

Broad River

WATER AUTHORITY

An Overview of Our Utility

The Broad River Water Authority (BRWA) is a local government entity that was founded in 1999 by local officials who had a vision for local control of their own water resources. The young company issued bonds and purchased the Duke Power Company's Rutherford Water System in December of 2000. The water system includes a modern water plant located on our water source, the Broad River, one of the cleanest and most dependable rivers in North Carolina. The distribution system serves the Towns of Ruth, Rutherfordton and Spindale; and many other areas of the county.



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As an independent, nonprofit municipal corporation formed under the laws of the State of North Carolina, the BRWA is overseen by a board of eight directors, two each appointed for three-year terms by the governing elected commissions from the Towns of Ruth, Rutherfordton and Spindale; and the County of Rutherford. Meetings, which are always open to the public, are held monthly, usually on the fourth Tuesday of each month at 5:15 p.m. at the Rutherfordton Town Hall. Every meeting provides an opportunity for any person to address the Board on any matter of inquiry or concern. The Board sets policy and rates, adopts an annual budget and hires a General Manager to carry out policy, make recommendations and administer the daily activities of the water system's operation. The water system currently is managed by Maria Hunnicutt (General Manager), Reid Hammett (Distribution Superintendent), and Brad Joyner (Water Plant Superintendent).

Source Water

The source of water for the BRWA Water Treatment Plant (WTP), the Broad River, is fed by a Class IV watershed located primarily in northeast Rutherford County, and extending into parts of McDowell, Buncombe and Henderson Counties. Located near the headwaters of the Broad River with limited industrial and commercial development in the watershed, the BRWA is fortunate to have a reliable water source with low turbidity. The utility is permitted to draw up to 13 MGD (million gallons per day) through its intake channel, cut upstream from the river itself. After passing through an oil and debris containment boom and a bar screen, the water is pumped to the head of the WTP to begin the treatment process.

Water Treatment Plant

Located at 1661 Baber Road in Rutherfordton, the BRWA WTP was originally constructed as an 8 MGD conventional treatment plant (coagulation, flocculation, filtration and disinfection) by Duke Power in 1983. Since being purchased by the BRWA in December of 2000, the plant has undergone multiple upgrades. The largest, which occurred in 2010, included: a new jet mix system for coagulation, multistage flocculator arrangement, tube settlers, and an air scour filter backwash system. Additional upgrades include new raw water, backwash, high service and booster



The BRWA Water Treatment Plant has undergone multiple upgrades in recent years.

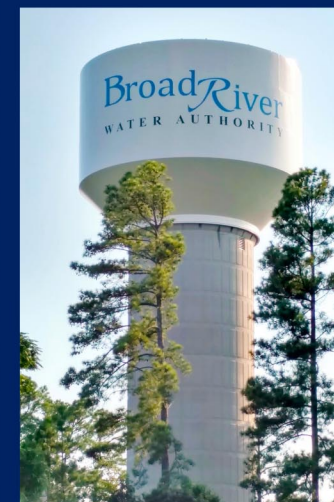


Poors Ford 5 MG ground storage tank.

pump motors, a new generator for backup power, and updates to SCADA and security systems. After the water has been treated, filtered, disinfected and conditioned for the distribution system, it is pumped to a 5 MG ground storage tank (clearwell), located on Poors Ford Road in Rutherfordton. From there, BRWA's primary booster pump station, located adjacent to the clearwell, sends clean, pressurized water into our distribution system.

Distribution System

On average, the BRWA treats and distributes 5.65 MGD to its customers, with daily production ranging from 4 to 8 MGD throughout the year. This water is stored and pressurized by three primary, elevated storage tanks: Railroad Ave. (750,000 gallons), Spindale (500,000 gallons), and Harris (500,000 gallons). Additionally, two smaller pump stations, (Little Mountain and Pinnacle), provide storage and pressure to customers at higher elevation, near the boundary of BRWA's system. In total, the distribution system consists of approximately 250 miles of pipeline ranging from 2 to 24 inches in diameter.

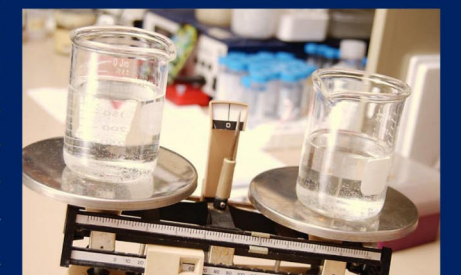


Harris 500,000-gallon elevated storage tank.

Pipe materials include ductile and cast iron, PVC, HDPE, and galvanized iron. Through the distribution system the BRWA serves over 16,000 customers with 6,800 meters in the following communities: Rutherfordton, Spindale, Ruth, Mt. Vernon, Gilkey, Shiloh, Harris, Cliffside, Henrietta, and Caroleen. We also supply water to Polk County, NC, to Grassy Pond Water Company (Cherokee County, SC), and to Inman Campobello Water District (Spartanburg County, SC).

Laboratory

Located at the WTP, the BRWA Laboratory is responsible for continually monitoring water quality, making sure that the water leaving the plant meets or exceeds State regulatory standards. Parameters such as pH, turbidity, and chlorine residual are tested hourly. Bacteriological tests are run daily, with 15 additional tests conducted monthly at designated points in the distribution system. Other parameters, including alkalinity, hardness, iron, manganese, and orthophosphate are checked weekly. Additional tests are completed by commercial labs throughout the year in accordance with State regulatory schedules. A comprehensive list of testing results can be seen in the BRWA's annual Consumer Confidence Reports, which are updated prior to July 1st each year and can be found online at www.ncbrwa.com/printedMaterials.html. The laboratory offers bacteriological testing for community water systems (private housing communities, churches, campgrounds, daycares) and private wells for a fee of \$50 and \$40 respectively; for retests of the same system the charge is \$25. The BRWA is certified to test for the presence of Total Coliform and E. Coli bacteria.



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