9

RIO GALLINAS

THREAT: Climate change, outdated forest and watershed management

JACOB ERICKSON, HPWA PR DIRECTOR

STATE: New Mexico

AT RISK: Clean drinking water, farming, watershed functionality

SUMMARY

New Mexico's waterways are among the most vulnerable in the United States. The Rio Gallinas is the poster child for the adverse impacts — both ecological and cultural — of climate change on Southwestern watersheds. The river provides water for Las Vegas, New Mexico, and for the traditional acequia irrigation system. Drinking water, farming, and overall watershed functionality are all threatened by climate change and outdated forest management practices. Furthermore, without a good connection to its floodplain and a loss of wetlands, the Rio Gallinas is less able to naturally store the water needed to maintain flows during periods of drought.

In the aftermath of the largest fire in New Mexico's history, the multiple state and federal agencies charged with managing the Rio Gallinas watershed will determine the river's fate. It's essential that their work includes local communities' input and updated forest management protocols.

THE RIVER

The Rio Gallinas, flowing from the east side of the Sangre de Cristo Mountains, is a critical tributary to the Pecos River. Approximately 13,000 people depend on the Rio Gallinas for drinking water. Traditional Hispanic acequia systems, with a 500-year history on the landscape, also depend on the river to sustain agricultural and ranching communities. A large amount of the river is diverted to Storrie Lake to meet the needs of the Storrie Project Water Users Association. The Rio Gallinas watershed is home to a rich and diverse array of wildlife, including threatened and endangered species. The watershed and river also support many recreational activities such as hunting, fishing, and hiking.

THE THREAT

Over 20 years of drought, reduced snowpack, declining riparian health, high-intensity wildfire, and increased human demands are threatening the existence of the Rio Gallinas. A long history of land uses that have channelized and degraded the river and its riparian area have made them less resilient to climate change. Infrastructure (e.g., homes, roads) located in the river's floodplain further limits the ability of the Rio Gallinas to mitigate floods and fire. Most pressingly, outdated agency policy and protocols on forest management, prescribed burning, and watershed management pose threats to local drinking water, traditional acequia agriculture, and the forest products economy.

The Hermit's Peak/Calf Canyon fire, a catastrophic wildfire event in Spring 2022, was started by two USFS-prescribed burns that merged and became the largest wildfire in New Mexico history. The fire devastated 341,735 acres and the majority of the upper Rio Gallinas watershed. Over 900 structures were destroyed, including over 300 homes. The fire and ensuing floods contaminated water sources watershed-wide, including the Rio Gallinas. Pollution of wells and the town's reservoir caused drinking

9

RIO GALLINAS

Continued


JACOB ERICKSON, HPWA PR DIRECTOR

water emergencies and forced mandatory water cuts. Acequias that aid in aquifer recharge were destroyed by flooding and debris flows. There have been major negative impacts to the outdoor recreation economy and traditional hunting and fishing for sustenance.

The community and environment will experience long-term impacts from continued flooding, water quality degradation, the loss of vegetation, and decreased soil stability resulting from the Hermit's Peak/Calf Canyon fire. The lack of government agency collaboration and minimal opportunities for community engagement in watershed restoration hinder efforts to save the Rio Gallinas. While prescribed burning remains important for forest health, modernizing forest management policies and protocols is essential to improving watershed management and stewardship.

WHAT MUST BE DONE

The federal and state agencies that steward the public lands in the Rio Gallinas watershed must overhaul their stewardship practices in watershed-friendly, transparent, locally appropriate, and community-driven ways. Public involvement is critical to making this happen. Individuals can send comments to the relevant federal and state agencies, including the Santa Fe National Forest, Army Corps of Engineers, Federal Emergency Management Agency (FEMA), New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Forestry Division, and New Mexico Environment Department, asking for:

A commitment to participate in the first annual New Mexico Fire and Water Summit in the summer of 2023, where all affected communities, decision makers, federal agencies, and state agencies come together to create a long-term management and mitigation plan.

A long-term management and mitigation plan for the Rio Gallinas that accounts for:

- Mandatory and improved public engagement protocols for prescribed burns, forest fuels treatment, and post-fire watershed impacts.
- Worsening climate change impacts, including severe storms.
- The long-term health of the river and watershed in all emergency response activities.
- Nature-based solutions to post-fire watershed and flood management (e.g., floodplain restoration, beaver dam analogs).

FOR MORE INFORMATION:

RACHEL ELLIS
American Rivers
(505) 699-4746
rellis@americanrivers.org

RALPH VIGIL
New Mexico Wild and
New Mexico Acequia Commission
(505) 603-2879
ralph@nmwild.org

LEA KNUTSON
Hermit's Peak Watershed Alliance
(505) 617-1360
lknutson@hermitspeakwatersheds.org

MAX TRUJILLO
HECHO and San Miguel County
(505) 617-1851
max@hechoonline.org

WILLIAM GONZALES
Rio Gallinas Acequia Association and
New Mexico Acequia Commission
(505) 660-6535
wilogonzales@yahoo.com

TAKE ACTION:

AMERICANRIVERS.ORG/RIOGALLINAS2023