

Water Resources in New Mexico: 2014 Challenges, Opportunities, and Priorities

Gregory C. Ridgley
General Counsel
NM Office of the State Engineer

New Mexico has endured exceptional drought for the past 4 years.



Storrie Lake File Photo



Storrie Lake 2012



Santa Rosa Lake 2011



Santa Rosa Lake in 2012



Brantley Reservoir near Carlsbad

File Photo



1,000 MILES
on my own two feet

Brantley Reservoir near Carlsbad NM 2013



New Mexico received a years worth of
rain in one week in both **September 2013**
and in **September 2014**



Rio Grande at Tingley Beach
September 13, 2013



**Rio Puerco near Bernardo,
September 15, 2013**



**San Acacia Diversion
September 18, 2013**



2013 Rain Impacts to the Pecos River Basin

**Over 100,000 acre-feet of project
supply**

NM Interstate Stream Commission
stopped pumping from 7 Rivers Well
Field

Santa Rosa: 103,765 acre feet

Fort Sumner: 37,575 acre feet

Brantley reservoir: 43,862 acre feet

Avalon reservoir: 4,466 acre feet



2013 Rain Impacts to Lower Rio Grande

Elephant Butte Reservoir gained 72,000 acre-feet

Reservoir rose 12.5 feet and now has a surface area of about 10 square miles

Storage doubled from 4% of capacity to 8%

Caballo Reservoir gained 28,000 acre-feet

Reservoir rose 11.5 feet

In addition, 25,000 stored in Cochiti Reservoir during the rains will be delivered to Elephant Butte Reservoir by the end of the year.

2014 Rain **Impacts to the** **Pecos River** **Basin**

190,754 acre-feet of project supply

Brantley Reservoir is today at a record high storage level of 77,000 acre-feet

Santa Rosa is the only Pecos Reservoir with space available

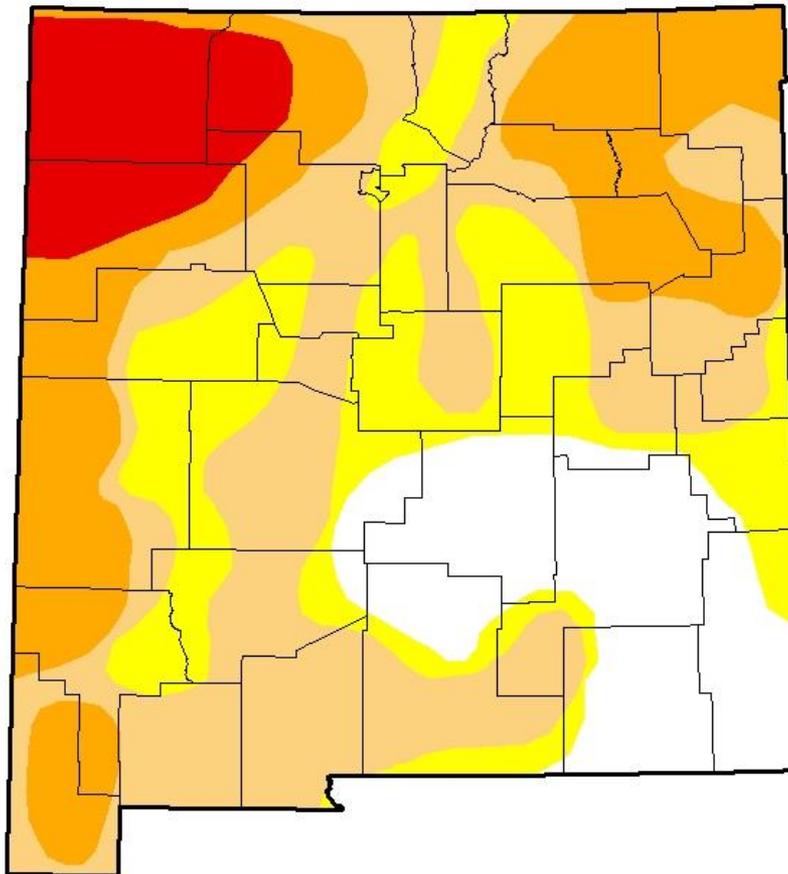
Since September 18th, **over 125,000 acre feet has been delivered to Texas**



Current Drought Status

U.S. Drought Monitor New Mexico

October 7, 2014
(Released Thursday, Oct. 9, 2014)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	16.70	83.30	62.64	30.04	8.08	0.00
Last Week 9/30/2014	16.70	83.30	62.57	30.04	8.08	0.00
3 Months Ago 7/8/2014	0.00	100.00	96.16	86.01	42.29	0.42
Start of Calendar Year 12/31/2013	0.39	99.61	75.21	32.68	3.96	0.00
Start of Water Year 9/30/2014	16.70	83.30	62.57	30.04	8.08	0.00
One Year Ago 10/8/2013	1.67	98.33	74.92	37.81	3.39	0.00

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

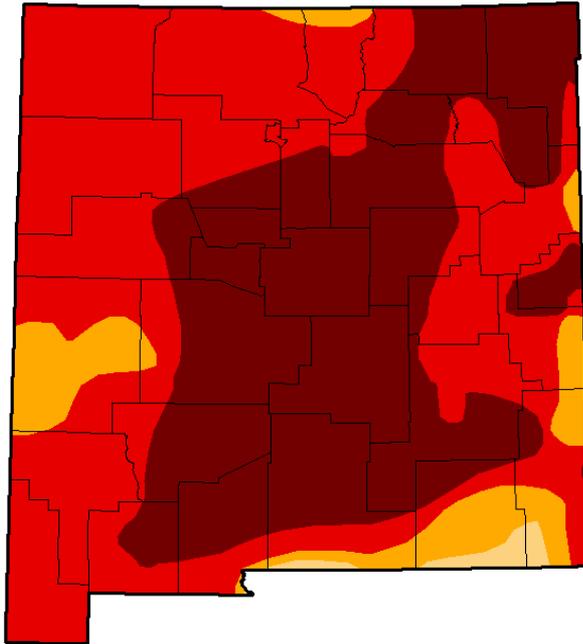
Author:
Mark Svoboda
National Drought Mitigation Center



Improvement from last year

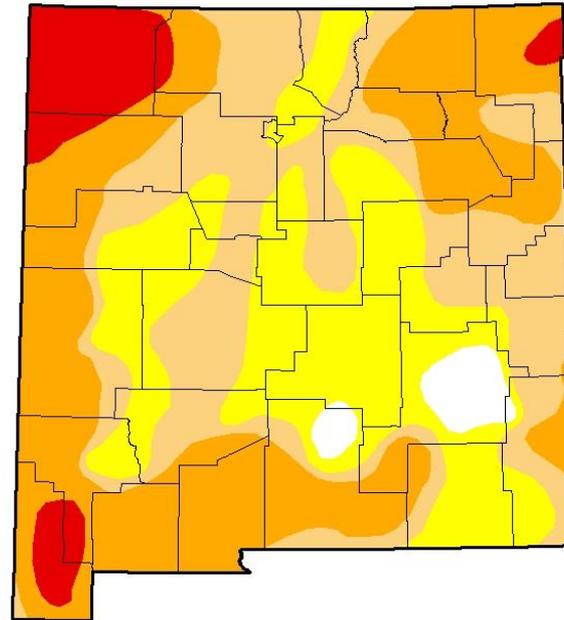
June 2013

U.S. Drought Monitor
New Mexico

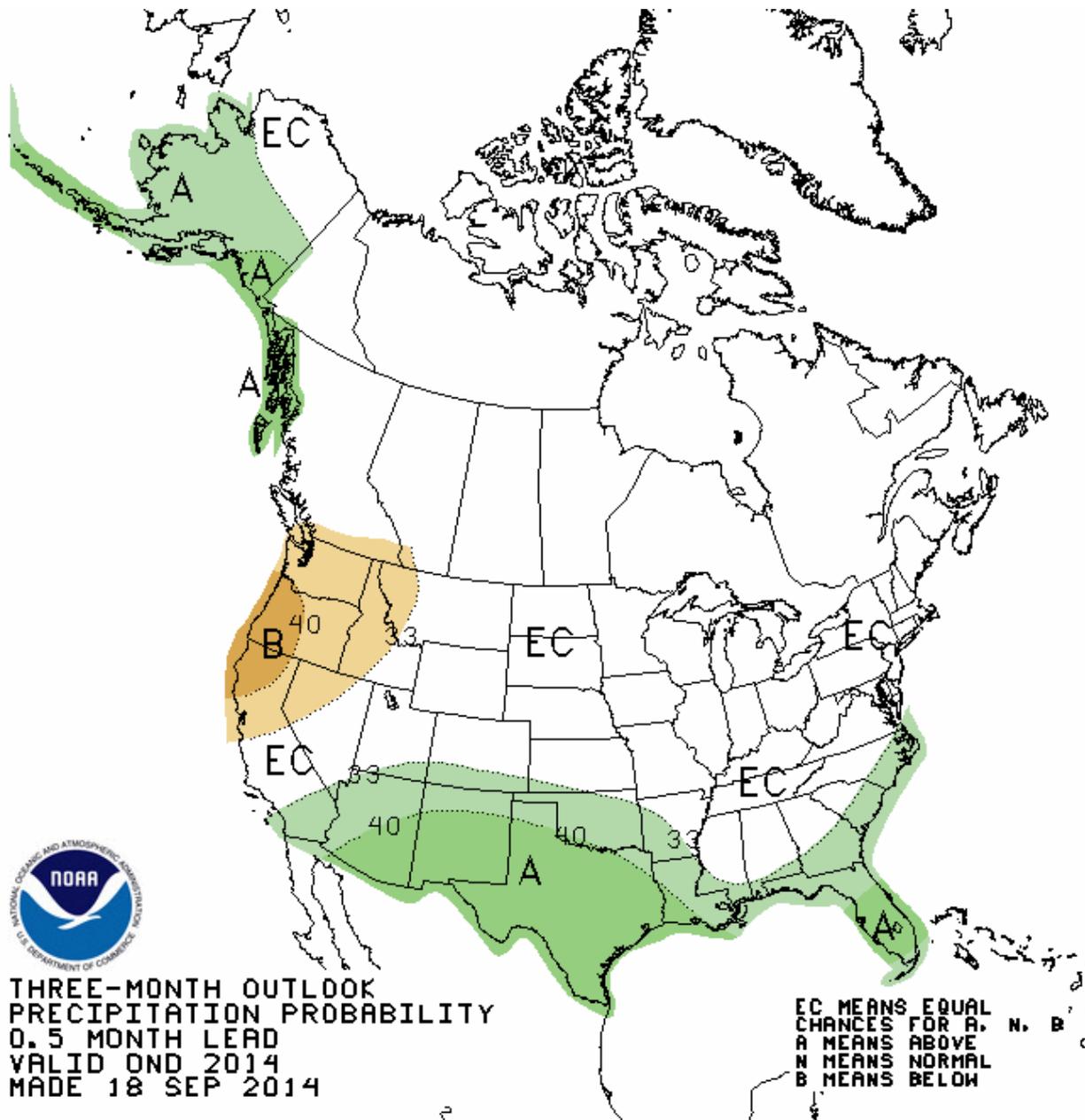


Sept 2014

U.S. Drought Monitor
New Mexico



Three Month Precipitation Outlook is **Above Normal**



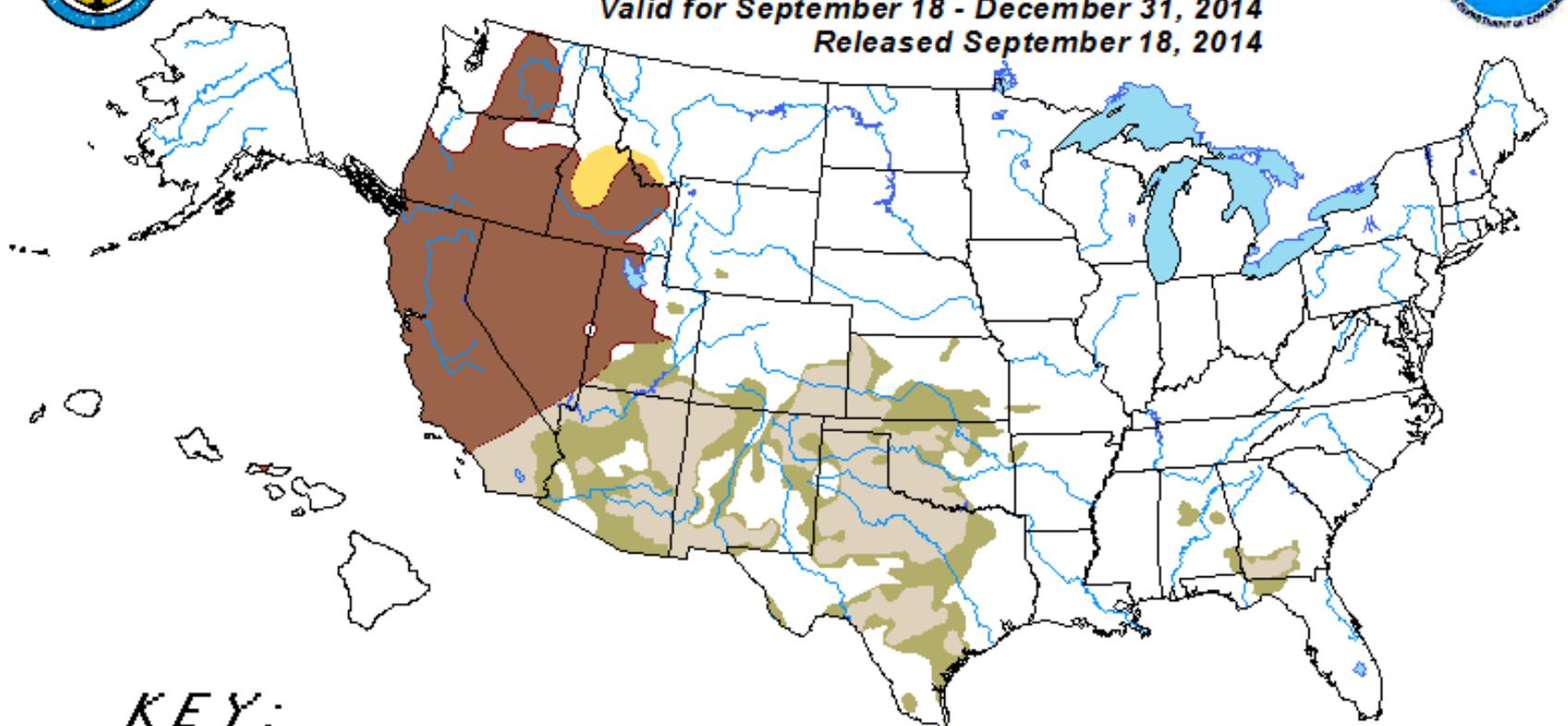


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for September 18 - December 31, 2014

Released September 18, 2014



KEY:



Drought persists or intensifies



Drought remains but improves



Drought removal likely



Drought development likely

Author: Anthony Artusa, Climate Prediction Center, NOAA

http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.html

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events – such as individual storms – cannot be accurately forecast more than a few days in advance. Use caution for applications – such as crops – that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity).

For weekly drought updates, see the latest U.S. Drought Monitor.

NOTE: The tan area areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain.

The Green areas imply drought removal by the end of the period (D0 or none)



4 years of extreme variation
in New Mexico's water supply
have exacerbated complex water issues
statewide

Issues include:

- Expanding water demands
- Competition for water resources
- Watershed health, increased fire hazard and flood risk
- Ecosystem health, environmental mandates
- Increased consumptive use, administrative constraints
- Outside threats to NM jurisdiction and authority
- Infrastructure investment needs and limited resources
- Drought and flood resiliency
- Interstate delivery obligations and compact credits
- Economic impact and job creation

These ongoing water supply extremes have
driven several of
New Mexico's water priorities



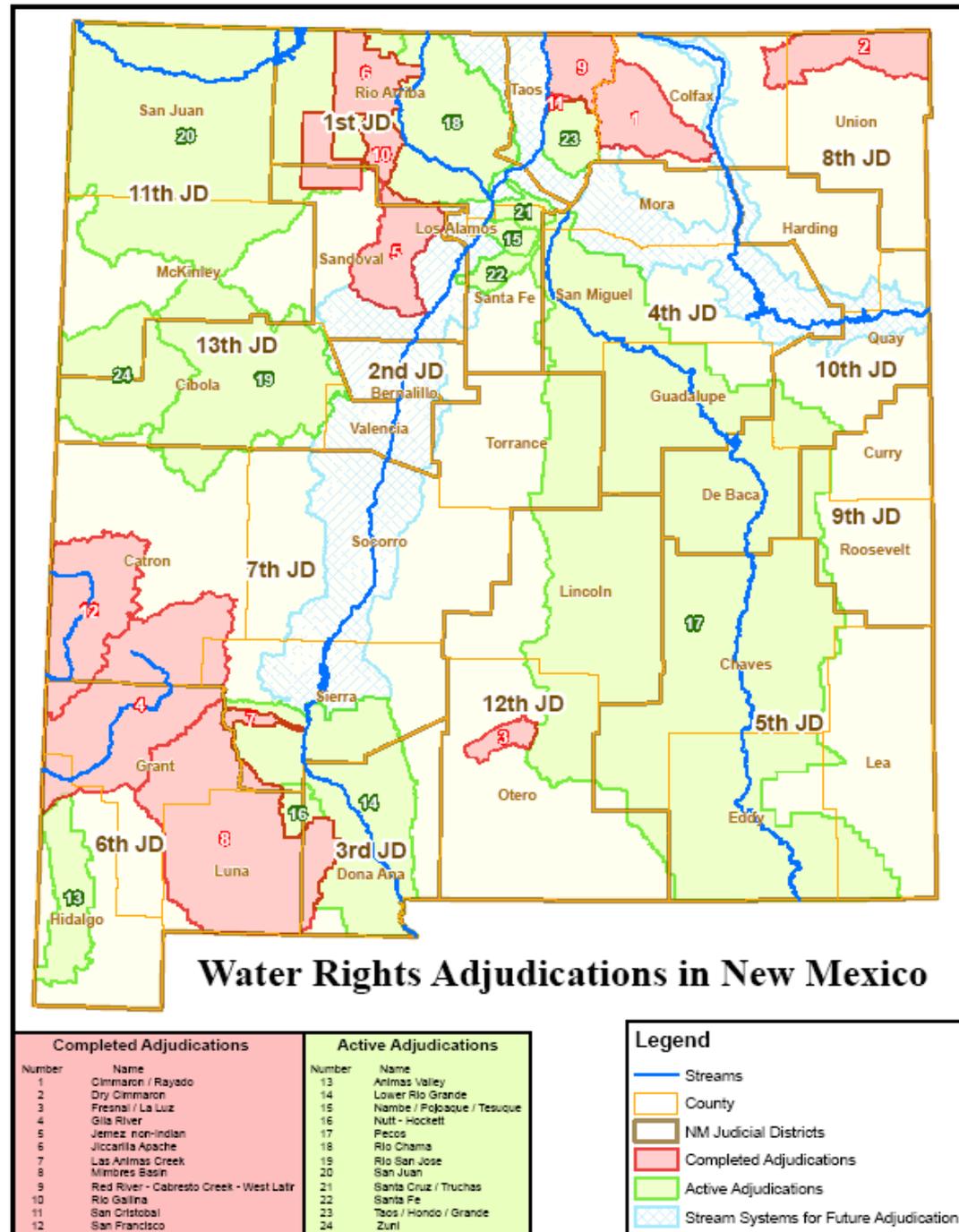
Priority: State and Regional Water Planning



Priority: Water Rights Adjudications

Resource Allocations:
Annual Rule 71.3
Report

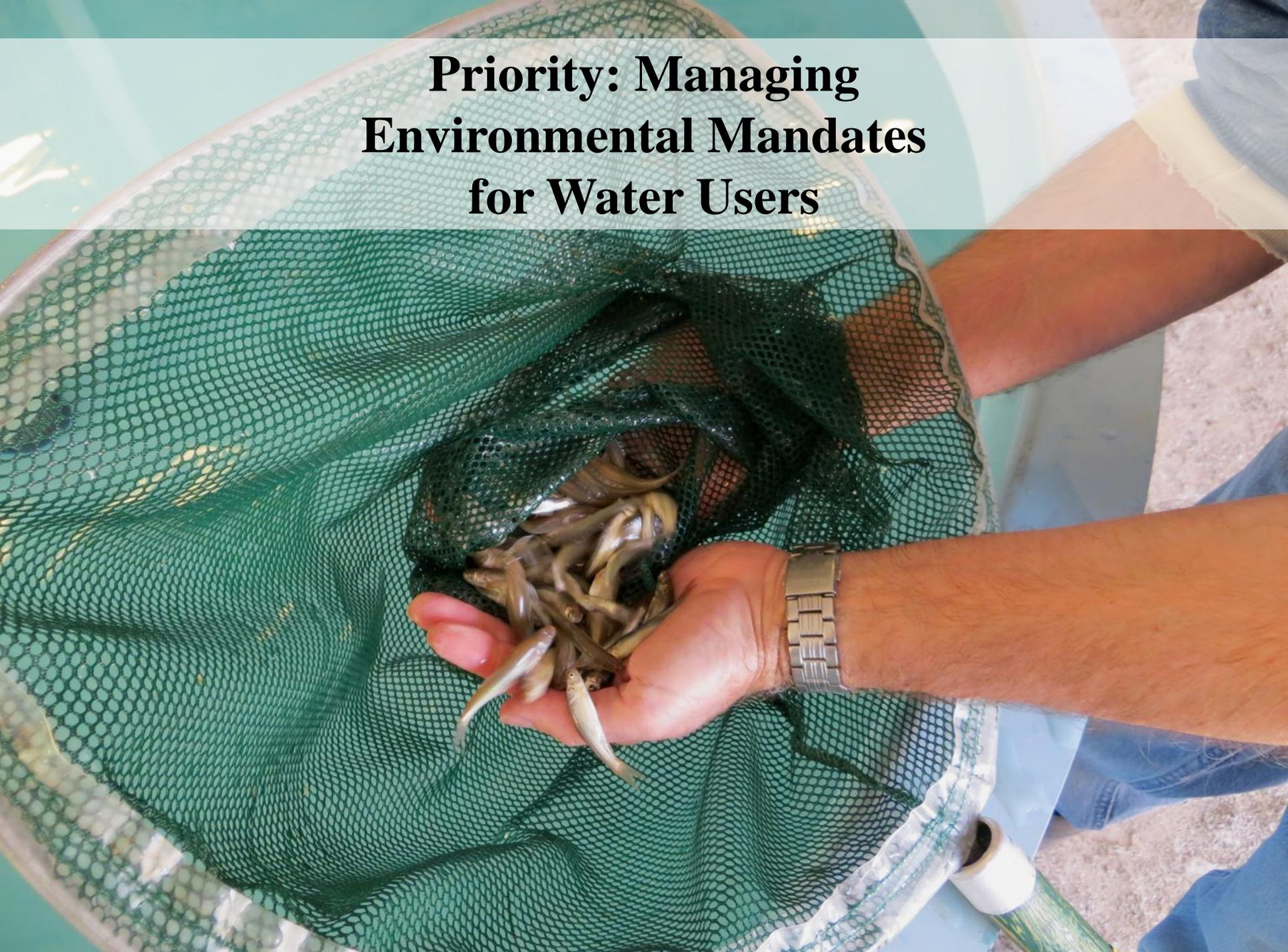
Indian Water Right
settlements



**Priority: Capital investment
for water projects**



**Priority: Managing
Environmental Mandates
for Water Users**



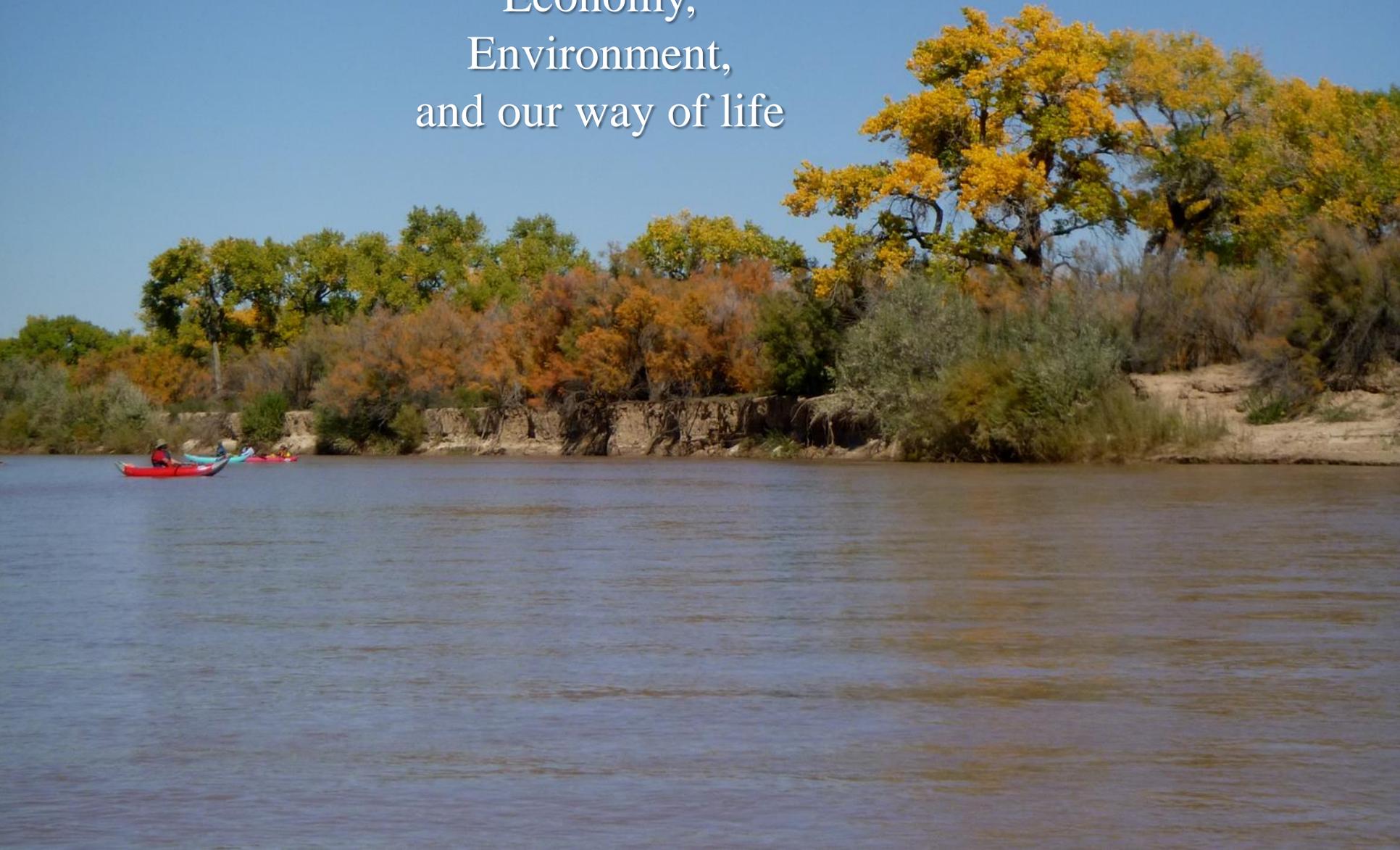
Priority: Arizona Water Settlements Act



Priority: Active Water Resource Management



These *6 priorities* create water certainty for:
Citizens,
Economy,
Environment,
and our way of life



But one remaining priority to ensure long term success does ***NOT*** have its origin in water supply extremes...

Priority: Defending New Mexico's jurisdiction over water



Thank You

(and go )