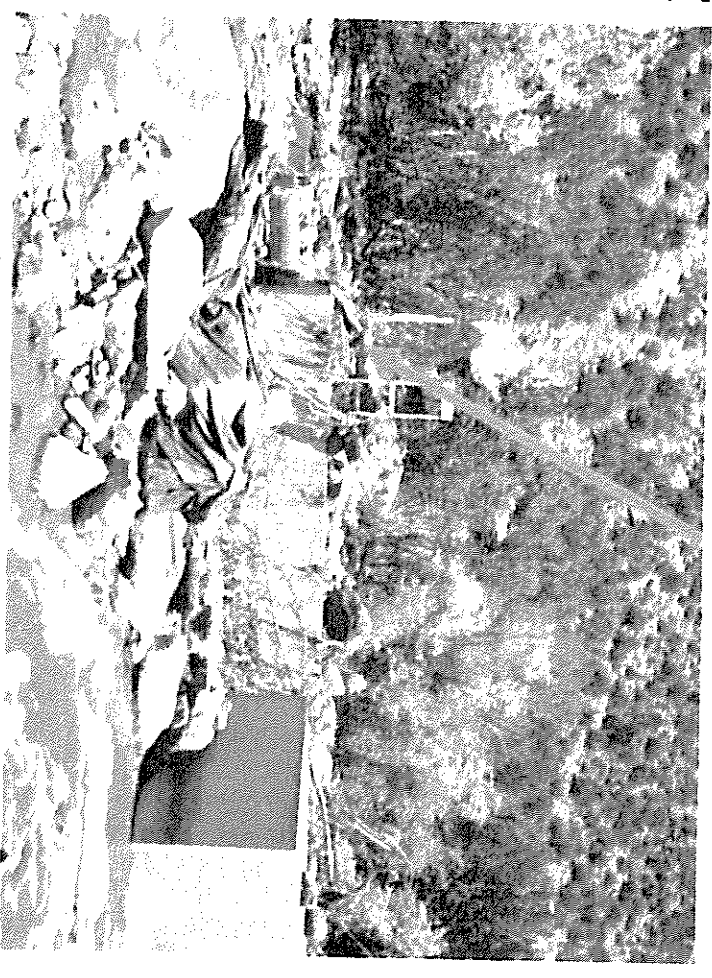




Acequia del Pueblo de Abiquiu. New diversion structure before disaster.



Rocks, debris, and sediment after 2024 flood.

Acequias and Flood Disasters: **Lessons Learned and Recommendations for Improving Recovery Programs** New Mexico Acequia Association Presentation to the Land Grant Committee 8/25/26

The climate crisis is devastating acequias...

The 2020s have been the warmest years on record. This has also been the time of unprecedented wildfires.

Burn scar flooding and flash flooding are increasing in frequency and intensity. Localized storms cause flooding that damages acequias with debris flows, sedimentation, and damaged infrastructure.

Disaster programs seem to have been designed for a one time event, like a hurricane, and they are not adaptable to small units of government with limited capacity.

Acequias are facing complex disaster impacts, such as recurring flooding (cascading events). The requirements and process of gaining access to disaster funding and support is overwhelming for acequia volunteers.



Acequia de los Romeros, Holman, Mora County, HPCC Disaster.

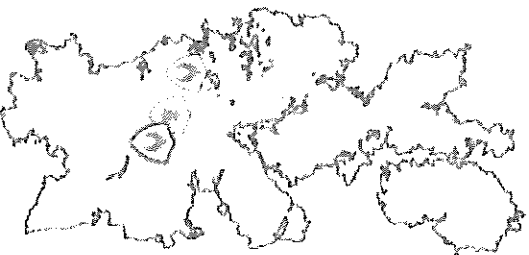
Update on Acequia Disaster Recovery Technical Assistance

Estimated number
of damaged

2022 Black Fire
325,136 Acres
25+ Damaged Acequias



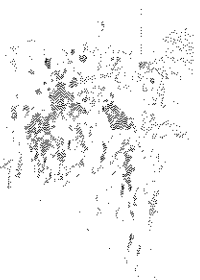
**2022 Hermits Peak
Calf Canyon**
341,735 Acres
90+ Damaged Acequias



2022 Cerro Pelado
45,605 Acres
1 damaged Acequia



2024 Salt/South Fork
24,754 Acres
20+ Damaged Acequias



acequias:
~150-200

2025: 30 new acequias damaged in Santa Cruz, Ojo Caliente, Pojoaque, plus cascading events in HPCC and Ruidoso.

2026: Localized flooding in Jemez, Ojo Caliente, Santa Cruz, cascading flooding in HPCC, Ruidoso area

2024 Rio Chama Flooding
8 Damaged Acequias

Other non-federal disasters:

- Dixon
- Rio en Medio (SF County)
- Santa Cruz (SF County)
- Sierra County – Monticello
- Plus others

Black Fire

Mimbres and Gila

- The 2022 Black Fire burned 325,136 Acres, second in size to the HPCC fire.
- The Governor declared an emergency but there was no federal disaster declaration.
- There were approximately 25+ damaged acequias on the Mimbres and Gila rivers.
- State Programs Made Available:
 - NMDOT Debris Removal
 - NRCS Emergency Watershed Program
- Some acequias are seeking non-disaster funds for structural repairs that originated with the Black Fire, e.g. Tigner Ditch in Luna County.



Above: Flooding from the Black Fire and impacts to the Grijalva Ditch Diversion in Grant County

2024 South Fork – Salt Flooding Ruidoso and Upper Hondo

- Federal disaster declared so FEMA was available.
- NRCS EWP was also available for acequias. The 25% cost share was met from local resources. 16 acequias were assisted and another 13 were ineligible due to pre-existing conditions.

2024 Rio Chama Flooding

- Federal disaster declared so FEMA was available.
- 8 acequias were damaged plus the Rio Chama has a massive sediment plug.
- NRCS EWP was established for the disaster but it was not made available for acequias. The DFA Match Fund was used for the 25% cost share requirements.



Acequia de los Duranes, Rio Arriba County, 2024 Flood.

Lessons Learned and Policy Recommendations

1. Clarify the Disaster Recovery Process.

Acequias (and all local governments) need a clear pathway to access disaster assistance.

- There should be a standardized application process with clear expectations.
- The method for delivering aid should be adaptable to local conditions and should consider that acequias are volunteers.
- This includes establishing an improved disaster response that is predictable and reliable rather than having to re-invent the wheel every time there is a disaster.

2. Technical Assistance.

Acequias are governed and managed by volunteers. Therefore, specialized technical assistance is vital to the recovery process. Expand resources for recovery officers and case managers at DHSEM and an increase in acequia technical assistance (NMAA, NMAC).

3. Acequia Capacity and Preparedness.

Acequias need support to build capacity to be better prepared to participate in disaster programs (and infrastructure projects generally). Their governance, financial compliance, and other policies and procedures should be made current before a disaster strikes.



Acequia del Sombrillo, HPCC Burn Scar

Lessons Learned and Policy Recommendations (continued)

6. Reliance on NRCS and Sponsors for EWP.

Given a choice between FEMA and NRCS EWP, acequias have tended to choose EWP for their structural repairs. It is more user-friendly because the sponsor administers the funds, manages funds, and procures contractors.

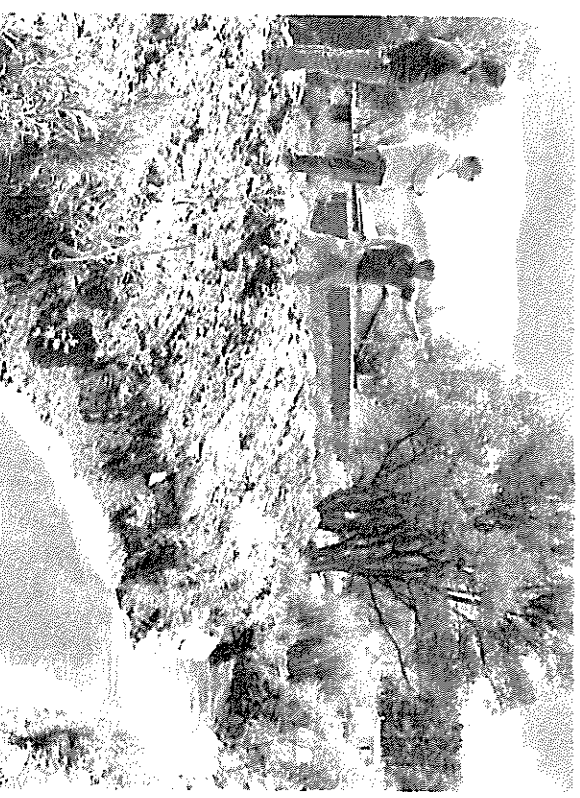
There are several issues to be considered:

- Local or state sponsors need more capacity to administer EWP. For HPCC, DFA was the sponsor.
- NRCS is undergoing a reduction in staff due to federal budget cuts.
- Acequia eligibility should be codified in policy, not a case-by-case decision.
- The state should develop a program like EWP (agency administers projects) that is covered with FEMA reimbursements and/or state funds, modeled after the NMDOT debris removal program.

7. More Engineers, Water Resource Experts, and Local Contractors are Needed.

A major challenge is the need

for more technical experts including hydrologists and engineers. There is a major bottleneck in the engineering design phase when structural repairs or permanent work is needed on a project. Local contractors should have experience and training on working on acequias, which require specialized expertise.



After initial HPCC burn scar flooding, NMDOT was deployed to assist with debris removal. Acequia Madre de Holman.