

Charlottesville's Commitment to Water Quality



Utilities is committed to water quality, and every time you turn on your faucet you can expect **clean, safe, and reliable water** to flow. Providing quality water is essential to the health of our community, and the water we deliver from the Rivanna Water and Sewer Authority (RWSA) exceeds all standards established by the **Safe Drinking Water Act, the Environmental Protection Agency, and the Virginia Department of Health**. As part of our commitment to water quality, we support and are engaged with RWSA's continuous work to implement industry-leading water treatment techniques, and we diligently comply with all state and federal regulations and directives. **Granular Activated Carbon treatment** enhances the range of proven water treatment practices in place, and our **Backflow/Cross-Contamination Protection program** and **Water Service Line Inventory program** help ensure we continue to provide the highest quality water to Charlottesville. From source to tap, you can trust your water, and our commitment to its quality.

Granular Activated Carbon (GAC) Treatment Driven to provide superior quality water

RWSA administers a broad range of treatments to your water to ensure its quality and safety. Among these treatments include Granular Activated Carbon (GAC) to aid water quality. Installation of a GAC system began in 2012 in a joint effort between the City of Charlottesville, the Albemarle County Service Authority, and the Rivanna Water & Sewer Authority. The GAC treatment process aids in the additional removal of organics. When organics are combined with chlorine, this creates disinfection byproducts that are regulated by the EPA. The GAC treatment system was completed in 2018, and the reduction in disinfection byproducts has been dramatic. Additionally, GAC is proven to be highly effective at removing man-made and naturally occurring contaminants that can impact taste and odor to the finished water.



The new GAC vessels being installed at the South Rivanna Water Treatment Plant in 2017.



In total, there are 14 GAC contactors that serve the City - eight at the South Rivanna Water Treatment Plant (shown) and six at the Observatory Water Treatment Plant for a total treatment capacity of 10 million gallons of water per day.

Backflow/Cross-Contamination Protection Program

A strategy of hazard prevention

Cross-contamination presents a serious hazard to our water supply. The situation in which water flows in a direction that is opposite from the intended flow is called backflow. This can potentially put the drinking water supply in danger by allowing the undesirable reversal of flow, such that non-potable water moves into the potable water system. The location at which this backflow occurs, where a customer's water line and the main supply line are joined, is called a point of cross-connection.

As part of our strategy to prevent cross-contamination, certain businesses, such as medical facilities, laboratories, food processing plants, chemical plants, high-rise buildings, or other facilities where a potential for backflow or cross-connection hazard may exist, are required to install, and maintain cross-connection or backflow prevention devices. All new buildings are scrutinized during the design and permitting process to ensure the proper installation of backflow devices. Additionally, the Department of Utilities currently maintains inspection records for nearly 1,100 backflow devices to provide the highest quality water to Charlottesville. The Cross-Connection Plan is reviewed annually and updated if necessary to reflect changes to the Virginia Waterworks Regulations.

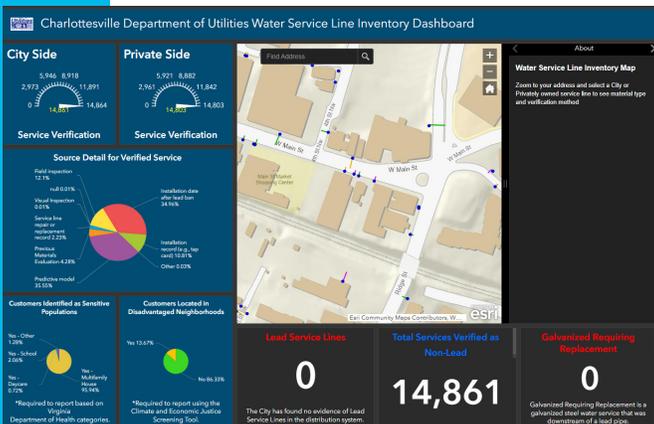


Water Service Line Inventory

Ensuring a safe water distribution system

In 2021, the Environmental Protection Agency (EPA) released the much-anticipated revisions to the Lead and Copper Rule. In accordance with this ruling, the EPA has required all water providers to identify and create

an inventory of all water service lines within their distribution system. The goal of this program is to identify and replace lead service lines that may still be in existence. Since 2023, the Department of Utilities has followed a statistical methodology derived from Michigan's Department of Environment, Great Lakes, and Energy, known as the EGLE method to identify locations where lead water lines could be present. We are happy to report that based on historical records, field verification, and a robust infrastructure replacement program, the **Department of Utilities has found no evidence of lead water lines in the private or public distribution system.**



The Department of Utilities will continue to collect data to improve our inventory. If you wish to participate or find out more about our program, including the online dashboard and interactive map, please visit www.charlottesville.gov/waterquality.