



*Acequia del Lado Sombrillo, Gascon, Mora County, following the Hermits Peak Calf Canyon Fire and subsequent floods*

# Acequia Flood Damage Report

Prepared by NM Acequia Association

Updated 11/20/22



**Fire impacts watersheds - the headwaters of acequias.** This results in intense, post-fire flooding and debris flows.



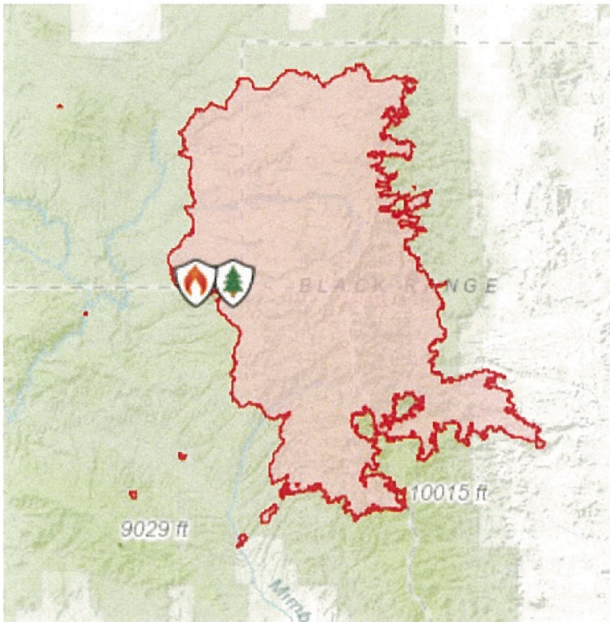


## 2022 was a catastrophic year for wildfires....

### Black Fire

325,136 Acres

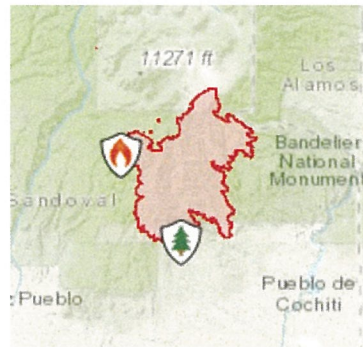
24 Damaged Acequias



### Cerro Pelado Fire

45,605 Acres

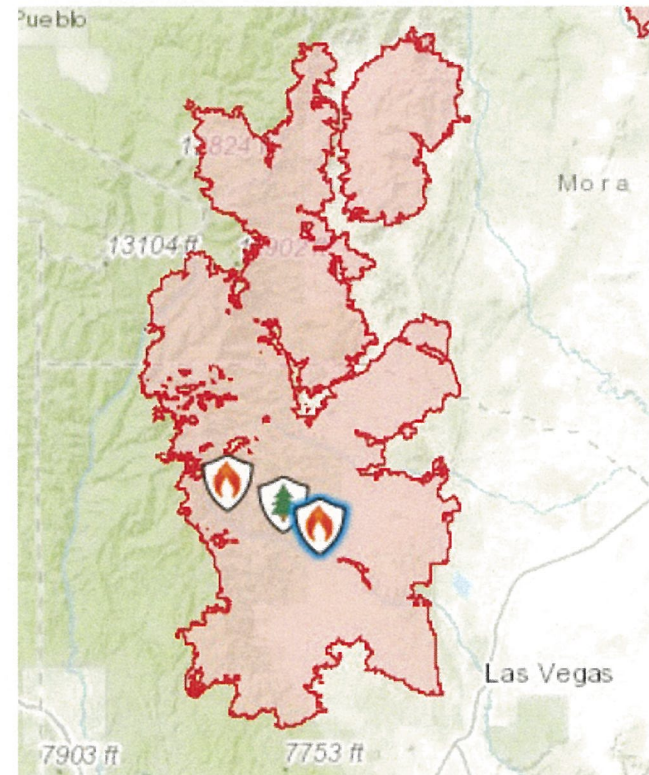
1 damaged Acequia



### Hermits Peak Calf Canyon Fire

341,735 Acres

45 Damaged Acequias



**Flash flooding** (not related to fires) also affected communities throughout the state including Taos and Rio Arriba Counties.

Several acequias in Dixon in Rio Arriba County were seriously damaged by flash flooding in July 2022.

Governor Lujan Grisham declared a State of Emergency in these counties which made state disaster funds available for local governments, including acequias, to do repairs.





## 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.



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

## Black Fire Post-Fire Flooding in SW New Mexico

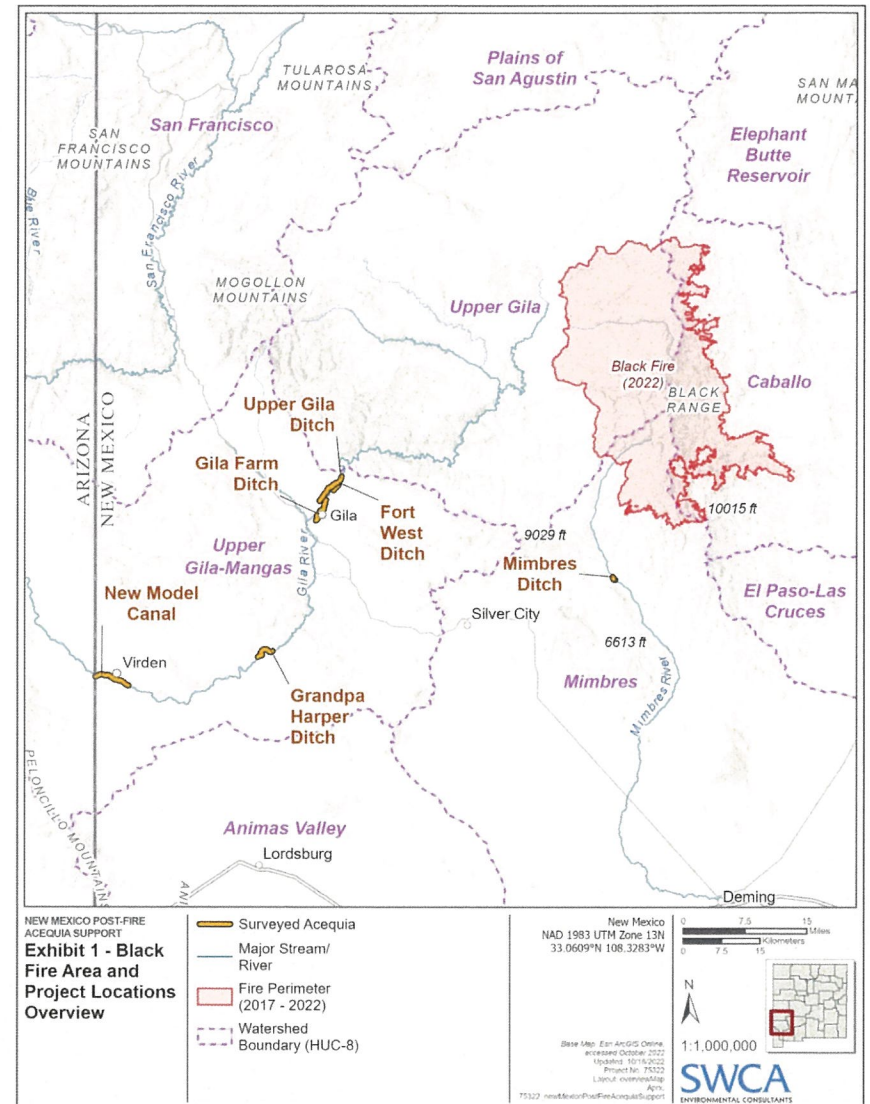
Acequias impacted by flooding in the Mimbres Valley, Upper Gila, and Lower Gila (Virден). **We estimate about 24 acequias and community ditches have been damaged.**

State of Emergencies were declared by Governor Michelle Lujan Grisham for the counties affected. However, **there has not been a federal disaster declaration** at this time.

Due to the high number of acequias damaged, we believe that a federal disaster is justifiable. However, the cost estimates have to be submitted to DHSEM. **Each acequia has to submit a Request for Disaster Assistance Form to DHSEM with cost estimates.**

The Interstate Stream Commission (ISC) contracted with SWCA Consultants to conduct an assessment, which is in progress. This may help acequias with cost estimates for DHSEM.

**This disaster must meet a dollar threshold to qualify for a federal disaster declaration to gain access to FEMA funds.**





## Hermit's Peak Calf Canyon Post-Fire Flooding

HPCC fire was declared a federal disaster, thereby providing access to the FEMA Public Assistance Program. With the support of NMAA, **38 acequias in Mora and San Miguel counties have submitted RPAs to FEMA.**

FEMA Public Assistance is based on reimbursement. **The local entity has to cover the cost of repairs up front and then get reimbursed by FEMA.** This is prohibitive for acequias who do not have the resources for disaster recovery.

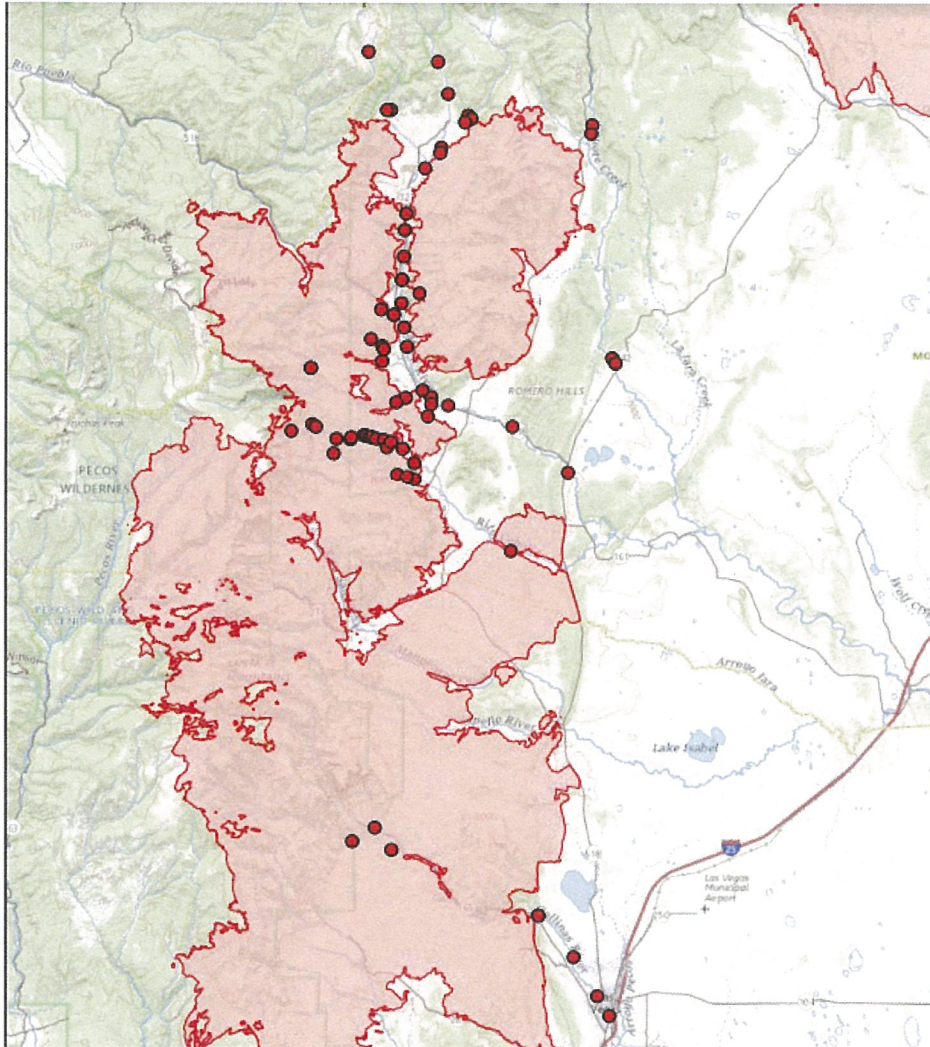
Generally, the PA program covers 75%, DHSEM 12.5%, and the local acequia 12.5%. **The cost share for acequias is often an obstacle to using disaster funds for recovery.**

\*\*With the HPCC Assistance Act, 100% of costs will be covered by FEMA and there is no cost share requirement for the acequias who apply for PA.

**Acequias need extensive technical assistance to navigate the FEMA PA program.** Documentation, forms, cost estimates, etc. are difficult for many acequia officials who are volunteers.







## Acequias in the Hermit's Peak Calf Canyon Burn Scar

Acequias in Mora	54
Acequias in San Miguel	18
Total Acequias in both counties	72
Acequias in Mora with RPAs	30
Acequias in San Miguel with RPAs	8
Total Acequias with RPAs in both counties	38
Damaged Acequias in Mora	35
Damaged Acequias in San Miguel	10
Total Damaged Acequias in both counties	45

\*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

Acequias need extensive technical assistance to prepare applications:

1. DHSEM Request for Disaster Assistance
2. FEMA Request for Public Assistance

The DHSEM form requires cost estimates. Technical assistance resources for this purpose are very limited: ISC and NMAA.

FEMA RPA forms require significant documentation from the acequia. Also, the process requires completion of Project Worksheets with project descriptions and cost estimates.

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





## Creative solutions in 2022

- NMAA has been working with High Water Mark, LLC, and environmental consulting firm with expertise in emergency management, to assist acequias with disaster response. This includes a standing weekly disaster meeting where acequias can get updates. However, this has exceeded NMAA capacity and more resources are needed.
- The NM Department of Transportation (NM DOT) developed a mechanism to assist acequias. DOT is making their local contractors available to do debris removal (Category A under FEMA). Work will be done according to FEMA guidelines and DOT will get reimbursed by FEMA. This addresses the problem of acequias lacking resources.
- The Interstate Stream Commission (ISC) is using funds from the Acequia and Community Ditch Infrastructure Fund (ACDIF) for consultants to conduct damage assessments and develop cost estimates. This is a good approach but only five acequias have been assessed out of about 70 that need assistance.



*NMDOT has assisted three acequias in Rio Arriba County which were damaged by flash flooding in July 2022. State disaster funds were used to cover costs. NMDOT is planning similar work in the HPCC and Black Fire areas.*



### Summary of Policy Recommendations:

1. Appropriate funds for **Acequia Disaster Response** to support state agency response specific to acequias. Expand the Acequia and Community Ditch Infrastructure Fund (ACDIF).
2. 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.
3. Increase funding for the **Acequia and Community Ditch Education Program** at DFA to expand technical assistance services to acequias.
4. Support expanded staffing at **DHSEM for more disaster recovery officers** to process requests for assistance.
5. Support a **continued role for NMDOT to assist with disaster recovery for acequias** with resources and staffing.
6. Support funding for the following programs to support **watershed health and resilience**:
  - River Stewardship Program (NMED)
  - Forest and Watershed Funding (EMNRD)
  - Reforestation efforts (NMSU, NMHU, UNM, and EMNRD)



For more information, contact Paula Garcia, NM Acequia Association, at 505-231-7752.

*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.*



HPCC Acequia List (Updated 11.20.22, revised weekly)

Acequia	County	Basin/Community	RPA	Assessed	Damage assessment
Acequia de la San Jose	Mora	Ledoux/Monte Aplanado	Yes	Yes	Flood damage confirmed in field.
Acequia de la Isla	Mora	Ledoux/Monte Aplanado	Yes	Yes	Flood damage confirmed in field.
Lower San Jose Acequia	Mora	Ledoux/Monte Aplanado			Not known, damage likely.
Acequia de la Aguila	Mora	Ledoux/Monte Aplanado	Yes	Yes	Flood damage confirmed in field.
Acequia de la Canada Seca	Mora	Ledoux/Monte Aplanado	Yes	Yes	Flood damage confirmed in field.
Acequia de La Otra Banda	Mora	Ledoux/Monte Aplanado			Not known, damage likely.
Acequia de la Banda y la Bandita	Mora	Ledoux/Monte Aplanado	Yes	Yes	Flood damage confirmed in field.
Monte Aplanado Ditch	Mora	Ledoux/Monte Aplanado			Not known, damage likely.
Acequia de la Canada	Mora	Ledoux/Monte Aplanado			Not known, damage likely.
Acequia de la Sierra	Mora	Chacon			Not known, not likely, not in burn scar.
Acequia del Rito Griego y La Sierra	Mora	Chacon			Not known, not likely, not in burn scar.
Acequia del Molino	Mora	Chacon			Not known.
Acequia de los Leybas	Mora	Chacon	Yes	Yes	Flood damage confirmed in field.
Acequia de los Borregos	Mora	Chacon		Yes	Flood damage, confirmed in field.
Acequia de la Joyas	Mora	Chacon			Not known.
Acequia de los Lunas	Mora	Chacon			Not known.
Acequia de los Ortegas	Mora	Chacon		Yes	Flood damage, confirmed in field.
Acequia Larga de Las Cruces	Mora	Chacon			Flood damage reported verbally or with survey.
Acequia de Las Colonias	Mora	Chacon	Yes	Yes	Flood damage confirmed in field.
Acequia de los Lovatos y Romeros	Mora	Holman (Mora River)	Yes	Yes	Flood damage confirmed in field.
Acequia de los Lovatos	Mora	Holman (Mora River)	Yes	Yes	Flood damage confirmed in field.
Acequia de los Romeros de Holman	Mora	Holman (Mora River)	Yes	Yes	Flood damage confirmed in field.
Acequia del Medio de Holman	Mora	Holman (Mora River)	Yes	Yes	Flood damage confirmed in field.
Acequia de la Sierra de Holman	Mora	Holman (Los Alamitos)	Yes	Yes	Flood damage, confirmed in field.
Acequia Madre de Holman	Mora	Holman (Mora River-Los Alamitos)	Yes	Yes	Flood damage, confirmed in field.
Acequia Arellano y Essary	Mora	Holman (Mora River)	Yes	Yes	Flood damage, confirmed in field.
Acequia de la Morada	Mora	Holman/Tramperos (Mora River)	Yes	Yes	Flood damage confirmed in field.
Acequia del Medio de Tramperos	Mora	Tramperos (Mora River)	Yes	Yes	Flood damage confirmed in field.
Acequia de los Vallecitos de San Isidro	Mora	Rio de la Casa	Yes	Yes	Flood damage, confirmed in field.
Acequia de Encinal de San Antonio	Mora	Rio de la Casa	Yes	Yes	Flood damage, confirmed in field.
Acequia del Alto al Sur (Alto y Martinez)	Mora	Rio de la Casa	Yes	Yes	Flood damage, confirmed in field.
Acequia de los Martinez	Mora	Rio de la Casa	Yes	Yes	Flood damage, confirmed in field.
Cassidy Ditch	Mora	Rio de la Casa	Yes	Yes	Flood damage confirmed in field.
Cleveland Mill Ditch aka Cassidy Mill Ditch	Mora	Rio de la Casa	Yes	Yes	Flood damage, confirmed in field.
Acequia de Canoncito	Mora	Canoncito/Encinal	Yes	Yes	Flood damage, confirmed in field.
Acequia de Encinal	Mora	Canoncito/Encinal	Yes	Yes	Flood damage, confirmed in field.



Acequia de San Antonio	Mora	Cleveland/Mora (Mora River)			Not known, damage likely.
Acequia de los Luceros	Mora	Cleveland/Mora (Mora River)			Not known.
Acequia del Alto al Norte	Mora	Mora (Mora River)	Yes	Yes	Flood damage, confirmed in field.
Acequia del Medio	Mora	Mora (Mora River)			Not known.
Acequia de Canoncito de la Cueva	Mora	Mora (Mora River DS)	Yes	Yes	Flood damage confirmed in field.
Acequia de Buena Vista	Mora	Buena Vista (Mora River DS)			Not known.
Acequia de Golondrinas Norte	Mora	Golondrinas (Mora River DS)	Yes		Flood damage reported verbally or with survey.
Acequia de Golondringas Sur	Mora	Golondrinas (Mora River DS)			Not known, damage likely.
Santo Tomas 1	Mora	Guadalupita (Coyote Creek)	Yes		Flood damage reported verbally or with survey.
Santo Tomas 2	Mora	Guadalupita (Coyote Creek)	Yes		Flood damage reported verbally or with survey.
Rainsville North	Mora	Rainsville (Coyote Creek)			Not known, damage likely.
Rainsville South	Mora	Rainsville (Coyote Creek)			Not known, damage likely.
Acequia del Lado Sombrillo	Mora	Gascon (Rio San Jose)	Yes	Yes	Flood damage confirmed in field.
Acequia de Lado Resolana	Mora	Gascon (Rio San Jose)			Not known, damage likely.
Acequia Madre del Canon de Martinez	San Miguel	Rociada	Yes	Yes	Flood damage confirmed in field.
Las Tusas Community Ditch	San Miguel	Sapello	Yes	Yes	Flood damage confirmed in field.
Acequia de la Concepcion	San Miguel	Gallinas			Not known, damage likely.
Acequia Madre de los Romeros	San Miguel	Gallinas	Yes		Flood damage reported verbally or with survey.
Acequia Madre de los Vigiles	San Miguel	Gallinas			Not known, damage likely.
Agapito Vigil Community Ditch	San Miguel	Gallinas			Flood damage confirmed in field.
El Porvenir Ditch	San Miguel	Gallinas		Yes	Flood damage confirmed in field.
Placita de Arriba Acequia	San Miguel	Gallinas			Not known, damage likely.
Round House Ditch	San Miguel	Gallinas	Yes	Yes	Flood damage confirmed in field.
San Augustine Ditch Association	San Miguel	Gallinas	Yes		Flood damage reported verbally or with survey.
Upper Maestas Ditch	San Miguel	Gallinas	Yes		Flood damage reported verbally or with survey.
Ancon del Gato Ditch	San Miguel	Gallinas	Yes	Yes	Flood damage confirmed in field.
Acequia Madre de Las Vegas	San Miguel	Gallinas	Yes		Flood damage reported verbally or with survey.
Acequia de las Seguras	San Miguel	Cow Creek	Yes/WD		No damage.
Acequia de la Placita	San Miguel	Cow Creek	Yes/WD		No damage.
Middle Bull Creek	San Miguel	Cow Creek	Yes/WD		No damage.
Acequia del Toro	San Miguel	Cow Creek	Yes/WD	Yes	No damage.
Rio de la Vaca	San Miguel	Cow Creek	Yes/WD		No damage.

Abbreviations:

DS - Downstream

WD - Withdrawn

RPA - FEMA Request for Public Assistance

IP - In progress

**Black Fire Acequia List (updated 11.20.22)**

<b>Acequia</b>	<b>County</b>	<b>Basin</b>	<b>Damage Assessment</b>
Grijalva Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Kenly #2 Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Heuchling #1, #2, #3, & #4	Grant	Mimbres	Flood damage confirmed in field.
Ancheta/Galaz Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Heredia Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Llano Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Tajo Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Perrault Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Duran Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Goforth Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Dominguez Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Eby / Baca Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Macedonio Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Baca / Government Community Ditch	Grant	Mimbres	Flood damage confirmed in field.
Wardwell/ Herron	Grant	Mimbres	Flood damage confirmed in field.
Tustin / Mcintosh	Grant	Mimbres	Flood damage confirmed in field.
Sunset Ditch	Hidalgo	Gila	Flood damage likely.
New Model Ditch	Hidalgo	Gila	Flood damage confirmed in field.
Fort West Ditch	Grant	Gila	Flood damage confirmed in field.
Upper Gila Ditch	Grant	Gila	Flood damage confirmed in field.
Gila Farm Ditch	Grant	Gila	Flood damage confirmed in field.
Grandpa Harper Ditch	Grant	Gila	Flood damage confirmed in field.