

Water Dialogue

“An Unprecedented Water Crisis: A Time to Act”

January 12, 2022
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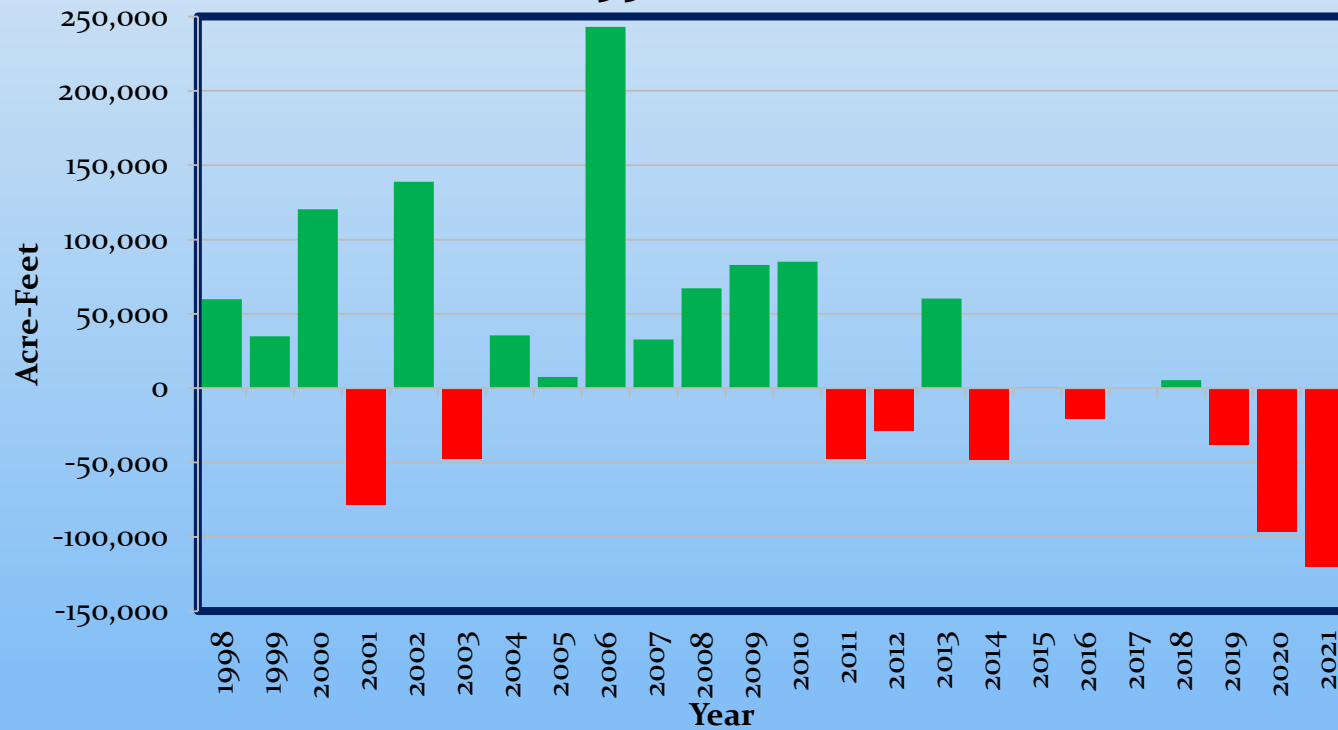
Evolution of New Mexico Water Policy

- Spanish/Mexican Law for Acequias utilizing sharing of shortage and community unity as the guiding principle
- Establishment of Prior Appropriation Doctrine with 1907 as the starting point for administration
- 1923 Conservancy Act for the improvement of the middle Rio Grande valley – construction of El Vado Dam
- Interstate Compacts for the Rio Grande, Colorado, Pecos, Canadian, Costilla and Animas-La Plata
- Federal projects: Elephant Butte Dam, Dams on the Pecos, San Juan-Chama, Navajo Dam, Flood Control Acts, etc.
- Adjudications, Active Water Resource Management?

Persistent Drought and Climate Change

- 20th century water policies and infrastructure scaled to above average water supplies in the long-term record
- Paleo-hydrology indicates that the current background drought is part of the longer-term cycles
- How is this cycle impacted by CO₂ driven climate change?
- Observations since the 1980s reveal warmer springs with reduced low snow persistence into earlier spring runoffs that have changed hydrographs impacting infrastructure
- The Leap Ahead Analysis by Emilia Dunbar and team reveals added aridity due to higher temperatures

NM RG Compact Annual Over/Under Delivery 1996-2021

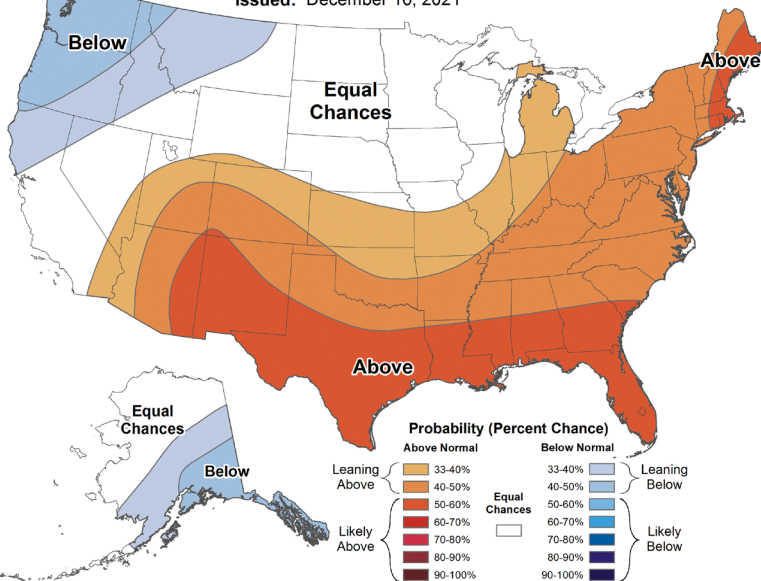


NWS 90-Day Outlook



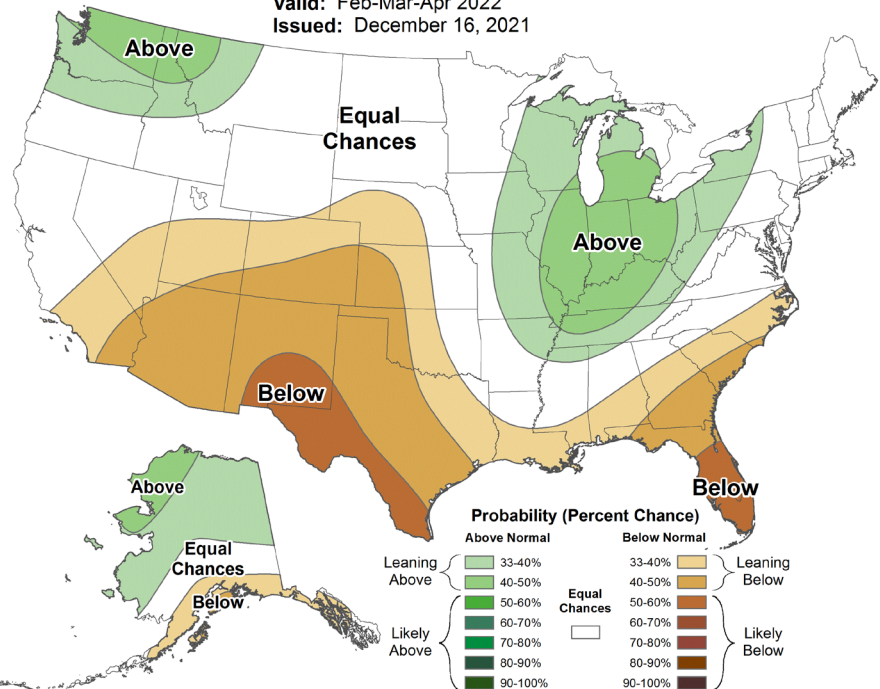
Seasonal Temperature Outlook

Valid: Feb-Mar-Apr 2022
Issued: December 16, 2021



Seasonal Precipitation Outlook

Valid: Feb-Mar-Apr 2022
Issued: December 16, 2021



Solutions – and Opportunities

Short-term actions

Perform dynamic fallowing using funds for voluntary and temporary fallowing across the state – Drought Mitigation Fund

Address infrastructure needs with new funding – ARPA and Bi-partisan Infrastructure funds with focus on equity for underserved communities

Streamline state funding mechanisms through review of current procedures

Complete 50-year water plan with recommendations vetted through a Water Policy and Infrastructure Task Force by July in time for the 60-day session

Longer-term actions

Develop agricultural system that is scaled to new average supplies

Create managed conjunctive use strategies through administration of groundwater uses – AWRM for shortage sharing agreements and settlements

Address stormwater capture, treatment and use strategies

Optimize reservoir systems with new authorities and re-thinking Compacts based upon new normal similar to what's occurring on the Colorado River

Assure preservation of eco-systems and traditional communities



Questions?