History of the City of Anderson Water System

The City of Anderson, doing business as Electric City Utilities, has a history that dates back well over a century.

In 1889, the Anderson City Council entered into a contract with Anderson Water Supply Company agreeing to receive water for fire protection for a term of 25 years. This contract also granted the exclusive right to install water lines through the streets of the City to furnish drinking water to its citizens. The first water storage tank was a standpipe located on Sharpe's Hill and held 200,000 gallons of water and provided a pressure of 55 pounds per square inch (psi) on the public square at the city's center. By 1896, the Anderson Water Supply Company, then known as Anderson Water, Light, and Power Company had between twelve and thirteen miles of water mains, 84 public hydrants, and 300 taps serving private citizens.

Water service was provided from Whitner Creek, located adjacent to the current City of Anderson / Electric City Utilities Water Operations Department on Tribble Street, approximately a quarter mile from the center of town. A 1,000,000 gallon reservoir was constructed several hundred feet north of the water plant that was located at the current Water Operations Department so that water could be diverted from Whitner Creek to store enough water for the City for several days. A 14-inch diameter pipe constructed of wood was installed to carry water from the reservoir to the Tribble Street Plant. A section of this pipe is on display at the Water Operations Department.

In 1910, the State mandated that Anderson move toward surface water supply and treatment. Three years later, Southern Power Company, the predecessor of the Duke Power Company, bought the water system. In order to meet the needs of the new mandate, a pump station was built on Bailey Creek to pump water to a newly constructed treatment plant on Cox's Creek, located behind Anderson University. This location served as the City of Anderson's sole water source and continued until growth demanded additional water capacity. A new intake located on Rocky River was constructed around 1950 and pumped to the Cox's Creek Water Treatment Plant.

Duke Power Company took over operations of the water system around 1927. As industry began to locate in and around the City of Anderson, and also for continuing service to the existing textile mills, Duke Power Company – Water Operations began projections for supplying long-term demand using growth projections from the electric supply side of the company. The Piedmont region of South Carolina was recognized as having a strong growth potential on the electric side, which in turn projected additional water needs for the community. After the drought of 1954, a large storage reservoir was constructed on Old Williamston Road above the treatment plant to provide a reliable supply of water to the raw water pump. An additional storage reservoir was later built upstream of the Rocky River pump to allow flow to be released to the intake prior to treatment and distribution.

In the mid 1960s Duke Power Company – Water Operations hired J.E. Sirrine Company Engineers of Greenville to design a water treatment plant on Hartwell Lake. Construction on the Lake Hartwell Water Treatment Plant (LHWTP) was completed in 1968. The LHWTP was put on line in October 1969.

Duke Water Systems, formerly known as Duke Power Company – Water Operations, sold the water system in April 2002. On April 16, 2002, the City of Anderson purchased the retail distribution in and around the City, known as the City of Anderson Water Service Area, and the Electric City Utilities Division of the City of Anderson, South Carolina was created. The purchase included approximately 325 miles of distribution and transmission mains, six elevated storage tanks (totaling 2.6 million gallons), a booster pump station and 900 fire hydrants that provide the service area with an adequate supply of water for drinking and fire protection purposes at suitable flows and pressures. The LHWTP was jointly purchased by a 13 member agency comprised of local municipalities and water districts known as the Anderson Regional Joint Water System. The LHWTP at the time of the purchase was 32 million gallons per day with the City owing 10.46 million gallons per day (MGD) of the total daily production capacity.

With approximately 15,800 service connections spread across 31 square miles of service area, Electric City Utilities – Water Operations currently serves approximately 40,000 residents, employees and visitors on a daily basis. With many of the Duke Water Systems staff coming over to the City of Anderson after the sale was complete, the Water Operations Department did not miss a beat. Each member of the Water Operations Department staff takes pride in efficiently installing, operating and maintaining the system while emphasizing customer service, safety, and sustaining system compliance.

The Water Operations Department prides itself on its history of compliance. Electric City Utilities has met or exceeded the overall requirements established by the United States Environmental Protection Agency and the South Carolina Department of Health and Environmental Control since ownership was transferred to the City of Anderson in 2002. The cross connection control program is constantly evolving with the times to provide unvarying protection against backpressure and back-siphonage incidents.

While the City of Anderson takes pride in its rich past and present, it is its future that really shines brightly in the Electric City. A major plant expansion project at the LHWTP has increased the rated capacity to nearly 45 MGD. With this expansion, the City will increase its capacity by 3.66 MGD to 14.12 MGD, or 31.4% of the rated plant capacity. The upgrades to the water treatment process converted the costly and environmentally unsafe gaseous chlorine disinfection system over to a mixed oxidants (a fancy phrase for “salt”) approach for disinfection generation. Even though the ARJWS has never experienced any known problems with disinfection byproducts, it is well documented that the use of mixed oxidants will reduce the levels of trihalomethanes, haloacetic acids, and other disinfection byproducts and will reduce the taste and odors that some associate with gaseous disinfection.

In 2007, the City of Anderson / Electric City Utilities completed a capital improvement project that included the installation of two supplementary 500,000 gallon elevated storage tanks, 7.2 miles of transmission mains, 17.5 miles of renewed distribution mains, and 150 additional fire hydrants. The City of Anderson’s mission is to supply the highest quality drinking water possible by providing a high level of customer service, adequate pressures, ample fire flow protection, while being responsive to growth, and with few customer complaints.