# MANAGING CHRONIC WATER SHORTAGES ON THE RIO CHAMA

Tim Seaman Rio de Chama Acequia Association, Inc.

### RCAA, Inc.

Non-profit organization established in 1993 to represent 18 community acequia associations that divert irrigation water from the Rio Chama below Abiquiu Dam.

RCAA primary interests have since focused on the Aragon Adjudication with Ohkay Owingeh, protection and rehabilitation of acequia infrastructure, and coping with chronic water shortages. Adjudication activities are funded through the NMDA, Acequia and Community Ditch Fund.

This presentation will focus on water shortages and river operations on the lower Rio Chama.

#### Been here a long time ...

RCAA represents the Senior water-rights holders on the Rio Chama

Ohkay Owingeh might have aboriginal rights originating in the 1300s ("time immemorial")

Acequia systems were established between 1600 and 1735 by Spanish Colonists within several Land Grants to continue an ancient tradition of water sharing or *Repartimiento*.

Water shortages have also been here a long time, but have recently been complicated by climate changes and federal storage operations.

# Coping with water shortages

RCAA encourages members to maintain traditional methods of water sharing, through their mayordomos and commissions. This is what Acequias DO.

RCAA has also forged relationships with other water users within the Rio Chama watershed and the Middle Rio Grande Valley.

Federal water developments have made our relationships with these entities critical to acequia survival. It's a long list of local state and federal agencies involved in the Rio Chama. And a lot of straws...

Through these "external," non-traditional interactions, RCAA has worked to increase cooperation and operational flexibility on the Rio Chama.

# Active Water Resource Management (AWRM)

The State of NM has recognized the importance of acequias in its constitution, laws, and programs. AWRM, part of the Office of the NM State Engineer, is perhaps the most important program for the Rio Chama.

AWRM enables RCAA to work exclusive of priority-based water management and avoid expensive and lengthy court involvement.

With the assistance of the NM Legislature, and through close cooperation with the MRG Conservancy District and the Interstate Stream Commission (ISC), RCAA has established the **Rio Chama Irrigation Reserve** as a component of the AWRM.

# Rio Chama Irrigation Reserve: a short term solution

In 2018, The NM Legislature granted \$100,000 to RCAA to acquire storage space on the Rio Chama. The MRG Conservancy District agreed to a 25-year agreement to store 1000 acre feet of San Juan Chama Project (SJCP) water in El Vado Reservoir. This pool of *foreign* water is used to offset RCAA depletions of Conservancy Districts releases from El Vado Reservoir during water shortages.

Depletion management allows all RCAA ditches to operate normally until the Reserve runs out of water or the District halts operations. Diversion management is implemented by WRD at that point through curtailment & rotation among ditches. This is where we are right now.

# How it works: 2020 operations

The impending water shortage was declared by the State Engineer on 29 May. ISC tracked RCAA's depletion of Conservancy District releases starting on 15 June when flows dropped below 50 cfs at the La Puente Gauge, a proxy for *Native* water in the river.

RCAA previously purchased 833 acre-feet of SJCP water from Los Alamos County as offset with 2019 Capital Outlay funds.

After a week of 100+ degree days, ISC and WRD halted depletion management on 9 July. RCAA ditches had accumulated over 1000 acre-feet of depletions in less than a month and immediately began curtailment. RCAA is using a portion of its 2020 Capital Outlay to handle the deficit.

# Long-Term Solutions

The Irrigation Reserve requires a continuing investment by the State to purchase offset water.

In the long-term, RCAA needs use its *existing* senior water rights to apply for a storage permit in Abiquiu Reservoir based on water banking, fallow lands management, and the adjudication settlement.

RCAA supports the 2020 Water Resources Development Act, now being considered in DC, allowing native water storage in Abiquiu Reservoir. This is KEY. (handout).

Increasing agricultural and conveyance efficiency are also critical long term goals.

#### Conclusions

Rio Chama Acequias must adapt and continue to work outside its traditional water sharing methods to survive climate changes and the increasing demands for water on the Rio Grande.

The challenge is to do this while also maintaining our enduring heritage of farming, water sharing, and the many social traditions associated with irrigation in this arid land.

Questions?