

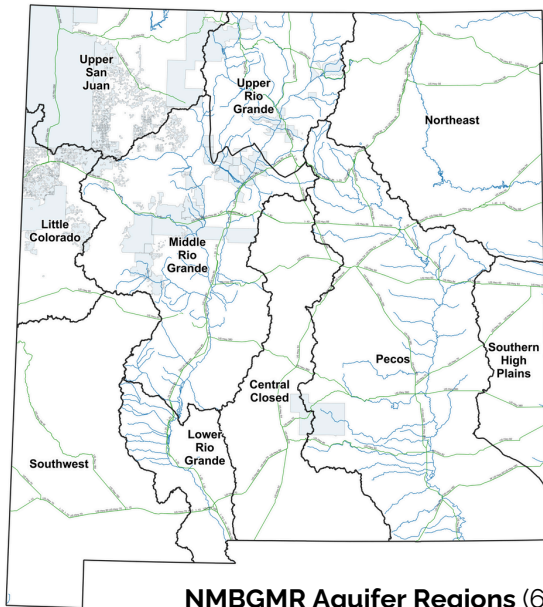
Valencia County

September 18th, 2024



Water in New Mexico

One of New Mexico's biggest challenges is water scarcity. New Mexico has the lowest water to land ratio of all 50 states (1), and climate change is only expected to intensify our water challenges. Water quality is also threatened by contaminants both artificial and natural. Arsenic, uranium, nitrate, fluoride, and bacteria are among the most problematic contaminants in the state (2). New Mexico surface water sources consist of six major river basins:

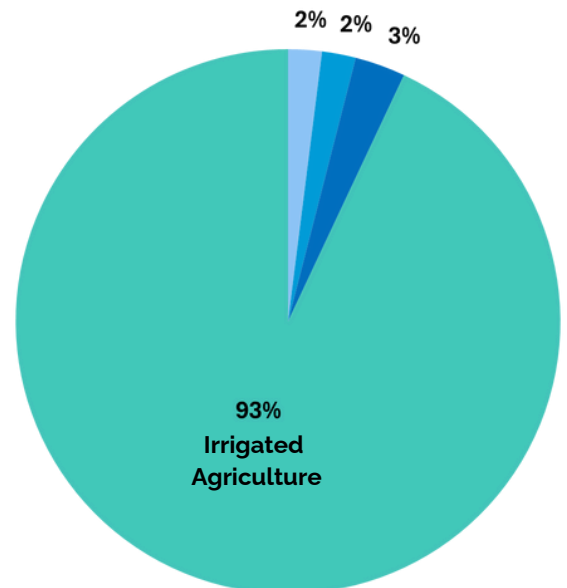


NMBGMR Aquifer Regions (6)

Arkansas-White-Red, Lower Colorado, Pecos, Rio Grande, Texas Gulf, and Upper Colorado (3). Despite the presence of numerous river basins, 78% of New Mexicans rely on groundwater for their drinking water (3). The [New Mexico Environment Department \(NMED\)](#) is responsible for managing water infrastructure systems and addressing water quality issues throughout the state (except on tribal lands), including the implementation and enforcement of the federal Safe Drinking Water Act (2). [The Office of the State Engineer](#) has authority over the supervision, measurement, appropriation, and distribution of all surface water and groundwater in New Mexico, including streams and rivers that cross state lines (4). [The New Mexico Interstate Stream Commission](#) investigates, protects, conserves, and develops New Mexico's waters including both interstate and intrastate stream systems (5). The [New Mexico Bureau of Geology and Mineral Resources Hydrology Programs](#) (6) provide independent geologic mapping collaborative hydrologic research statewide, including the aquifer mapping program (left).

Water in Valencia County

Valencia county has a population of 76,205 and a land area of 1,066.7 square miles (7). . Located south to Bernalillo County and Los Lunas being its county seat, Valencia County is part of the Rio Grande River Basin, with Isleta and Laguna pueblo to the north (3). The Rio Grande is the principal surface water source of this county; other sources include the Rio San Jose and the Rio Puerco to the west of the county (8). On the other hand, groundwater is pulled from the Belen Sub-basin which is a subdivision of the Albuquerque basin. The Santa Fe Group aquifer system is the principal source of water supply in the Albuquerque Basin (9). Irrigated agriculture is the biggest consumer of water in the county with most of its withdrawals being surface water. Residents rely on groundwater from both private wells and public water supply systems for their drinking water supply (3, 10). Common causes of water quality issues in the county include mercury, E. coli bacteria, sediment and turbidity, temperature, and nutrients (8).

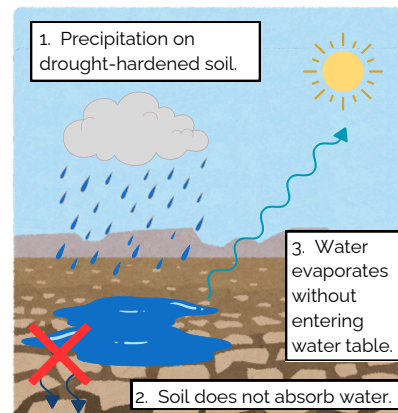


- Domestic (self-supplied)
- Commercial, Livestock, Industrial, & Power (self-supplied)
- Public Water Supply
- Irrigated Agriculture

Frequently Asked Questions

What are the water challenges faced by Valencia County?

- A major concern for Valencia County is the impact of increased drought on surface water supply. Extended dry periods reduce the soil's ability to absorb precipitation, and increases the risk of wildfires and floods (10).
- The Manzano Mountains and Rio Grande Bosque will become more vulnerable to wildfires, especially as droughts become longer/more intense. When vegetation burns at high intensity, places become prone to erosion. Besides the direct damage from fire, the loss of vegetation can raise the risk of flooding and affect surface water quality (10).
- In Valencia County, the highest risk of flood damage is for those living along the Rio Grande, near arroyos, and within flood plains. Many drainage areas and flooding issues cross jurisdictional boundaries, causing management issues (10).

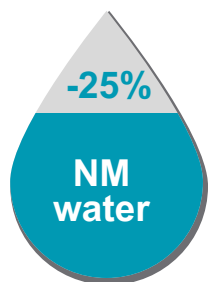


How is Valencia moving towards sustainable water management?

In its 2022 Comprehensive County Plan, Valencia County set a number of environment and natural resource goals and action items, including (10):

- Promote water conservation through programs for residents and regional surface water supply management.
- Explore water reuse programs, including the viability of expanded sewer systems with water reuse components, and education and incentive programs for the reduction of water use.
- Partner with farmers and other agricultural stakeholders on water management programs.
- Update the Hazard Mitigation Plan and regularly assess the conditions of critical infrastructure, such as flood control facilities.
- Support a local flood control authority that raises local revenue for critical infrastructure.

What is the 50-Year Water Action Plan?



The New Mexico Office of the Governor has developed a 50-year water action plan to address the state's water challenges now and in the future. Over the next 50 years, it is predicted that New Mexico will have about 25% less water available in rivers and aquifers (11). Additionally, it is expected that Climate Change will make the state hotter and dryer, change precipitation patterns, and increase occurrence of fires, flooding, and drought. The plan proposes a series of actions to secure New Mexico's water supply through water conservation, new water supplies, and water and watershed protection.

Additional Resources

Statewide

- 1) [NM 50-year water plan](#)
- 2) [2018 New Mexico State Water Plan – Policies](#)
- 3) [2018 New Mexico State Water Plan – Technical Report](#)
- 4) [2018 New Mexico State Water Plan – Legal Landmarks](#)
- 5) [New Mexico Water Data](#)
- 6) [New Mexico Environment Department](#)
- 7) [Climate Change in NM Over the Next 50 Years: Impacts on Water Resources](#)

Regional

- 1) [Regional Water Planning](#)
- 2) [Mid-Regional Council of Governments](#)

Countywide

- 1) [County Economic Summaries & Data Profiles](#)
- 2) [Valencia County](#)
- 3) [Valencia County Comprehensive Plan 2022](#)