

# Legislative Finance Committee

## Preliminary Report on Water Policy and Infrastructure Task Force

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

May 19, 2022

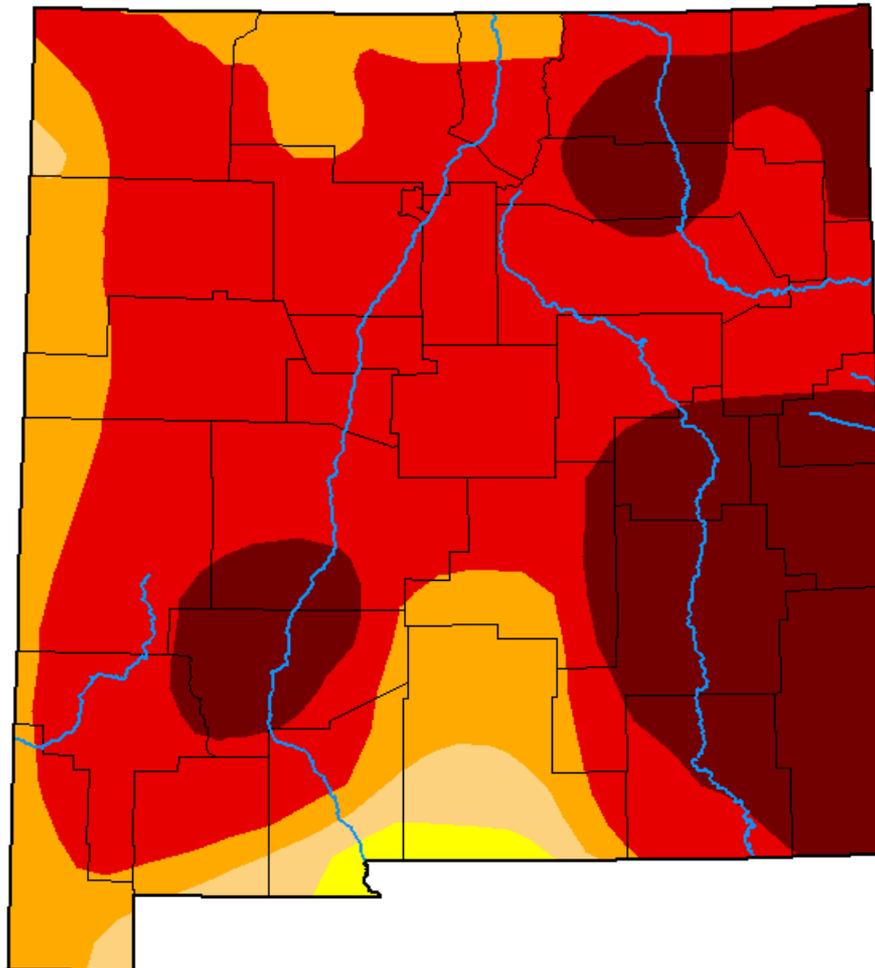




Calf Canyon Fire

# U.S. Drought Monitor New Mexico

**May 3, 2022**  
(Released Thursday, May. 5, 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	98.94	95.79	79.05	24.64
<b>Last Week</b> 04-26-2022	0.00	100.00	98.94	95.79	67.99	15.74
<b>3 Months Ago</b> 02-01-2022	0.00	100.00	97.15	78.16	29.76	2.53
<b>Start of Calendar Year</b> 01-04-2022	0.00	100.00	97.83	75.86	20.91	0.00
<b>Start of Water Year</b> 09-28-2021	10.70	89.30	79.47	49.33	19.12	0.00
<b>One Year Ago</b> 05-04-2021	0.00	100.00	100.00	99.37	80.50	52.12

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:

David Simeral  
Western Regional Climate Center



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

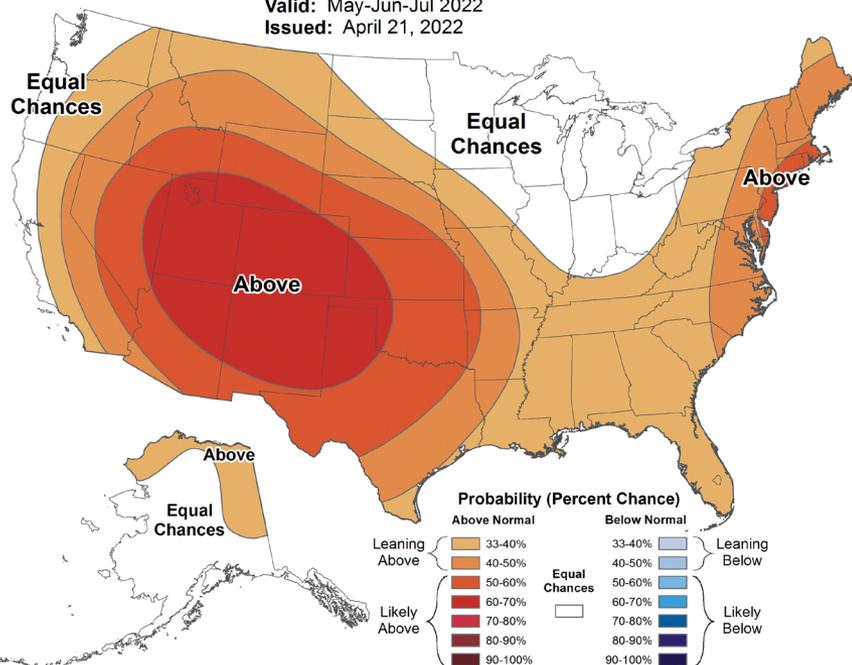
# THREE MONTH OUTLOOK



## Seasonal Temperature Outlook



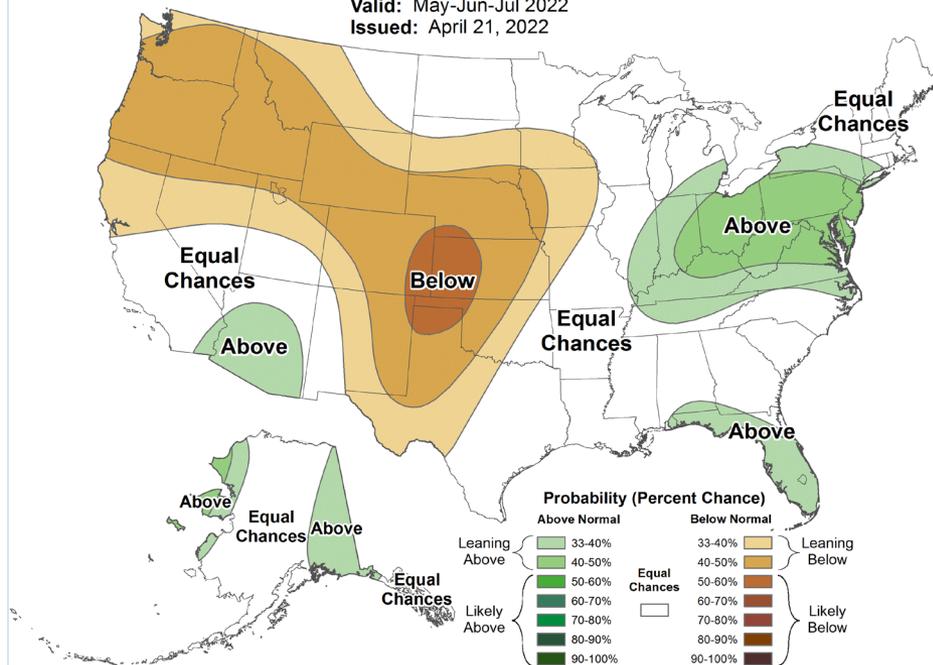
Valid: May-Jun-Jul 2022  
 Issued: April 21, 2022



## Seasonal Precipitation Outlook



Valid: May-Jun-Jul 2022  
 Issued: April 21, 2022



# 50-YEAR WATER PLAN UPDATE

- Completion in Summer 2022
- Goal » Help New Mexico prepare for the impacts of climate change impacts to water resources
  - Stewardship
  - Sustainability
  - Equity



# 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.

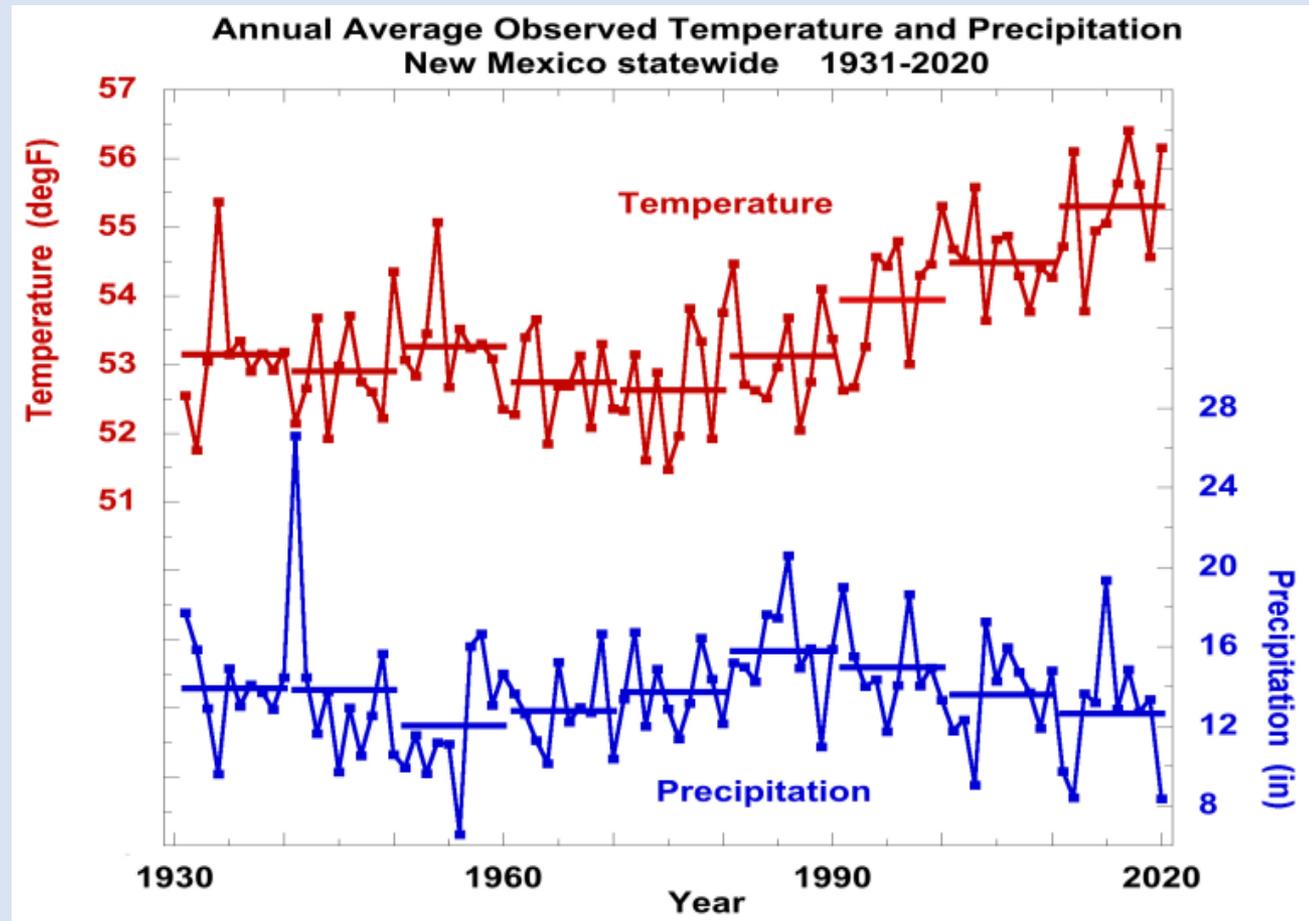


Image from [Climate Change in New Mexico over the Next 50 Years: Impacts on Water Resources](#)

Higher Emissions (RCP 8.5) 2040-2069 vs. Historical Simulation 1971-2000, Mean Change

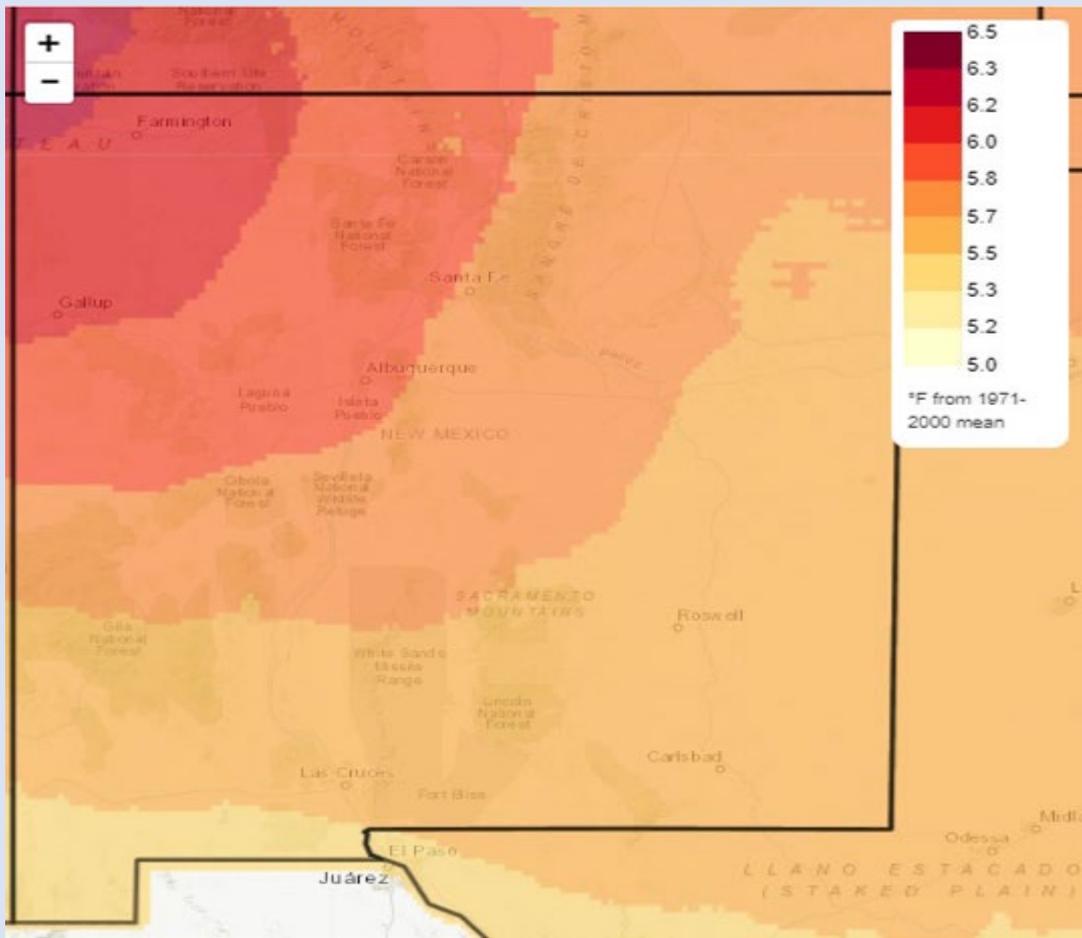


Image from [Climate Change in New Mexico over the Next 50 Years: Impacts on Water Resources](#)

# Temperature Change in New Mexico

Temperature increase throughout the entire state.

Higher temperatures result in *increased loss of water* from our landscapes, including increased crop demands.

Annual average temperature simulated by 20 CMIP5 climate simulations by different models, spatially averaged over the state of New Mexico. Temperature change is defined as the difference between two thirty-year averages: (2040-2069) minus (1971-2000); the central years of these averaging periods are 70 years apart, so this plot represents 70-year temperature changes across the state.

# Climate Change and Water in New Mexico: The Next 50 Years

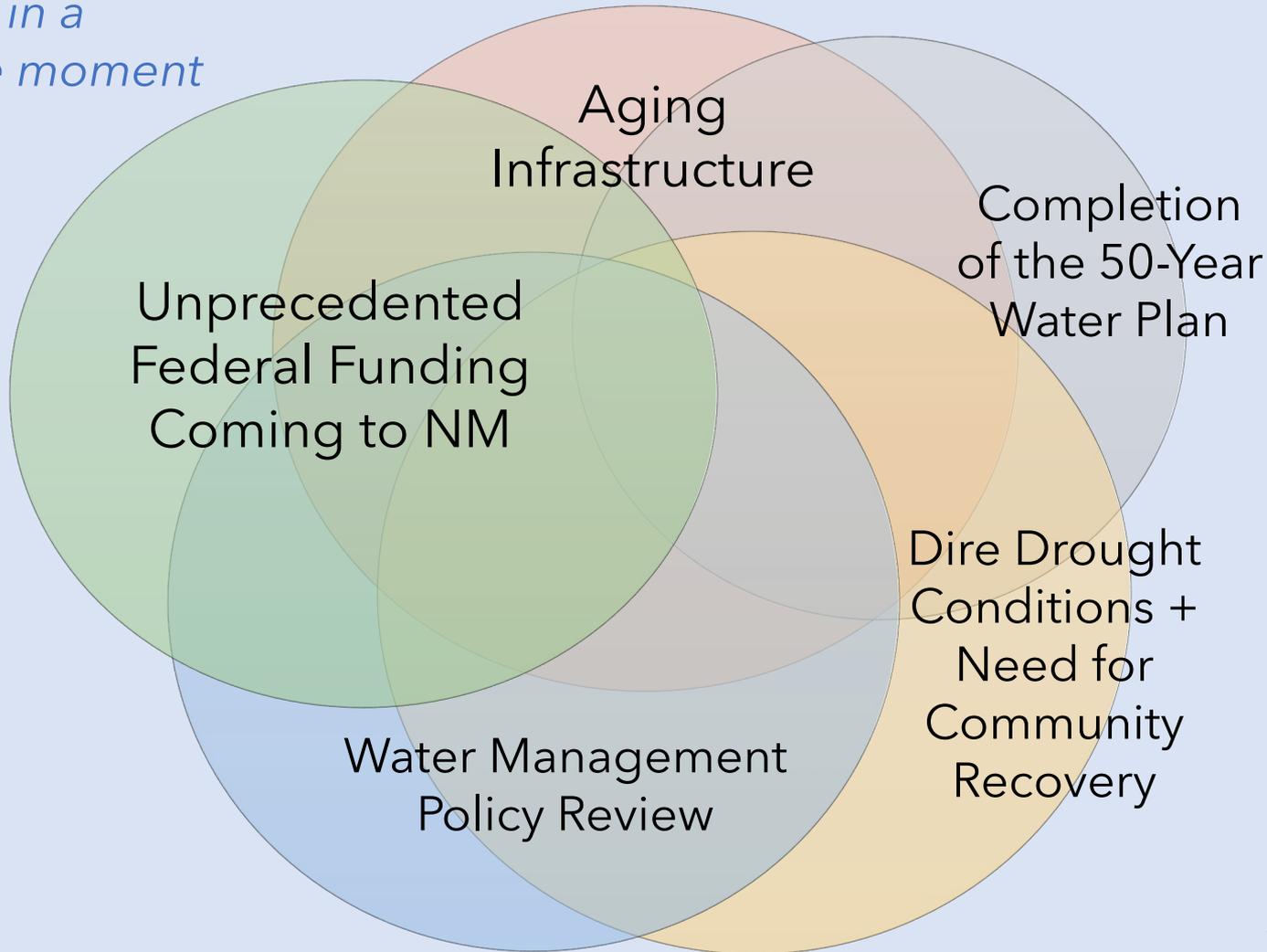
- *Average temperature rise of 5° to 7°F*
- *Lower streamflow and aquifer recharge*
- *Greater year-to-year variability in precipitation*
- *Hotter, more severe droughts*
- *Decreasing snowpack, earlier and diminishing runoff*
- *Greater demands on dwindling groundwater due to surface water shortfall*
- *Stress on natural vegetation caused by increasing temperature and decreased water availability*
- *Increasing catastrophic forest fire frequency resulting from heat and dryness*
- *Increasing flooding and sediment transport due to more intense storm events and fires*
- *Irreversible damage to soils through loss of vegetation and erosion*
- *Degraded quality of surface waters*

We need to plan for resilience together.



# Water Policy and Infrastructure Task Force

*A once in a  
lifetime moment*



*Is there a  
willingness  
to act?*

# Water Policy and Infrastructure Task Force

GOAL » Bring expertise from every water use sector to the table to craft recommendations for action related to:

- 1) Preparing for Continued Drought and Climate Change Impacts to Water Resources  
= *Input to the 50-Year Water Plan*  Summer 2022
- 2) Review Current Water Policies to Address Both Regional and Statewide Water Management Goals » Recommended Legislation
- 3) Funding Mechanisms Reform Related to Water Infrastructure
- 4) Capacity Development on Multiple Levels  
= *Report to the Legislature*  Fall 2022

# Role of the Task Force

## Task Force is:

- Consensus Driven Process
- Statewide with Regional/Community Focus
- Short-lived
  - through 2023 Session
- Resource for Finalizing and Implementing the Governor's 50-Year Water Plan
- Focused on Tangible Outcomes:
  - Water Policy Review
  - Water Infrastructure Funding Process Reform
  - Internal and External Capacity Development
  - Legislature Resource

## Task Force is not:

- Just Another Task Force
- Special Interest Focused
- Intended for Prioritizing Funding Use or Developing Project Lists
- State Agency Driven

**75%** of voters think we need to *act now* to ensure that future generations have an adequate water supply  
— 2021 Poll

# 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
- Funding Mechanisms Reform and Coordination
- Long-Term Sustainability for Rural and Agricultural Communities and Small Domestic Water Systems



# Funding Mechanism Reform



See

June 2021 LFC Report on State Funding for Water Projects

Time to roll up our sleeves and get to work.

