

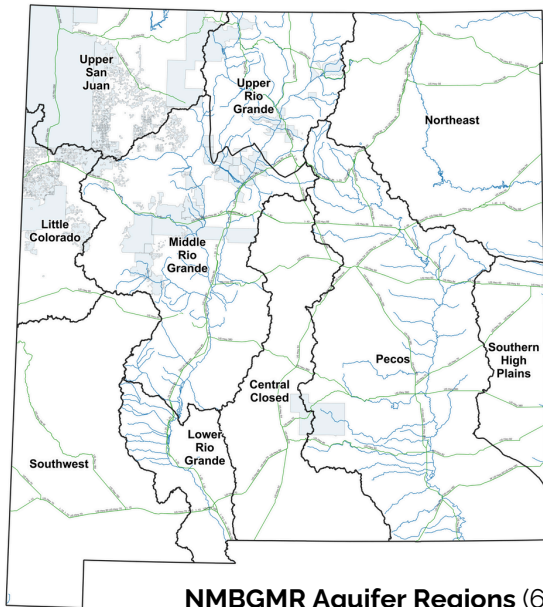
Colfax County

June 27th, 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:

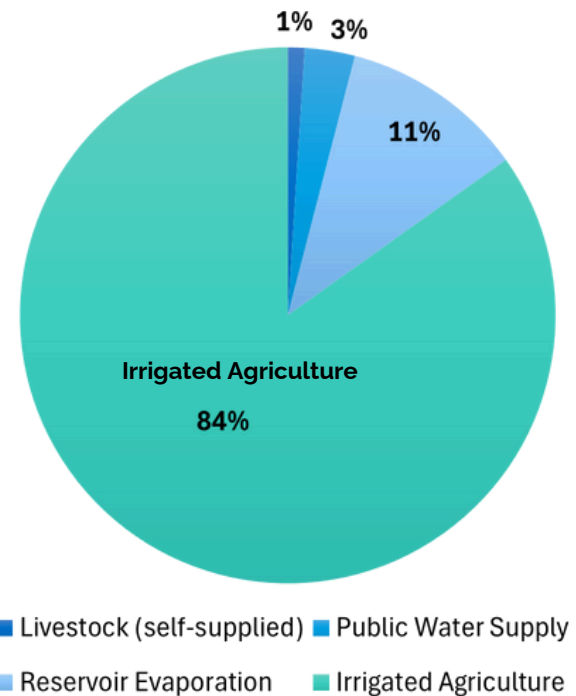


NMBGMR Aquifer Regions (6)

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 an independent geologic mapping collaborative hydrologic research statewide, including the aquifer mapping program (left).

Water in Colfax County

Part of the Arkansas-White-Red River basin, Colfax County is 3,758 square miles in area with a population of 12,387 (7). Most of Colfax County's water supply needs are met with surface water from the Canadian River and its tributaries. The county also has many reservoirs, streams, and lakes. Of these, Eagle Nest Lake is the most significant at just under 80,000 ac/ft (8). Eagle Nest Lake serves as a public water supply, irrigation source, and recreational resource for the area (8). The major tributaries to the Canadian River include the Vermejo River and Cimarron River, both originating in the northern and/or western parts of the county. Below Eagle Nest Reservoir, Ponil and Rayado Creeks are significant tributaries to the Cimarron River. These primary drainages account for most of the surface water supply in Colfax County (9). Although groundwater accounted for only about 2 percent of all county water diversions in 2015, it remains important as the only source of drinking water for many communities. In Colfax County, the villages of Angel Fire, Eagle Nest, and Maxwell water systems are supplied by groundwater, as are numerous smaller systems and domestic and livestock wells (9).



Frequently Asked Questions

What are the water challenges faced by Colfax County?

- Colfax's high reliance on surface water makes the area drought-vulnerable (9).
- Various inefficient irrigation delivery systems (irrigation ditches) are being used within the county, creating large losses of water (9).
- Due to the large amount of forested land in the region and recent drought conditions, the threat of wildfire and subsequent sedimentation impacts on streams and reservoirs is a key challenge (9).
- Common causes of impairment of surface water in the Colfax region include E. coli bacteria, nutrient/eutrophication, temperature, sediment/siltation, turbidity, and mercury in fish tissue (9). Causes of this pollution include grazing, loss of riparian ecology, low road crossings, flow alteration and point source pollution (8).

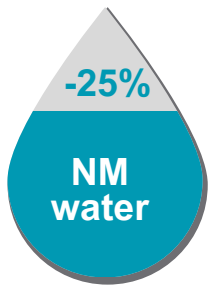


How is Colfax moving towards sustainable water management?

Proposed Strategies to meet future demand in the Colfax County 2016 Regional Water Plan (9) include:

- Continued landscape-scale forest and watershed restoration in Colfax County to limit catastrophic fires, mitigate negative effects of wildfire, and protect/restore water quality.
- Increasing efficiency of all irrigation systems in Colfax County by updating diversion works, measuring devices, cleaning the ditches, and checking the grades for proper slope.
- Eagle Nest Release Management - The Middle Cimarron River supports a vibrant fishery between Eagle Nest Dam and the Village of Cimarron. Arranging voluntary transactions to support sufficient flow during winter months would provide for a sustainable trout habitat in this region.

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 (10). 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) [North Central New Mexico Economic Development](#)

District

Countywide

- 1) [County Economic Summaries & Data Profiles](#)
- 2) [Colfax County](#)