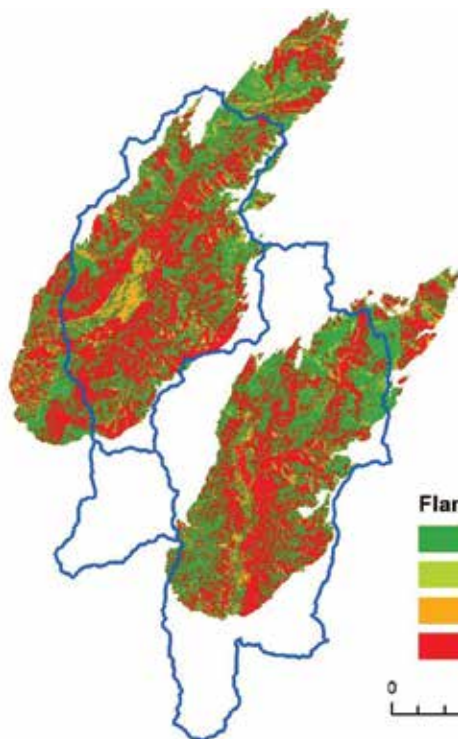
- 900+ acres were restored over three years on private lands—with a combination of tree thinning and managed fire—in partnership with the Chama Peak Land Alliance. In addition, some controlled burns have been planned and implemented across jurisdictions. One project, for example, spans the private Rancho Lobo and the Chama Land and Cattle Ranch, owned by the Jicarilla Apache Tribe.
- Fire management experience and on-the-job training was provided for an eclectic group of private land managers and more than 20 people from local, state and federal agencies. The Fire Learning Network's Training Exchange program (TREX) supported this May 2017 event.

The **Taos Valley Watershed Coalition** formed in 2015 to address restoration needs from the Rio Grande del Rancho Watershed to the Rio Hondo—an area with seven tributary streams flowing to the Rio Grande. Development of a Landscape Restoration Strategy in July 2016 led to a host of activities, some of which were completed this year:

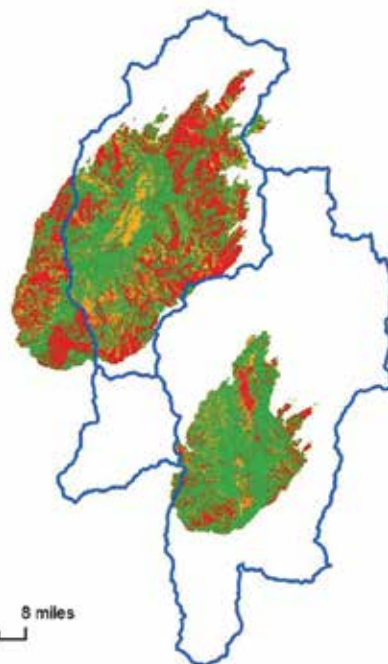
- An ecological fire history study showing that fires frequently burned up to 9,000 feet in ponderosa pine and dry, mixed conifer forests—especially on south-facing slopes.
- Analysis of proposed actions to protect communities and provide firewood in the Carson National Forest via thinning along Highway 150 in the Kiowa-San Cristobal area leading to Taos Ski Valley.
- Restoration planning for Pueblo Ridge on the north side of the Rio Fernando de Taos, McGaffey Ridge and the Rio Grande del Rancho Watershed.
- Launch of the Taos Interagency Fire and Fuels Crew comprised of veterans and Rocky Mountain Youth Corps graduates.

3:1 RETURN ON INVESTMENT

Fire Pathway With No Thinning or Controlled Burning



Fire Pathway with Restoration Treatments



Restoring the 17,000 acres shown in this model would cost an estimated \$9 million. The model predicts a substantial reduction in the probability and severity of wildfire, with estimated benefit from \$32 to \$44 million depending on wildfire location, timing and other variables.

For more information, visit
riograndewaterfund.org/reports

► PROTECTING CAPITAL CITY IS A TOP PRIORITY



New Mexico's state capitol building, the Round House, sits just three miles from the Santa Fe National Forest and a swath of forested land that stretches into Colorado. Water from this forest makes up nearly half the City of Santa Fe's supply. In addition, between the National Forest and houses are a mix of city, county and conservation lands. One of these areas—Aztec Springs—received Rio Grande Water Fund partner funding for thinning this year.

Though piñon and juniper trees are common at the city limits, the hill slopes quickly steepen, and the forest transitions to ponderosa pine and mixed conifer. In the absence of natural fire, these areas became overgrown. Fire experts expressed concern that ladder fuels could enable a wildfire to spread into the tree tops in the southern end of the canyon where, under windy conditions, flames could reach the Hyde Park subdivision in less than an hour.

The Nature Conservancy partnered with the Santa Fe Fire Department and National Forest to reduce the density of trees and improve the forest's ability to withstand natural fire. The Conservancy also wanted to enable management with controlled burns that clean out new undergrowth. In total, 60 acres of city land and 20 acres of Conservancy land were restored in Aztec Springs.

The Coalition was formed in 2016 to manage fire in the lands around Aztec Springs and the City of Santa Fe. The Coalition's primary goal is to identify and implement high priority, on-the-ground projects that make the Fireshed and its communities more resilient to wildfire. The group is also aiming to maintain and restore landscapes and incorporate data from a risk assessment developed by The Nature Conservancy into a landscape restoration plan. For more information, visit www.santafefireshed.org.

"Property boundaries are a key obstacle to forest restoration. Coalitions and collaboratives build the relationships needed to expand projects across boundaries. After all, wildfire knows no boundaries."

- Greg Gallegos, City of Santa Fe Fire Department



FIRE HERO



BILL ARMSTRONG

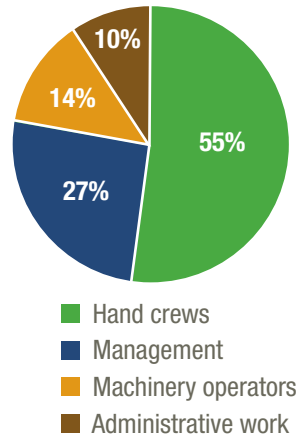
**Fuels Specialist,
Santa Fe National Forest**

As soon as he saw them, Bill Armstrong knew that New Mexico's forests were choked with trees and missing the cleansing benefits of fire. He has worked tirelessly since the 1990s to introduce fire as a normal and healthy process. "Under the right circumstances, fire can have positive benefits for forests and watersheds, reducing risks for future, catastrophic events," Armstrong says. "We still need to build the capacity of agencies to increase restoration, but the Rio Grande Water Fund is already helping significantly increase the scale of projects."

► JOB GROWTH TAKES ROOT

The New Mexico Forest Industry Association and Rio Grande Water Fund conducted a survey of forest worker jobs in New Mexico this year. The 20 businesses that responded reported on 244 jobs, including those of employees and subcontractors. The survey asked about workers employed in October of 2015 and 2016, and there was a five-percent increase in the number of jobs related to thinning forests or creating products from trees. Even with total jobs in all sectors dropping by 0.4% in New Mexico during this time, the forest sector was clearly growing.

The survey also asked businesses about the types of jobs they provide, and offered respondents four categories from which to choose: hand crew, machinery operator, crew boss or management, and administrative (see pie chart). The survey found that most employees are working 10 months per year, since forest thinning operations are curtailed by deep snow, muddy conditions or high fire danger.



STEWARDSHIP HERO



KIM KOSTELNIK

New Mexico Forest Industry Association

Agencies and industry are getting work done in the woods, thanks to a stewardship agreement with New Mexico Forest Industry Association (NMFIA), the first of its kind in the nation. Kim Kostelnik, with her expert technical advice, is its guide. Her job is matching contractors with priority restoration projects on public lands, allowing the Forest Service to focus resources on landscape-scale planning while NMFIA handles contract administration. This one-stop-shopping enables local industry to bid on and secure forest work. So far, 4,000 acres of the Cibola National Forest have been restored under the agreement.



► NEW PARTNERSHIPS FOR SUSTAINABLE FUNDING

The long-term success of the Rio Grande Water Fund depends on sustaining 20-year funding—the time it will take to restore forest health and secure sustainable resources to maintain forested watersheds. In addition, a key characteristic of a Water Fund is downstream water users paying to protect their upstream water sources. Significant progress was made this year on both fronts.

- Albuquerque Bernalillo County Water Utility Authority signed a five-year agreement with The Nature Conservancy to provide \$1 million over five years for restoration in the headwaters of the San Juan–Chama Project. This area supplies water to people living in over 300,000 households throughout the Water Authority’s service area.
- The Middle Rio Grande Conservancy District authorized \$50,000 in their fiscal year 2018 budget to restore even more acres in the San Juan–Chama Project headwaters. Farmers in the District rely on this water during key times in the growing season.

The USDA Forest Service also made a four-year commitment to the Rio Grande Water Fund via \$2.4 million dollars to match water user contributions. Through a competitive process, the Forest Service funds will be awarded for use in Water Fund focal areas, supporting thinning and controlled burns on national forest or private lands. The Rio Grande Water Fund will provide about 10-percent of the funding as capacity-building grants for collaborative groups whose work contributes to accelerate the pace and scale of restoration. The funding will also be used to develop a web-based monitoring system so restoration results can be uploaded directly from the field and analyzed by partner organizations. Requests for proposals for on-the-ground projects or capacity-building grants will be available at www.riograndewaterfund.org.



WATER HERO



KATHERINE YUHAS

**Water Resources Division
Manager, Albuquerque
Bernalillo County Water
Utility Authority**

An early member of the Rio Grande Water Fund advisory board, Katherine Yuhas is always eager to share why the Water Authority supports the innovative collaboration—to protect water sources for the future. She was initially hesitant about the ability to achieve such ambitious goals, but today is reassured by the Water Fund’s growth and progress. “I’m happy to see us bringing together a large, diverse consortium for watershed management,” Yuhas says, “but we need to continue engaging so everyone remembers the importance of healthy forests in the absence of wildfire and drought.”



► RIO GRANDE WATER FUND INVESTORS

Founding Investors

- Albuquerque Bernalillo County Water Utility Authority
- Anne Ray Foundation
- Bernalillo County
- City of Albuquerque
- Ciudad Soil and Water Conservation District
- Fire Learning Network
- Dr. Steven Hecht and Dori Smith, MED
- LOR Foundation
- Lowe's Charitable and Educational Foundation
- Lowe's Companies
- McCune Charitable Foundation
- Middle Rio Grande Conservancy District
- PNM
- Taos Ski Valley Foundation
- US Bureau of Reclamation: Southern Rockies Landscape Conservation Cooperative
- USDA Forest Service

Lead Investors

- Anonymous
- Albuquerque Metropolitan Arroyo Flood Control Authority
- Buckman Direct Diversion Project
- General Mills, Inc. and the General Mills Foundation
- 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

- Anonymous
- Adelante Consulting, Inc.
- 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

Other Supporters

- Bank of Albuquerque
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- Bow and Arrow Brewing Co.
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- Mr. Irving M. Deitz III
- Angela Gregory
- Ms. Eileen Grevey Hillson
- Kelly's Brew Pub
- Mrs. Jennifer M. Mammoli and Dr. Andrea Mammoli
- KAKAK Natural Resource Consulting
- SCM Partners, LLC
- Nancy Pepper
- James D. Smith
- Souder, Miller & Associates
- Stagg Family Fund

Why we give: "The McCune Charitable Foundation is honored to have supported The Nature Conservancy for the Rio Grande Water Fund's work in New Mexico, which seeks to protect and restore our treasured watersheds as well as build capacity across diverse sectors."

- Allison Hagerman, Associate Program Officer, McCune Charitable Foundation

► FORESTS + WETLANDS = WATER



Wetlands and wet meadows in New Mexico's mid- and high-elevation forests play a critical role in regulating streamflow. These habitats accumulate snow, slowly releasing it during warmer months. The Rio Grande Water Fund launched the Stream, Wetland and Aquatic Restoration Program (SWARP) in 2017 to care for these habitats. Three initial projects were selected: Cebolla Creek and

Redondo Meadows in the Jemez Mountains, and La Jara wetlands in the Rio Fernando de Taos. In keeping with the Fund's collaborative nature, the first step was engaging the grazing permit holders to get their permission to proceed. In some cases, funding will be used to provide livestock with upland drinking water sources.



► WATER FOR BEER

Brewers require high-quality water in large quantities. Did you know that healthy forests are key to a healthy water supply? That's why, for the second year in a row, The Nature Conservancy is working with Taos Mesa Brewing to raise awareness in New Mexico about the Rio Grande Water Fund and the close connection between healthy forests and our water. Via a public awareness campaign known as OktoberForest, the brewery and Conservancy are highlighting these connections and explaining why stewarding forests is important to the beer industry. Our shared goal is building support for forest restoration across the United States through the Wildfire Disaster Funding Act. For more information, visit www.oktoberforest.org.



WETLAND HERO

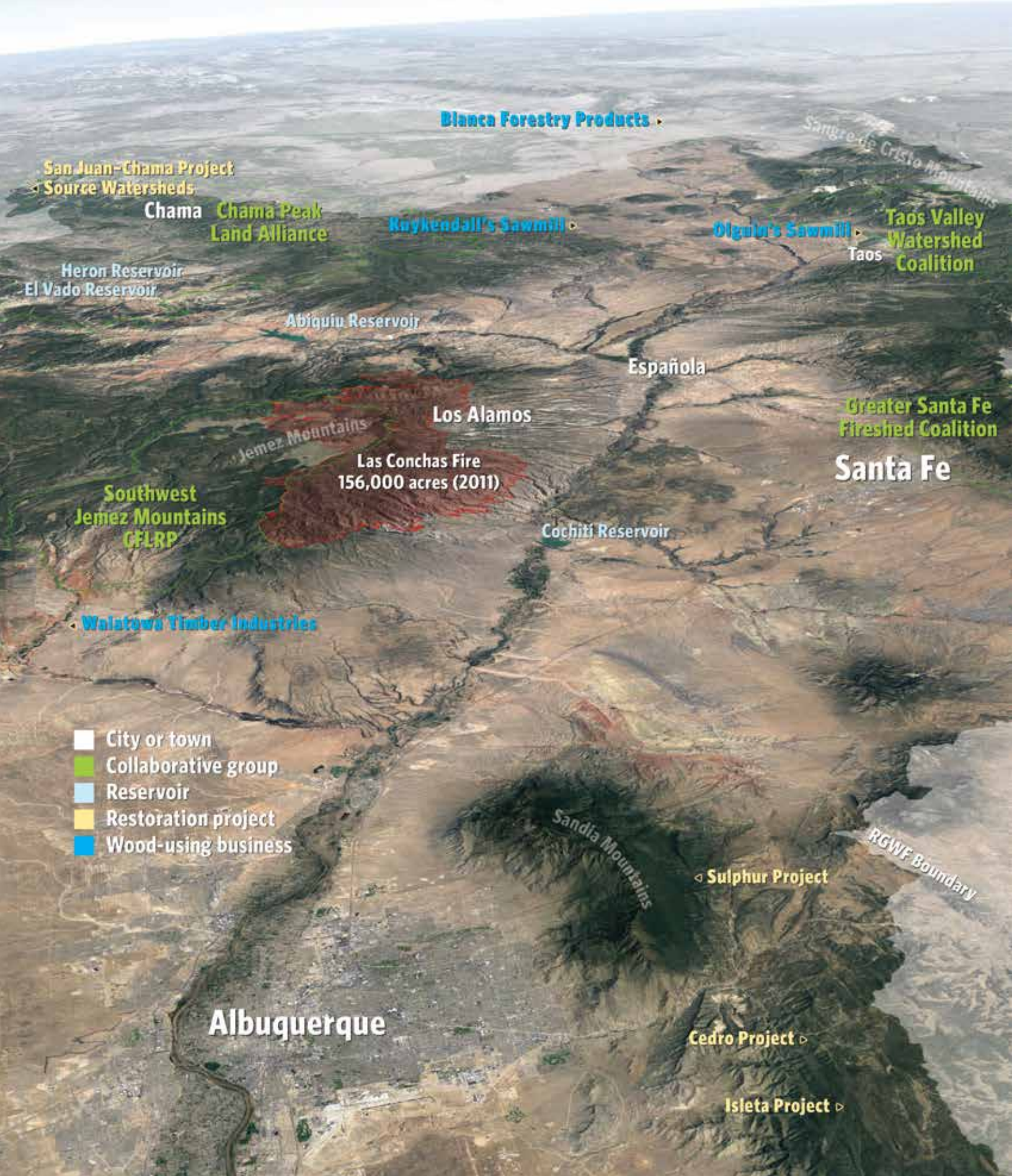


KAREN MENETREY

**Environmental Specialist,
Surface Water Quality
Bureau, New Mexico
Environment Department**

Karen Menetrey has hope: New Mexico's higher elevation wetlands can be restored. Many are vital for wildlife and, when healthy, act like sponges to provide important water storage. As a member of the technical panel for the Stream, Wetland, and Aquatic Restoration Program (SWARP), Menetrey said, "The experience reminded me it's important to involve local land users in decision-making about protection and restoration of streams, wetlands and riparian areas."

RIO GRANDE WATER FUND PROJECTS



CHARTER SIGNATORIES



*Full list of investors inside

FOR MORE INFORMATION, VISIT US ONLINE AT NATURE.ORG/RIOGRANDE