

NEW MEXICO WATER FACTSHEET

Bernalillo County

July 10th, 2024

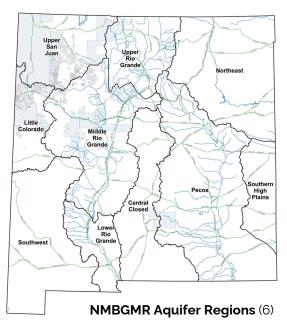


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Water in New Mexico

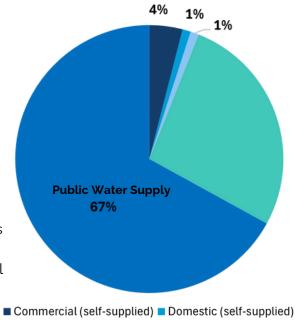
One of New Mexico's biggest challenges is water scarcity. New Mexico has the lowest water to land ratio of all 50 states (1), and climate change is only expected to intensify our water challenges. Water quality is also threatened by contaminants both artificial and natural. Arsenic, uranium, nitrate,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



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 Recourses Hydrology Programs (6) provide an independent geologic mapping collaborative hydrologic research statewide, including the aquifer mapping program (left).

Water in Bernalillo County

With a population of 676,444, Bernalillo County is the most populous county in the state. Bernalillo County's 1,167 square miles of area are located within the Rio Grande Basin. Water resources in Bernalillo County differ between the east and west sides of the Sandia Mountains. In the east, the aquifers consist of thin to moderately thick sedimentary and fractured bedrock aquifers, which are accessed by individual domestic wells or small public water supply wells of varying depths. To the west, most residents are served by the Albuquerque Bernalillo County Water Utility Authority (ABCWUA), which draws its groundwater supply from the Santa Fe Group alluvial aguifer and surface water (12) from the San Juan-Chama Drinking Water Project (7). This project is a conduit system consisting of small diversion dams, tunnels, and siphons that divert water from the Colorado River Basin to the Rio Grande watershed (8). The San Juan-Chama Project provides an average annual diversion of about 110,000 acre-feet of water to the Rio Grande Basin. The water supply for residents who are not on the ABCWUA system in this area is groundwater sourced from either upper Quaternary alluvial Industrial (self-supplied) sediments or the upper portion of the Santa Fe Group aguifer (12). Public Water Supply

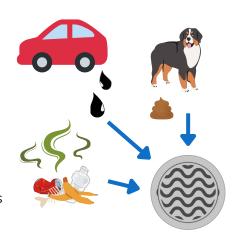


Irrigated Agriculture

Frequently Asked Questions

What are the water challenges faced by Bernalillo County?

- Because of the earlier and weaker snow-fed flood pulse, streamflow volume in the Rio Grande River is projected to decline, especially in late spring and early summer. These changes will likely decrease water availability and increase crop/landscape water needs in Bernalillo County in the future (12).
- Drinking water in Bernalillo County may contain some levels of arsenic, with levels ranging from non-detectable to over 50 ppb. Long-term exposure to elevated concentrations of arsenic in drinking water can lead to both cancerous and non-cancerous health effects (10).
- As the county's population grows, stormwater pollution becomes a bigger concern. Pollutants can come from both industrial and daily activities, such as leaked automobile fluids, pet waste, and litter.



How is Bernalillo moving towards sustainable water management?

- Water Conservation Plan Bernalillo County: The Bernalillo County Water Conservation Program supports County residents in the efficient and responsible use of water. The program promotes water conservation through education and outreach, incentive programs, assistance to water systems, and leading by example by conserving water at County facilities, and a Water Conservation Ordinance (12).
- ABCWUA Water Quality Report: Every year, thousands of water samples are collected to test the quality of water by ABCWUA. The Water Authority provides water that meets all state and federal legal standards for safe drinking water, although some federal standards are being introduced and revised (13).

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 (14). 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

Regional

- 1) Regional Water Planning
- 2) Mid-Region Council of Governments

- 5) New Mexico Water Data
- 6) New Mexico Environment Department
- 7) <u>Climate Change in NM Over the Next 50 Years:</u> Impacts on Water Resources

Countywide

- 1) County Economic Summaries & Data Profiles
- 2) Bernalillo County Water/Wastewater/Stormwater
- 3) Albuquerque Bernalillo County Water Utility Authority