



Acequias and Post-Fire Flooding: Challenges with Disaster Response

Presentation to the Land Grant Legislative Interim Committee

Paula Garcia and David Garcia, NM Acequia Association

Fire impacts watersheds - the headwaters of acequias. The result is intense, post-fire flooding and debris flows.



Impacts on Acequias from Post-Fire Flooding

Realignment of and damage to river channel causing diversion structures could be disconnected from the river.

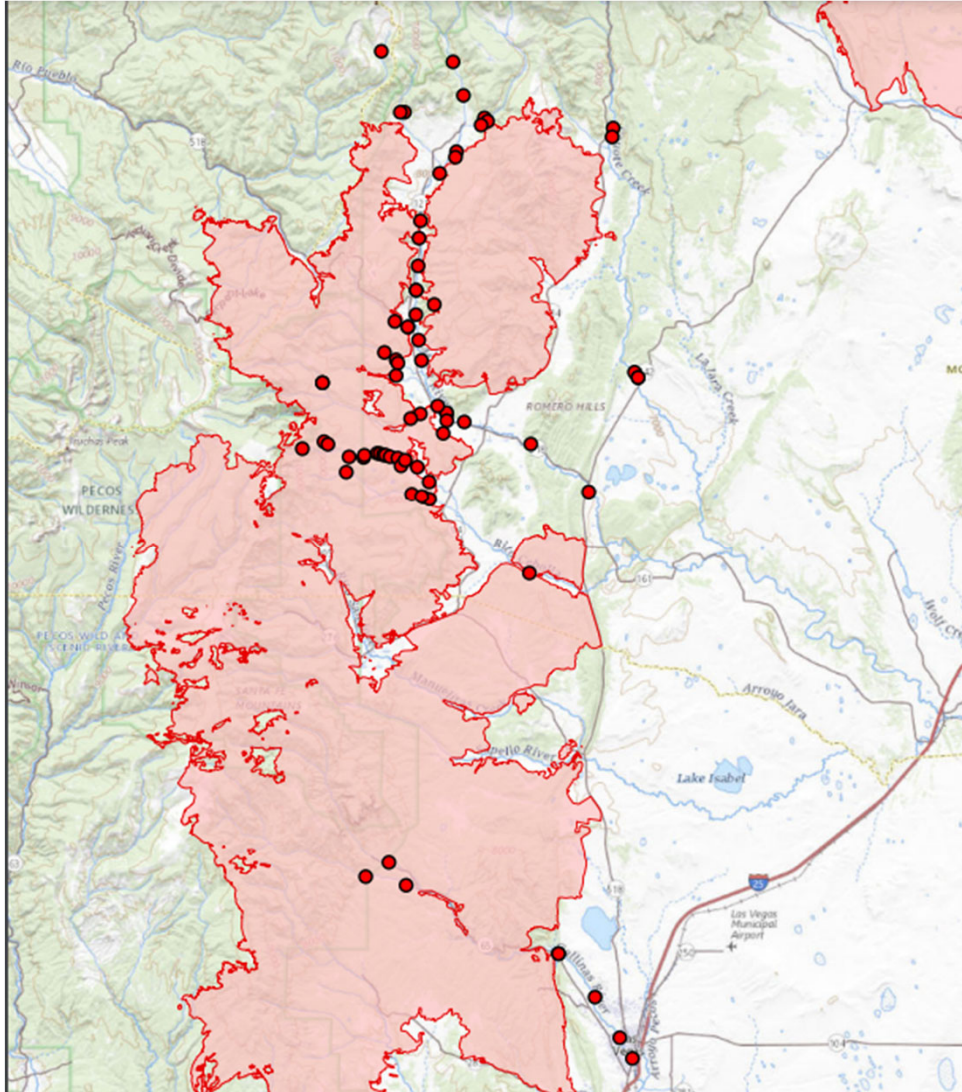
Debris flows may damaged structures, such as diversions, headgates, dividers, sluices, crossings, etc.

Heavy flooding may **damage structures** by dislodging them or washing them away, by damaging fences, and by causing erosion.

Debris flows, ash, and sediment can **clog acequia waterways** and can deposit on farmlands.

Right. Sediment and ash clog an acequia in Gascon in Mora County.





Acequias in the Hermit's Peak Calf Canyon Burn Scar

Acequias in Mora	50
Acequias in San Miguel	18
Total Acequias in both counties	68

Acequias in Mora with RPAs	26
Acequias in San Miguel with RPAs	8
Total Acequias with RPAs in both counties	34

Damaged Acequias in Mora	31
Damaged Acequias in San Miguel	10
Total Damaged Acequias in both counties	41

*Note: NMAA has inventoried impacted acequias in Mora and San Miguel Counties. Work is ongoing in Grant, Lincoln, Hidalgo, Catron, and Sandoval counties from the Black, McBride, and Cerro Pelado fires.

Challenges for Acequias

FEMA Public Assistance will reimburse expenses for disaster response and recovery. However, acequias cannot afford to cover the cost of debris removal and immediate needs up front.

Acequias need extensive technical assistance to prepare applications and navigate the FEMA grants portal. NMAA is providing assistance to the extent possible with our limited capacity and resources.

NMAA is working with the following partners:

- DOT to assist with debris removal using heavy machinery and get reimbursed by FEMA.
- Americorp to assist with hand crews for acequia.
- ISC to provide assistance with engineering and consultations. This will strain resources for other projects across the state.

WHAT WOULD HELP: Create an Acequia Disaster Contingency Fund that state agencies can use to assist acequias with up front costs.



Summary of Policy Recommendations:

Appropriate funds (revertable) for a year to year **Acequia Disaster Contingency Fund** to support state agency response specific to acequias. The Legislature can tap the Irrigation Works Construction Fund (IWCF) for this purpose.

Create an **Acequia Bureau at the Interstate Stream Commission (ISC)** with dedicated staffing to provide a systemic and programmatic response for acequias in addition to the existing work of supporting acequia infrastructure projects.

Increase funding for the Acequia and Community Ditch Education Program at DFA to provide technical assistance to acequias.

Support funding for the following programs to support **watershed health and resilience**:

- River Stewardship Program (NMED)
- Forest and Watershed Funding (EMNRD)
- Reforestation efforts (NMSU and EMNRD)



Morphy Lake was constructed by Acequia de la Isla and Acequia de San Jose over a century ago. The headwaters are severely burned. Post-fire, water has been diverted away from the lake to avoid burn scar debris and ash from entering the waters.