

# NMFA Oversight Committee

## Water Policy and Infrastructure Task Force Update

Mike A. Hamman, P.E., State Engineer

October 25, 2022



## Major Problems Facing New Mexicans in the Coming Decade

- Persistent drought being exacerbated by rising average annual temperatures
- Catastrophic wildfires resulting from drought devastating watersheds
- Declining aquifers resulting from reduced surface water supplies
- Ageing water and wastewater infrastructure, hitting rural systems hardest
- Need for stormwater control investments as intense monsoon events rise
- Lack of consistent funding for proper human capacity development at all levels of government and the private sector
- Need for long-view planning and investment to correct years of under-funding



Calf Canyon / Hermits Peak Fire

## Sign of the times...

Third year of significant drought conditions affecting communities throughout New Mexico.

# U.S. Drought Monitor New Mexico

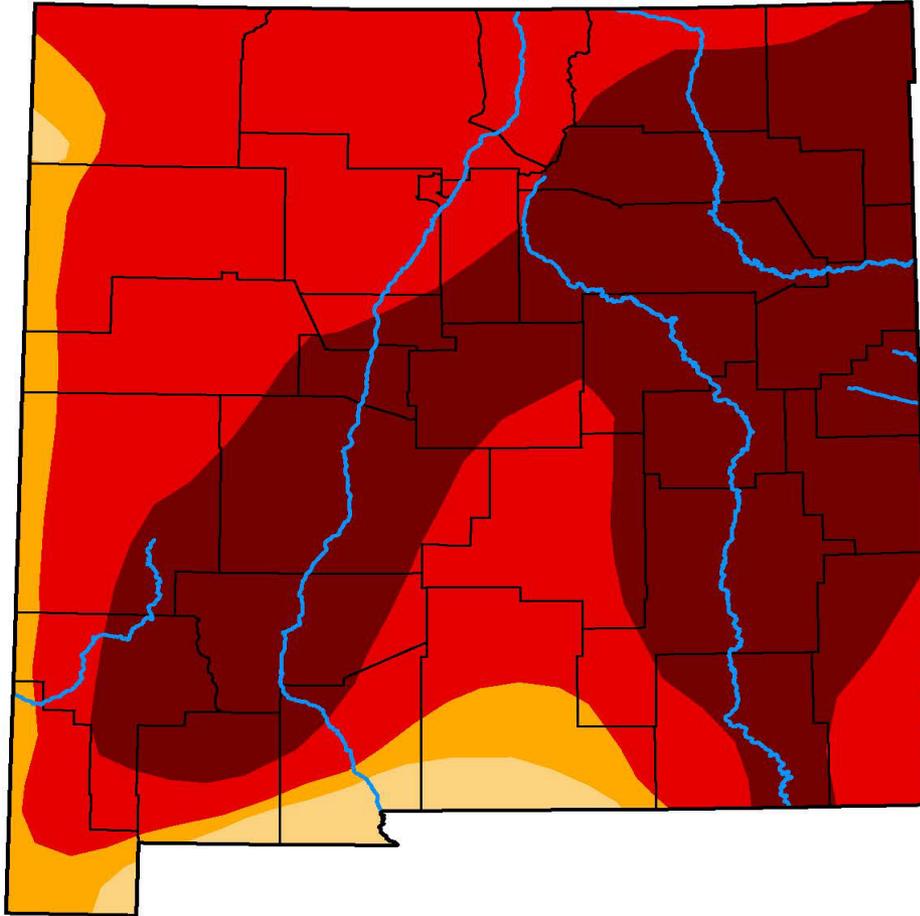
**June 7, 2022**

(Released Thursday, Jun. 9, 2022)

Valid 8 a.m. EDT

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	0.00	100.00	100.00	97.18	90.06	46.76
<b>Last Week</b> <i>05-31-2022</i>	0.00	100.00	99.26	97.20	90.06	45.84
<b>3 Months Ago</b> <i>03-08-2022</i>	0.00	100.00	98.92	85.09	34.52	3.85
<b>Start of Calendar Year</b> <i>01-04-2022</i>	0.00	100.00	97.83	75.86	20.91	0.00
<b>Start of Water Year</b> <i>09-28-2021</i>	10.70	89.30	79.47	49.33	19.12	0.00
<b>One Year Ago</b> <i>06-08-2021</i>	2.06	97.94	93.41	88.82	64.76	33.26



**Intensity:**

- None
- 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. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>*

**Author:**

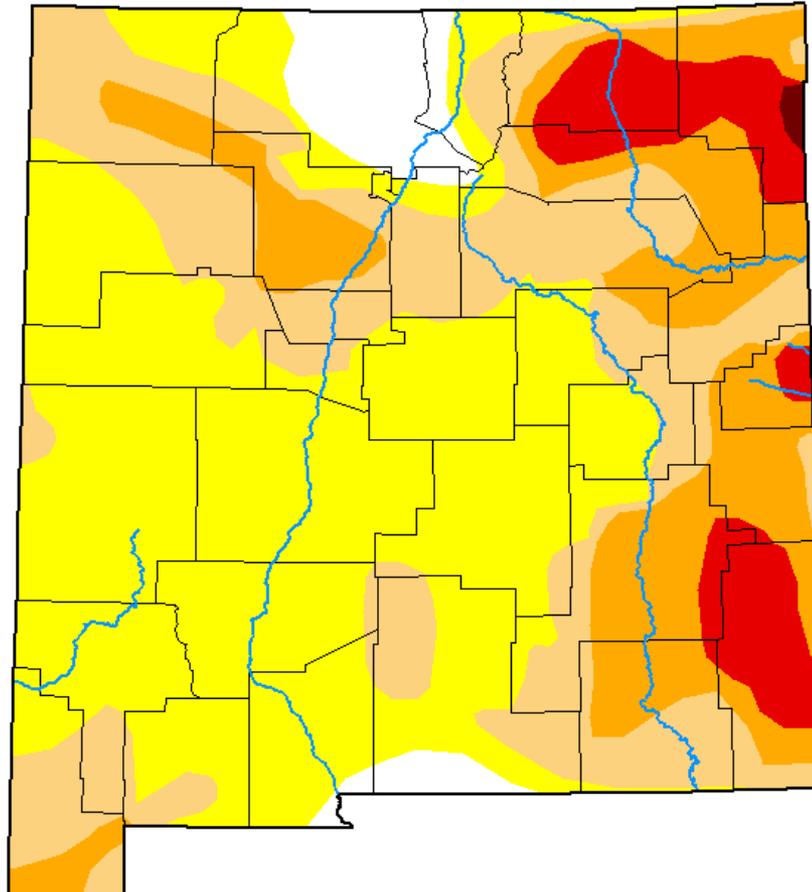
Brad Pugh  
CPC/NOAA



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# U.S. Drought Monitor New Mexico

**October 18, 2022**  
(Released Thursday, Oct. 20, 2022)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	4.94	95.06	49.06	23.09	7.01	0.19
<b>Last Week</b> <i>10-11-2022</i>	3.31	96.69	52.10	26.36	7.16	0.19
<b>3 Months Ago</b> <i>07-19-2022</i>	0.68	99.32	98.51	85.47	32.76	11.08
<b>Start of Calendar Year</b> <i>01-04-2022</i>	0.00	100.00	97.83	75.86	20.91	0.00
<b>Start of Water Year</b> <i>09-27-2022</i>	0.99	99.01	76.80	31.46	6.99	0.00
<b>One Year Ago</b> <i>10-19-2021</i>	5.43	94.57	76.51	50.36	11.27	0.00

Intensity:

- None
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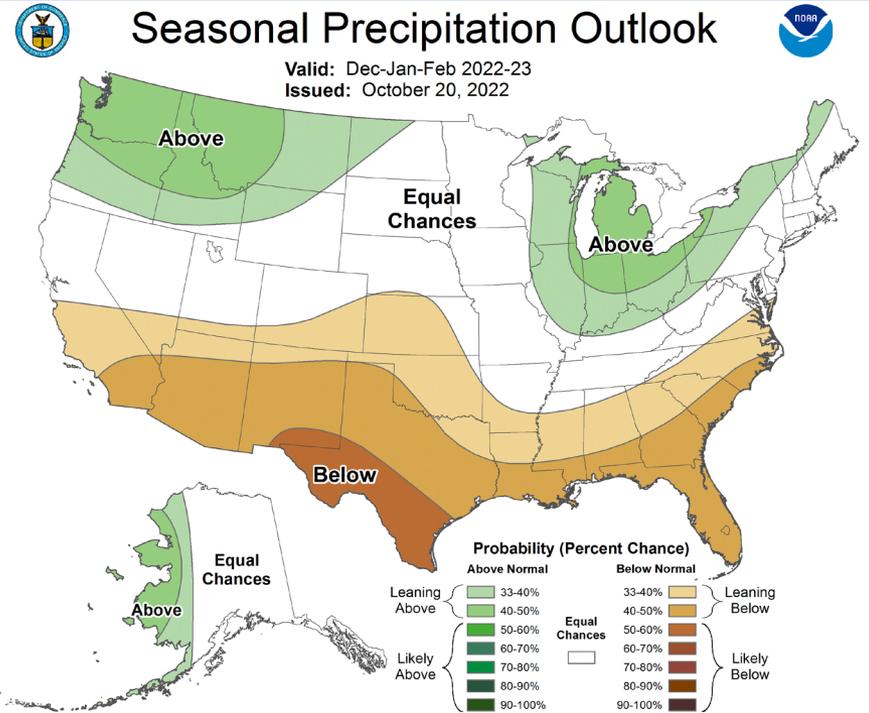
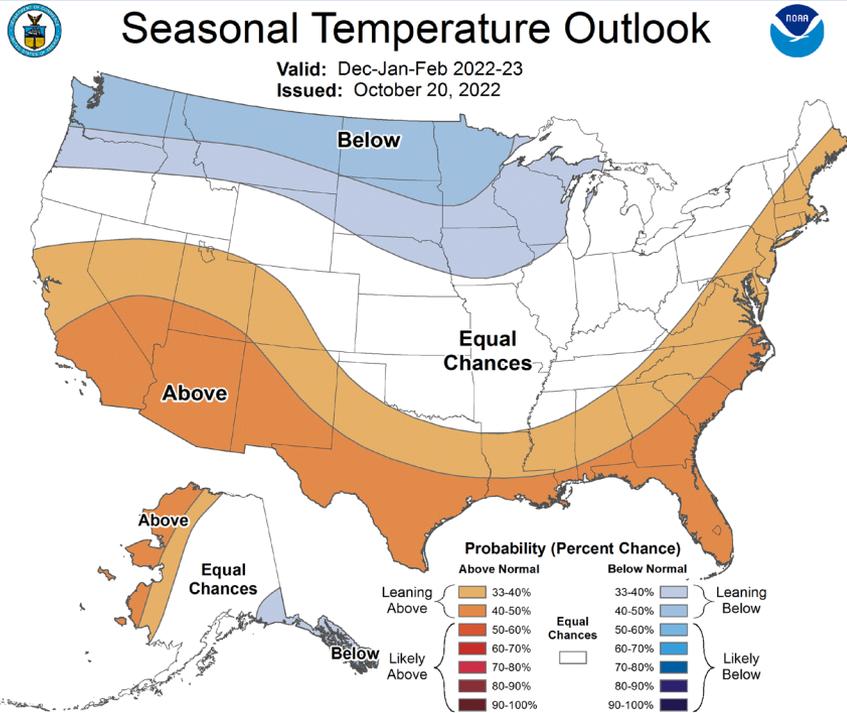
Author:

Adam Hartman  
NOAA/NWS/NCEP/CPC



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# THREE MONTH OUTLOOK



# NEW MEXICO'S WATER FUTURE = *DRIER / MORE VARIABLE*

- Anticipated continued changes in climate will mean less water is available while demands continue to increase.
- Given this new reality, *we must plan ahead* to ensure continuing economic development and the needs of all New Mexicans are met.

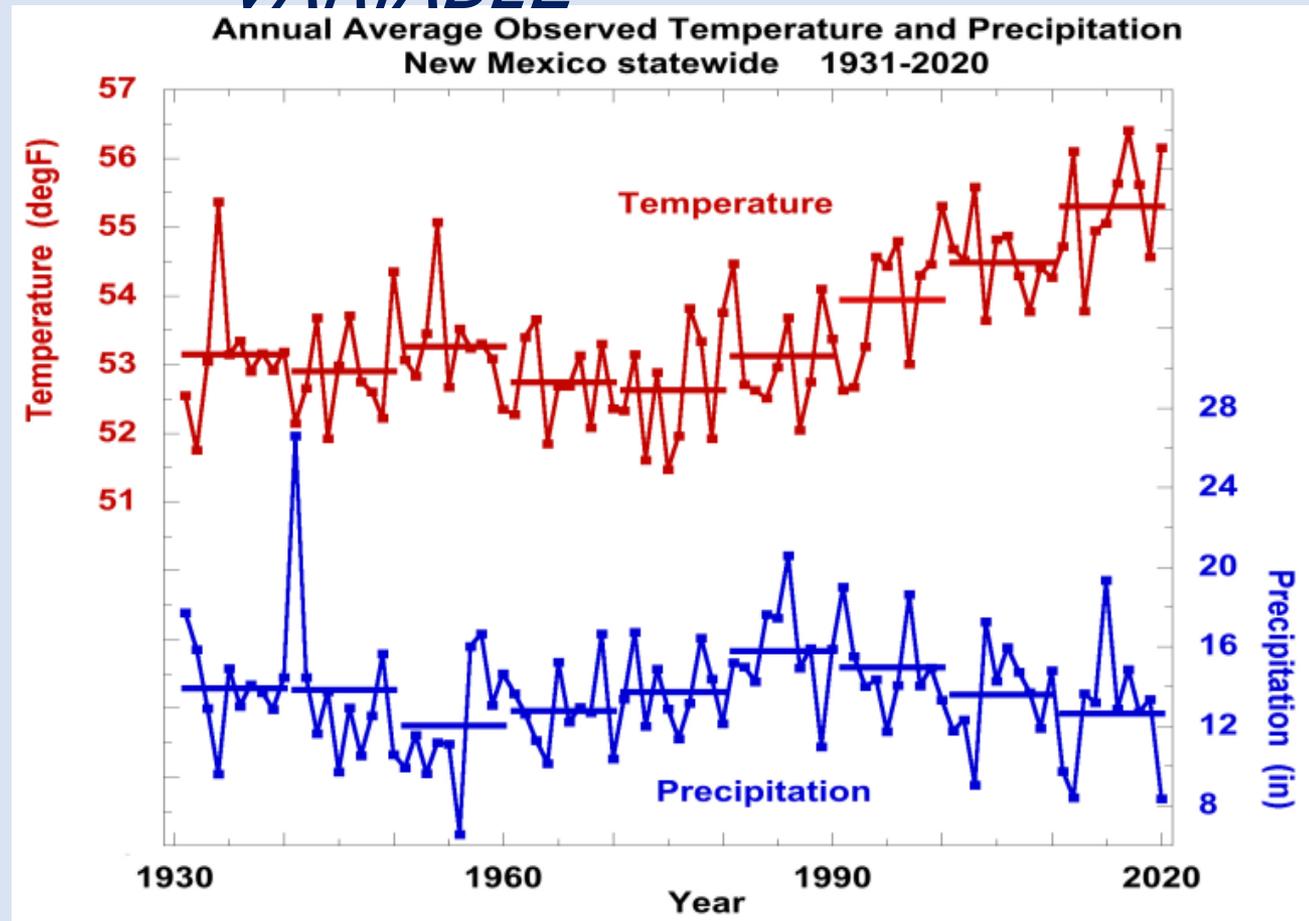
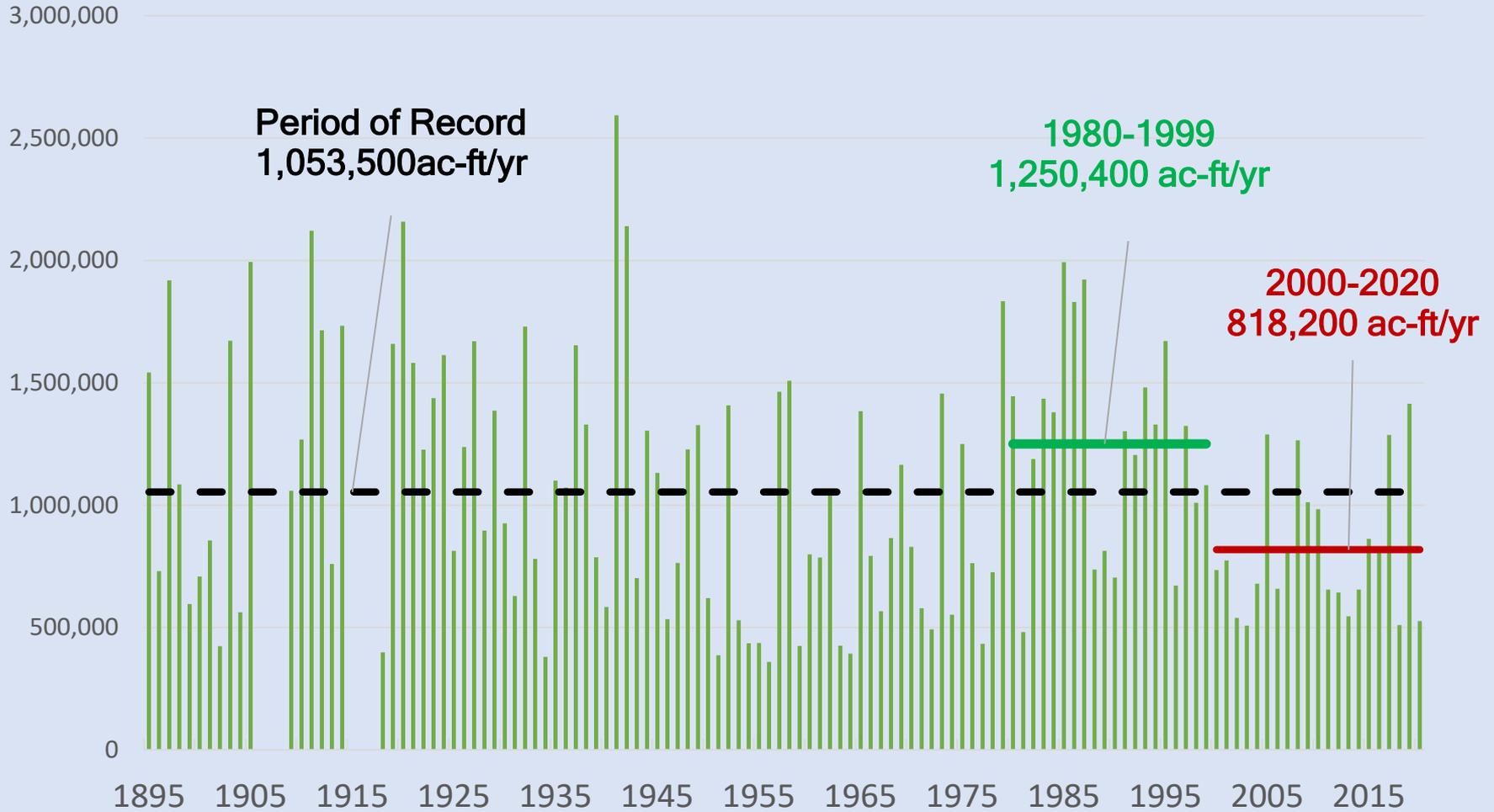


Image from [Climate Change in New Mexico over the Next 50 Years: Impacts on Water Resources](#)

# ANNUAL FLOW OF RIO GRANDE AT OTOWI GAGE



From USGS in Acre-Feet per Year

# Water Infrastructure and Capacity

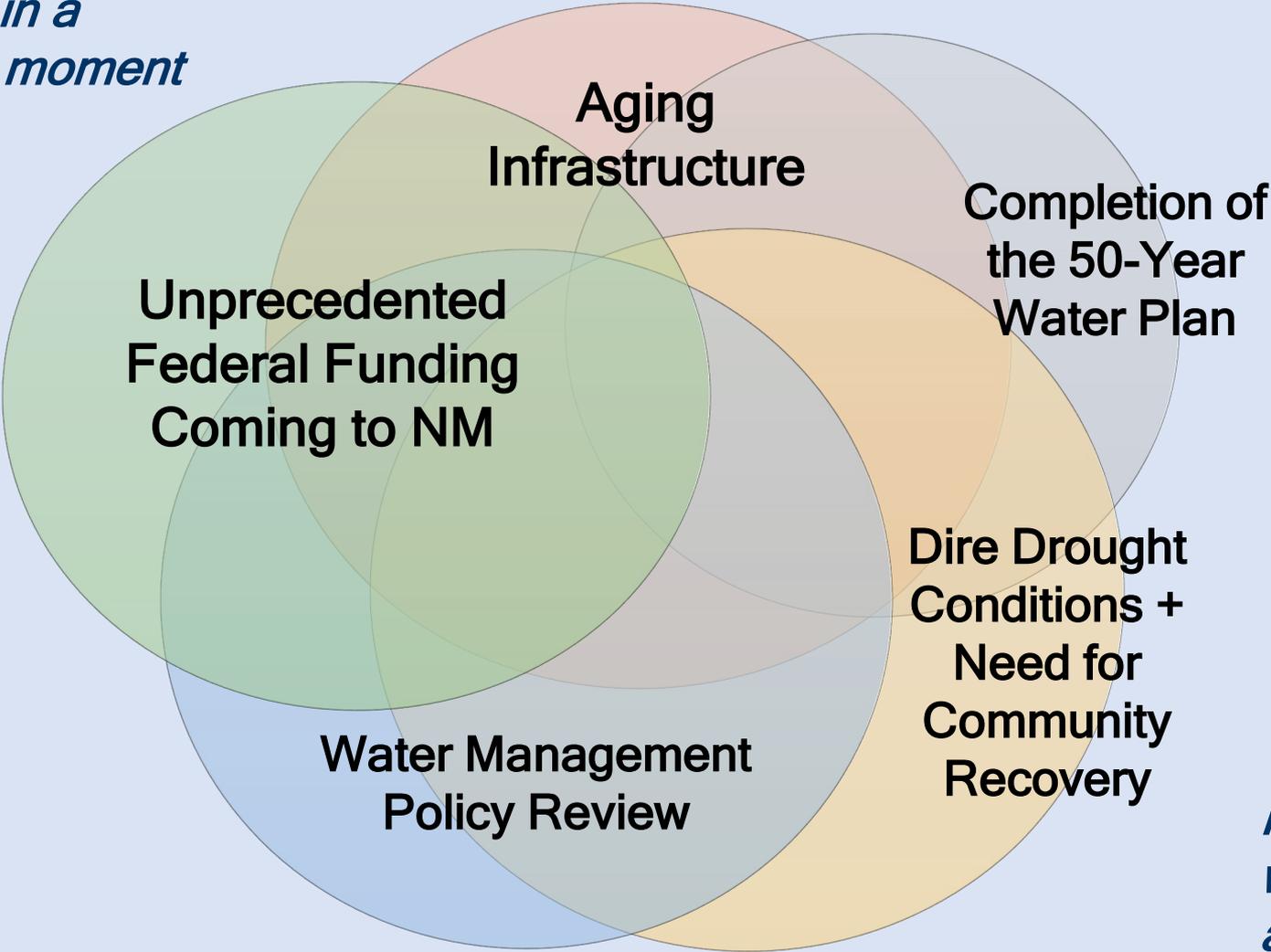
- **June 2021 LFC Report** - The staff of the Legislative Finance Committee investigated the manner that capital outlay was not effectively or adequately addressing the needs of rural water and wastewater systems.
  - Major finding shows that New Mexico is the lowest in the US in utilization of federal water, wastewater and stormwater funding programs leaving millions of federal dollars on the table and reallocated to other states.
- **New Mexico Rural Infrastructure Needs Study, Legislative Council Services, December 2021** - Prepared by rural water infrastructure experts using stakeholder interviews that identified a number of issues in addressing rural water needs ranging from poor or inadequate planning, lack of human capacity, need for more flexibility in grant and loan programs and more consistency in funding streams.
- **New Mexico Water Trust Board** - Originally developed to assist large water development projects for leveraging federal water project funding, the WTB has evolved to help address some of the rural communities needs but is not a great fit to address the human capacity issues that plagues many from qualifying.
- **New Mexico Environment Department Review of SRF** - With nearly a zero percent interest rate, small utilities and mutual domestics still resist loans for a variety of reasons

# THE VISION

- Recognizing these problems, Governor Lujan Grisham assigned her Water Advisor and later State Engineer to help address these problems through the formation of a Water Policy and Infrastructure Task Force (Water Task Force)
- The Water Task Force consists of 20 volunteer citizens that are water experts that represent a wide group of stakeholders for all four regions of the state along with representatives from state agencies to serve for a period not to exceed one year to develop recommendations to address these vexing problems.
- Recommendations would be transformative with a focus on immediate, mid and long-term solutions that would set the stage for foundational and lasting improvements as we prepare New Mexicans for a declining water resource.
- To take full advantage of the unprecedented level of federal and state funding in a manner that move our rural communities from dependency to self-sufficiency and resilience over the next decade.

# WATER POLICY AND INFRASTRUCTURE TASK FORCE

*A once in a lifetime moment*



*Is there a willingness to act?*

# THE APPROACH

- Initially, an Executive Order was explored but we shifted to a less formal approach and the 20 citizen and nine state agency Water Task Force members were recruited after the 30-day session.
- An Executive Committee was formed consisting of:
  - The State Engineer as Chair of the Task Force
  - The Deputy Secretary of NMED, Rebecca Roose
  - The Chief Executive Officer of NMFA, Marquita Russel
  - The Deputy Director of NMISC, Hannah Riseley-White
- Support team - Resources from the Thornburg Foundation provided support from the Utton Center for policy research and report development and NMISC contracted New Mexico First for facilitation and organizational logistics.
- A charter was developed stating the guiding principles of decision making that are founded upon group consensus

# THE PROCESS – Phase 1

- The Water Task Force met at least twice a month starting on June 5<sup>th</sup> with its initial in-person organizational meeting where the decision making process was discussed, schedules were set, and how to form ourselves into workgroups to tackle three main areas of interest. We also discussed how the Water Task Force shall engage in legislative coordination and it was agreed, through consensus, that the Chair would invite up to nine “legislative advisors” to observe and provide input.
- The three workgroups formed through division of interest as well as spreading the members as equally as possible between the following key issues:
  - Community drinking water, wastewater, and stormwater capacity, infrastructure and finance
  - Water resources management and planning
  - River, aquifer, and watershed health
- The workgroup formed co-leads and met frequently to develop a problem statement and key recommendations for each of the main topics. These recommendations were then voted on the full Task Force and, if accepted under the consensus rules, were adopted as recommendations to be added in the draft report. Other recommendations not receiving full consensus would also be documented in the report as such.

# THE PROCESS – Phase 2

- The Water Task Force draft report with all consensus developed recommendations is being utilized to brief legislative committees and developing discussions with a between the legislative advisors that consist of membership of the Legislative Finance Committee and the Water and Natural Resources Committee.
- A legislator workshop is tentatively scheduled for the morning of November 15 to continue discussing both policy and funding initiatives identified by the Water Task Force as key needs to address many of the serious problems facing New Mexicans.
- Members of the Water Task Force will work closely with the Legislature and the Executive in the hopes that a transformative approach in solving the above stated problems will coalesce as we approach the 2023 session and beyond.
- The Water Task Force membership is also serving as Water Ambassadors to their regions, legislators and constituents and will certainly continue promoting the outcome of these efforts beyond the conclusion of the Water Task Force's work.

# COMMUNITY DRINKING WATER, WASTEWATER and STORMWATER CAPACITY, INFRASTRUCTURE, and FINANCE

## THE PROBLEM

Water and wastewater systems are essential for quality of life. Many of New Mexico's aging water and wastewater systems have been left behind and many communities lack adequate and resilient stormwater infrastructure. This leaves communities' health and well-being at risk as they struggle with the growing impacts of climate change.

## Recommendations:

- Create a Water Infrastructure Projects Authority to assist small communities
- Support regional water system collaboration
- Enhance technical assistance support to small communities
- Create an emergency relief fund to help communities like those hit by fires and post-fire flooding in 2022

# WATER RESOURCES MANAGEMENT AND PLANNING

## THE PROBLEM

New Mexico's climate has changed. The state is experiencing higher temperatures resulting in greater aridity and less available water. New Mexico lacks adequate capacity to advance current institutional tools to address the scale of the response needed.

New Mexico's reservoirs, rivers, and aquifers are at or near record lows, and scientists project an additional 25% decrease in streamflow and aquifer recharge over the next half century, even as New Mexico's population and economy change and grow. This threatens human and environmental uses of water. Watershed degradation compromises surface and groundwater supplies, exacerbating the gaps between water supplies and water demands.

## Recommendations:

- Transform, empower, and adequately fund the state's water management agencies to fully implement their mission in serving the citizens of New Mexico.
- Elevate water planning, through statutory clarification of its purpose, and proper funding of its work, and through empowerment of regional and local water agencies, to set clearly identified goals for permanent and escalating reduction in water use over the coming decades.
- Provide the necessary state funding needed to leverage the bounty of federal funding currently available for water infrastructure.
- Support the resilience of the state's diverse agricultural communities with effective water rights administration by the Office of the State Engineer (OSE), inclusion of agricultural stakeholders in water management, and consideration of equity, conservation and sustainability.

# RIVER, AQUIFER, and WATERSHED HEALTH

## THE PROBLEM

New Mexico's rivers, aquifers, and watersheds are experiencing unprecedented stress, depletion, and degradation as we navigate a warming and drying climate. Increasing incidences of drought conditions, intense precipitation events, catastrophic wildfires, and associated destructive erosion and sedimentation threaten our forest and watershed health, and surface and groundwater resources.

## Recommendations:

- Fully fund and staff the Strategic Water Reserve and the River Stewardship Program.
- Fund the New Mexico Environment Department to take over surface water quality regulation from the US Environmental Protection Agency.
- Review modifications to New Mexico groundwater law to enable New Mexico to increase resilience of the state's groundwater supplies and groundwater-dependent users.
- Modernize forest management programs for both preventative and post-fire recovery.

# Capacity Development

- **Communities Across the State**
- **State Agencies**
  - Internal Capacity for State Funding Management and Distribution
- **Private Sector**
  - Engineering Services, Construction Contracting, etc.
- **Program / Project Management**
- **Capital Funding Mechanisms Reform as Identified in the June 2021 LFC Report**
- **Solution - Water and Infrastructure Projects Authority**
- **Long-Term Sustainability for Rural and Agricultural Communities and Small Domestic Water Systems**



# Time to take action toward building a resilient water future!

