

Brush Creek Wastewater Treatment Plant

The Brush Creek Wastewater Treatment Plant, located off of Riverview Drive in Johnson City, has been serving the wastewater needs of the residents of Johnson City since 1955. The plant was originally designed for primary wastewater treatment. The plant was upgraded in 1970 and 1986 to meet secondary treatment standards. The facility is designed to treat a normal daily flow of 16 million gallons per day (MGD) of wastewater and can handle peak flows of 22 MGD. The facility has consistently met discharge limitations set by federal and state regulators. The Brush Creek Wastewater Treatment Plant received the National Association of Clean Water Agency (NACWA) Gold Award and is also the recipient of the Kentucky-Tennessee Water Environment Association Operational Excellence award. The facility continues to serve the wastewater needs of the community in a safe and environmentally responsible manner.

The Brush Creek Wastewater Treatment Plant was one of the first municipal wastewater plants in Northeast Tennessee. It's hard to imagine what life was like before the City collected, treated and recycled wastewater. Quality of life in our region is greatly enhanced by our natural amenities, including our beautiful lakes and rivers. Municipal wastewater treatment is a vital component to keeping these waters clean and safe; it is what protects Boone Lake from the impact of growth and continuously failing septic systems.

The wastewater treatment process is similar to what occurs in nature but is more concentrated and does the job faster. These treatment systems are vast: wastewater flows through sewer lines into a connection called a lateral, and then to main lines or lift stations. The collection system transports the wastewater to a treatment plant. Each step of treatment is carefully monitored, and the water is continuously tested to ensure optimum quality. In the simplest of terms, municipal wastewater treatment plants make wastewater safe to reintroduce to the environment.

Wastewater treatment plants in the Tri-Cities consistently meet stringent state and federal guidelines to ensure that Boone Lake is safe for swimming, boating and fishing. Since the 1970s, when national standards for clean water were established, bacteria levels in Boone Lake have been significantly reduced thanks to the millions of dollars invested in wastewater treatment and collection systems by the cities of Johnson City, Elizabethton and Bristol. The result is a more sanitary Boone Lake Watershed.

Municipalities throughout the Tri-Cities are expanding services to accommodate residential and commercial customers. The leaders of our cities have shown great commitment to the environment by continuously reinvesting in wastewater infrastructure. The challenge for the future is developing best management practices for controlling the impact of stormwater runoff, trash and failed septic systems.