

**ACTION SHEET
PUBLIC UTILITES COMMITTEE MEETING OF 4/1/15**

ISSUE NO. 7

Presentation on the City of Santa Fe to become a Charter Member of the Rio Grande Wildfire and Water Source Protection Collaborative Program. (Rick Carpenter) 15 min.

PUBLIC UTILITES COMMITTEE ACTION: Approved at the 3/4/15 PUC. Also heard at 4/1/15 as an Informational Item with additional information. Forwarding to 4/29/15 City Council.

SPECIAL CONDITIONS OR AMENDMENTS:

STAFF FOLLOW UP:

VOTE:	FOR	AGAINST	ABSTAIN
COUNCILOR RIVERA, CHAIR	X (3/4/15 PUC)		
COUNCILOR MAESTAS		X (3/4/15 PUC)	
COUNCILOR BUSHEE	X(3/4/15 PUC)		
COUNCILOR DIMAS	Excused (3/4/15 PUC)		
COUNCILOR IVES	X(3/4/15 PUC)		

City of Santa Fe, New Mexico

memo

Date: March 17, 2015

To: Public Utilities Committee

Via: Nick Schiavo, Public Utilities Dept. & Water Div. Director *NSA*

Fr: Rick Carpenter, Water Resources and Conservation Manager *RC*

RE: Rio Grande Wildfire and Water Source Protection Collaborative Charter

ITEM AND ISSUE:

At the last PUC meeting staff requested that the committee take action to approve the City becoming a charter member of the Rio Grande Wildfire and Water Source Protection Collaborative Charter (Charter). The PUC voted 3-1 to approve. However, there was considerable discussion around several related issues (e.g., controlled burning, governance, funding, public process, etc.), and the committee requested that a representative from The Nature Conservancy come back to the April, 2015 PUC and make a more comprehensive informational presentation.

BACKGROUND:

The goal of the Rio Grande Water Fund program is to protect storage, delivery and quality of Rio Grande water through landscape-scale forest restoration treatments in tributary forested watersheds, including the headwaters of the San Juan Chama Project (i.e., BDD Project). This goal includes accelerating watershed restoration by providing additional financial resources to partner projects. The four focal areas are (1) Sandia and Manzano Mountains; (2) Jemez Mountains; (3) San Juan/Chama River Watersheds; and (4) West-slope of the Sangre de Cristo Mountains. The non-binding Charter will allow for representatives of the City of Santa Fe to participate in restoration planning efforts, management and administration of the program, to file applications for funding assistance/grants, and to serve on technical and executive committees associated with the program.

There are not fiscal impacts anticipated to occur as a result of executing the Charter, other than participation from existing City staff (no new FTE's required). It is possible, however, that the Rio Grande Water Fund Program could make a request for funding contribution in the future, at which point staff would bring the matter back to the Governing Body. Conversely, it is also possible for the City of Santa Fe to receive grant funding for watershed management programs from the Rio Grande Water Fund.



EXECUTIVE SUMMARY OF THE RIO GRANDE WATER FUND: COMPREHENSIVE PLAN FOR WILDFIRE AND WATER SOURCE PROTECTION

▶ JULY 2014 ◀



Water is life and livelihood. Nowhere is that more true than in New Mexico. However, the reality is that each year the size and severity of wildfires in our state increases, along with subsequent post-fire flooding that degrades rivers, streams and other critical water sources. In addition, state and federal agencies spend hundreds of millions of dollars a year reacting to these fires, not including the lost revenue to business. Without action, New Mexico's future water security is at great risk.



The Rio Grande Water Fund is a solution that can bring clean water to New Mexicans for generations to come. This innovative project will invest in the restoration of forested lands upstream so we can secure clean water for communities in these watersheds and downstream. Our goal is to generate sustainable funding over the next 20 years to proactively increase the pace and scale of forest restoration, including the most high-risk areas in the Rio Grande watershed. We are working together so nature can keep working for us.

A PLAN FOR THE FUTURE

The *Rio Grande Water Fund: Comprehensive Plan for Wildfire and Water Source Protection* is the culmination of a collaborative partnership among more than 40 organizations and agencies and more than two years of research and planning guided by a diverse advisory board. The Comprehensive Plan uses the best available data to describe the current wildfire threat to water sources and forested watersheds, setting forth a path for New Mexico's future water security. The focus is on water as the primary resource that people value, and that originates in forested headwaters at high risk of damaging wildfire.



Frequent fire is normal in New Mexico's ponderosa pine and dry mixed conifer forests, but changes in tree density and summer temperatures over the last century are causing wildfires to burn hotter. Watersheds that experience extensive mid- and high-severity fire have greatly diminished water storage functions—soil doesn't absorb and hold water, and runoff during rainstorms can cause flooding and debris flows. In addition, the large amounts of sediment that move into rivers and reservoirs during these floods and flows may disrupt water delivery and storage. Other important values—such as homes, property and community infrastructure, wildlife and fish, acequias and rural economies, tourism and outdoor recreation—are also at risk when forested watersheds are severely damaged by wildfire.

Las Conchas Fire: Case in Point

In 2011, the Las Conchas Fire burned 156,000 forested acres in the Jemez Mountains of northern New Mexico. Post-fire thunderstorms then led to massive ash and debris flows in surrounding canyons. The Rio Grande turned black with sediment and the cities of Albuquerque and Santa Fe halted water withdrawals because water managers determined the ash-laden water was not worth treating in their new \$450 million and \$215 million river-water facilities. Meanwhile, the flooding deposited tons of debris in Cochiti Lake, closing the area to recreation and dumping excessive sediment in the reservoir. The damaging effects of the Las Conchas Fire on the Rio Grande will persist for years to come.



Proactive steps on a large scale are needed to protect the Middle Rio Grande, Rio Chama and their forested tributaries and headwaters, an area with roughly 1.7 million acres of fire-prone ponderosa pine and mixed conifer forest (see Figure 1). Models of debris flow risk after high-severity fire indicate that key water sources are at risk. Scientists recommend that 1% to 2% of fire-adapted forest landscapes be treated each year to change fire behavior, which at the high end of this range corresponds to approximately 30,000 acres per year in this landscape. The Rio Grande Water Fund will sustain these treatments over the next 20 years for a total of 600,000 acres restored—a ten-fold increase in the current rate of forest and watershed restoration.

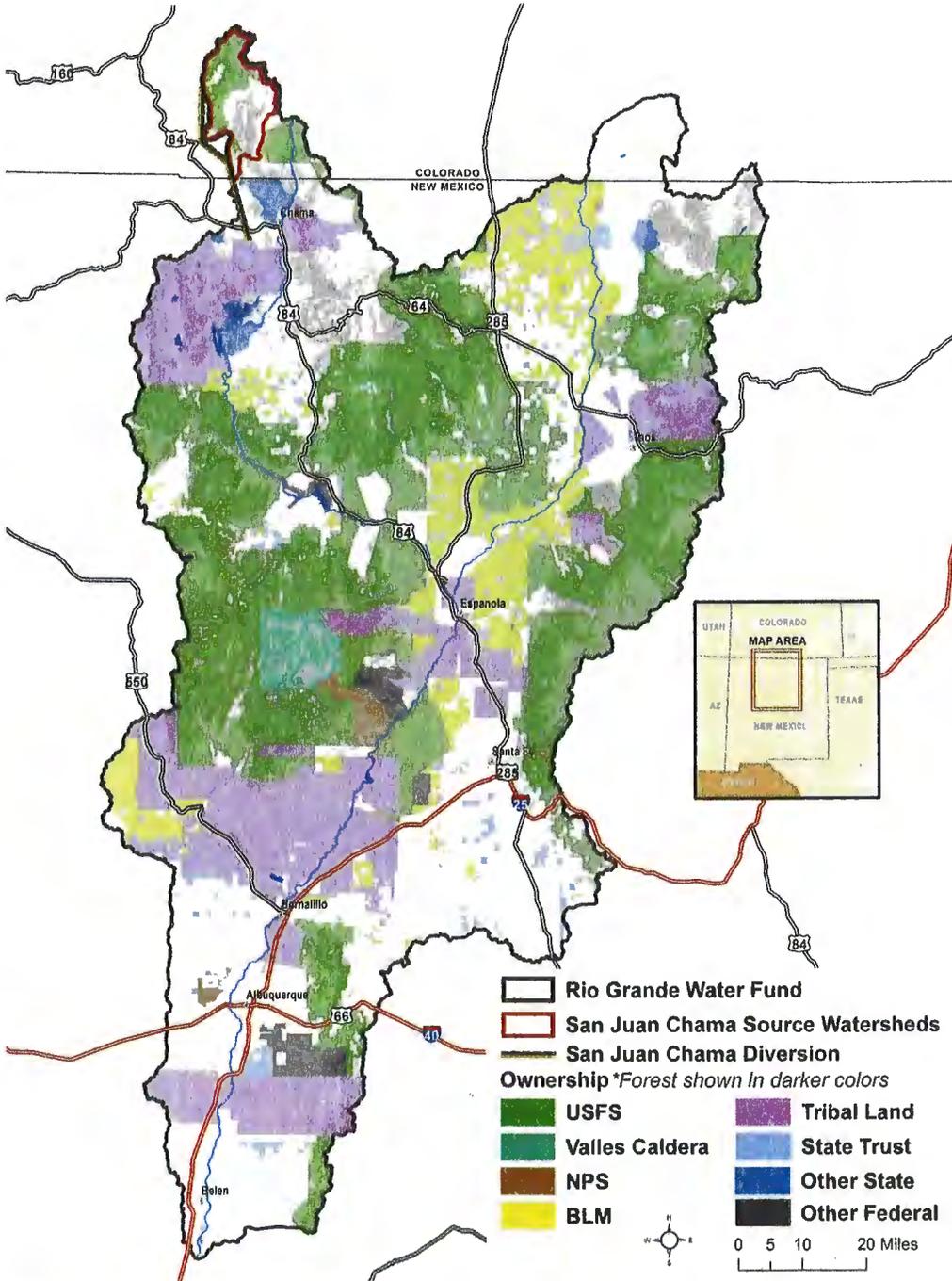


Figure 1. The Rio Grande Water Fund area includes forests, agricultural lands and communities from Belen north to the Colorado border.

PHOTO: Nearly 55% of the Las Conchas fire area burned at high severity. © Craig Allen

The Rio Grande Water Fund is the tool to collect and facilitate investments in this accelerated restoration work. A water fund allows government agencies, water users, community stakeholders and others to invest in the protection of the forests that supply our water. Similar funds have been established in Latin America and several cities in the western U.S., including Santa Fe, New Mexico.

SETTING PRIORITIES

The Comprehensive Plan sets forth the case and process for establishing a Rio Grande Water Fund. Most important, this Comprehensive Plan sets priorities to support the objectives of the water fund. These priorities are expressed as **focal areas** and **project criteria**, developed to ensure that the water funds and other leveraged public funds are allocated to the areas where the risk to water supplies is greatest and where forest thinning, controlled burning, stream restoration and flood mitigation projects have the highest potential for immediate and successful implementation.



INVESTING WISELY

The benefits of forest and watershed restoration are clear. Thinning one acre of dense forest in the Rio Grande Water Fund area costs \$700 on average, whereas the economic impact of one acre affected by damaging wildfire can be up to \$2,150 per acre. The 2011 Las Conchas fire cost is estimated at \$246 million and expenses are still accruing. In contrast, to accelerate the pace of wildfire and water source protection, \$21 million a year—or close to \$420 million over the next 20 years—will be needed. For comparison, about \$6 million is currently invested annually in restoration on federal lands in the water fund

area. Based on these estimates, it is more cost-effective to invest in “prevention” than to pay for expenses associated with “reacting” to damaging wildfires. Over time, the cost of prevention will decline as a larger forest industry is established. A transition period will be needed, and the Rio Grande Water Fund can fill the need as described in this Comprehensive Plan.

Water is essential for promoting economic well-being and provides a high return on investment. Water is a necessity for residents, industry, agriculture and many service activities, and to promote and sustain economic activity in the largest cities and marketplaces in the state. Water supports recreational activities and sustains the beautiful places that make New Mexico a “Land of Enchantment.” And water fund investments in forest treatments have the added benefits of creating jobs in rural communities, providing wood materials for locally sourced products, and protecting habitat for numerous forest and water dependent species.

A CALL TO ACTION

New Mexico must act now to protect our watersheds and water supply. With every year that goes by without a large-scale solution, more forested acres are severely burned, more critical water sources are jeopardized, more communities are threatened and other natural values are placed at risk. A coordinated, leveraged, multi-partner effort is needed to scale up restoration. The *Rio Grande Water Fund Comprehensive Plan for Wildfire and Water Source Protection* provides a blueprint for action (available for download at http://www.nmconservation.org/RGWF/RGWF_CompPlan.pdf). The plan includes an introduction and analysis of water security threats, a vision for the future, summaries of study results that will guide water fund investments and a clear path forward to securing New Mexico’s water for the future.

In Their Words



“An economic development strategy and a comprehensive plan that responds to the uniqueness of a place and realistically assesses the water resources necessary to retain and attract new business enterprises is a goal of the Rio Grande Water Fund. Growth, conservation and well managed natural resources can all work together if the end game is to build a resilient economy and a quality place for current and future generations to live, work and raise a family.”

Dale Dekker, Principal Dekker/Perich/Sabatini and Greater Albuquerque Chamber of Commerce, Water and Energy Subcommittee Chair

PHOTO: Headwater forests in the Valles Caldera feed the Jemez River, a tributary of the Rio Grande.
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