The Nature Conservancy
Protecting nature. Preserving life.™

Southwest
Climate Change Initiative

Responding to Mega-Fires, Drought and Climate Change in the Jemez Mountains

Practical Strategies to Help Species and Systems Adapt

Climate change is already affecting New Mexico's ecosystems in ways we can see and measure. We must act now to reduce the adverse impacts of rising temperatures and extreme weather on the places that sustain us.

Many current restoration practices – for example, introducing controlled burns and restoring streamside vegetation – can help reduce the adverse effects of climate change. But forest and stream restoration is not keeping pace with climate-driven changes. We need to do more, and do it faster. Our objective for the Jemez Mountains and other vulnerable landscapes: to accelerate and expand work that improves the health of forests and streams and the plants and animals that inhabit them. Healthy systems will be more resilient to rising temperatures and deeper droughts.

Our Approach to Conservation and Climate Change Adaptation

The Nature Conservancy pursues non-confrontational, pragmatic, solutions to conservation challenges. This makes it essential for us to work collaboratively with partners — communities, government agencies, tribes and businesses. We provide science-based information, like our statewide climate change vulnerability assessment. We develop and implement projects on the ground, and we work effectively across boundaries to bring people together to address conservation needs throughout the Jemez Mountains.

Here are a few examples of what we are doing to meet the climate change challenge:

We're thinking big. The Conservancy is a primary partner in the Southwest Jemez Restoration Strategy. We helped the Santa National Forest, the Valles Caldera Preserve and the New Mexico Forest and Watershed Restoration Institute write a successful grant proposal to fund up to ten years of forest thinning, prescribed fire, streamside restoration and a robust monitoring program across 210,000 acres of the Jemez Ranger District and the Valles Caldera National Preserve. Collaborative work at this scale is unprecedented in the Jemez Mountains. Our conservation scientists are helping develop a monitoring strategy for this ambitious project. And we are reaching out to national leaders in public land management agencies and Congress to share science and stories from the field that help garner support for large scale landscape restoration.

We're helping keep all the pieces. The Jemez Mountains are home to a number of species and varieties that occur nowhere else, making them highly vulnerable to climate change. Habitat for the rare Jemez Mountains Salamander is being degraded by severe fires and drought. The Conservancy is leading work with agencies and the Jemez Pueblo to understand what this irreplaceable species needs to survive, and how forest restoration work can be conducted to reduce crownfire risk while protecting the salamander.

We're developing innovative strategies. The Las Conchas Fire devastated streams in the eastern Jemez Mountains. We're working with Trout Unlimited, the U.S. Forest Service and other partners to devise plans and projects that will strategically restore streams that are suitable for for Rio Grande cutthroat trout. Having a well distributed population reduces the chance that future fires or reduced flow will eliminate our state fish from its native waters. We are also facilitating dialogue among public agencies and the Pueblos affected by the Las Conchas, so that ongoing assessment, restoration and public safety protection work is well coordinated.

For more information about the Conservancy's work in the Jemez Mountains and other places where we are helping natural areas cope with climate change, visit:

http://nature.org/newmexico (click on How We Work)
http://nmconservation.org/projects/jemez_mountains/
http://www.naturepeoplefuture.org (click on Places-Southwest)
http://nmconservation.org/new_mexico_climate_change

To support The Nature Conservancy's climate change work in New Mexico, please visit: www.nature.org/donate.