

**For Another Year Your Drinking Water Meets and Exceeds Drinking Water Standards**

2019  
 DRINKING  
 WATER  
 QUALITY  
 REPORT

MAY 2020

Charlotte Water monitors water quality in the river before it reaches the intakes. Monitoring also occurs throughout the treatment process and as water is distributed to customers through more than 4,300 miles of water pipes.

Our trained staff conducted more than 250,000 drinking water tests in 2019 which far exceeds the required number.



More than 31,000 people visited Charlotte Water's Water Wagon at various public events and festivals across the county in 2019.

**CHARLOTTE WATER**  
<http://charlottewater.org>  





Long ago, local creeks were the water supply for a budding city. But, after the city struggled through an extreme drought in 1911, Charlotte Water began pumping water from Mountain Island Lake and then also Lake Norman, lakes on the Catawba River. The River forms in the mountains of North Carolina and flows past Charlotte into South Carolina. It's been a high quality, reliable source of drinking water for more than a century.

Charlotte Water is a member of the Catawba-Wateree Water Management Group (CWWMG). The CWWMG has 19 members; one member representing each of the 18 public water utilities in North and South Carolina which operate water intakes on the Catawba river and one member representing Duke Energy.

CWWMG members meet regularly to formulate strategies and projects that address issues in the watershed. This includes monitoring the river basin, assessing shoreline conservation locations for maximum benefit to the water supply and working together to ensure that the region has a lasting and high-quality water supply for years to come.



Staff don't just take the job of providing safe and high-quality drinking water seriously because it's their job. Our staff and their families are customers too.



Charlotte Water uses a five-stage treatment process to remove solids and dissolved materials from the source water.



**Drinking Water Monitoring Stations**

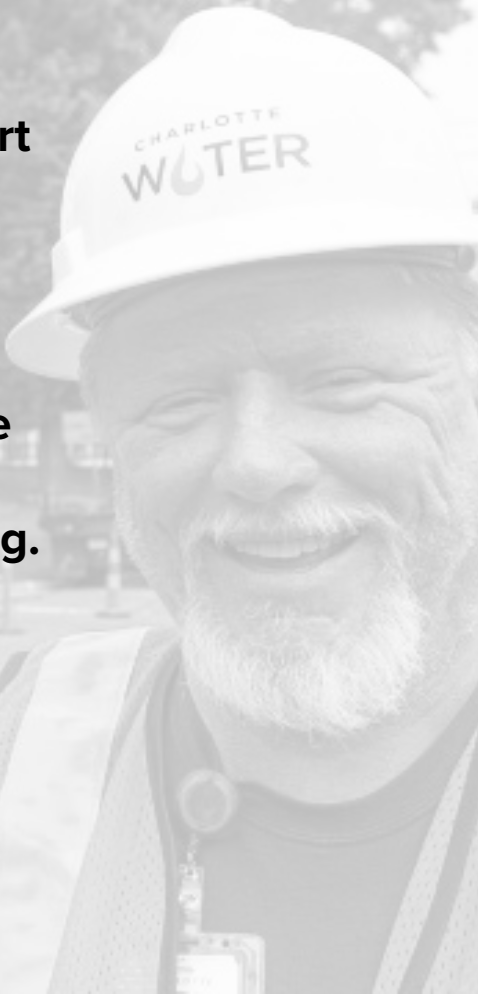
Testing across the distribution system used to mean going into local business and schools to get water samples. Recently, Charlotte Water started installing sampling stations that connected directly to our water mains. This allows our water quality specialists to sample water at any time and eliminates private plumbing issues that may contaminate the water sample.

We were also able to install sampling stations in strategic locations to enhance water quality monitoring throughout the county. More than 300 stations are now installed across the distribution system.

Your tap water averages a pH of 8 which is slightly alkaline. A pH of 8 ensures that your drinking water is not corrosive to pipes as it travels from the treatment plant to your home or business.



**This report summarizes the Consumer Confidence Report (CCR), a document required by state regulation to be published annually by every drinking water supplier. The full CCR can be found on the Charlotte Water website at [www.CLTWaterWQReport.org](http://www.CLTWaterWQReport.org). All laboratory testing results used to compile this report can also be found on the Charlotte Water website.**



The following information describes substances detected in your water in 2019. Your drinking water continues to meet and exceed all state and federal drinking water standards.

To understand the possible health effects described for many regulated compounds, a person would have to drink two liters of water every day at the highest level of contaminant that is allowed in drinking water for a lifetime to have a one-in-a-million chance of having the described health effect.



**E. Coli: No Violation**

**Turbidity: No Violation**

2019 Highest Value  
0.27 NTU (Franklin)  
0.09 NTU (Vest)  
0.23 NTU (Dukes)

**Fluoride: No Violation**

2019 Highest Value  
0.92 ppm (Franklin)  
0.78 ppm (Vest)  
0.78 ppm (Dukes)

**Disinfection Byproducts: No Violation**

Disinfection byproducts can form in the pipe system when chlorine reacts with naturally occurring organic and inorganic matter in water.

**Chlorine: No Violation**

Chlorine is added to the water treatment process as a disinfectant to kill bacteria and prevent waterborne illnesses. Chlorine levels are maintained as the water travels through the drinking water pipes to prevent bacteria growth.

Your water normally averages 1.3 ppm when it leaves the treatment plant.

**Corrosion Control (Lead and Copper): No Violation**

To satisfy monitoring requirements for lead and copper, Charlotte Water is required to test 50 samples once every three years. However, Charlotte Water tested 175 samples in 2018 (the compliance year).

**Unregulated Contaminants Monitoring: Testing Above and Beyond Confirms High Quality Drinking Water**

Unregulated contaminants or contaminants of emerging concern are compounds for which the EPA has not set a maximum contaminant level (MCL). Per- and Polyfluoroalkyl Substances (PFAS) are just one example of an unregulated contaminant and one that has been a recent concern in some North Carolina communities.

In addition to participating in the EPA's Unregulated Contaminant Monitoring Rule, Charlotte Water, working with an outside certified laboratory, has analyzed drinking water samples for over 740 unregulated compounds, including many PFAS compounds. Our test results show non-detection or levels that are just above detection for these compounds including PFAS.

In 2019, the NC General Assembly approved legislation to fund monitoring of PFAS in source waters. Results from recent State-sponsored samples indicate "no significant (or high) levels of PFAS compounds in the Charlotte Water samples compared to typical background PFAS concentrations observed in drinking water sources."

Charlotte Water is committed to producing the highest quality water for the people we serve. A full list of the testing results and data, including a link to the State-sponsored testing results can be found on our website. We will continue to monitor and participate in watershed planning efforts to protect our source water.

In Fiscal Year 2019, 152,572 linear feet (28.9 miles) of water and wastewater system pipes were replaced or rehabilitated.

Our long-term planning efforts and strategic operations not only keep rates affordable, they provide capacity for economic development in the region. As part of this effort, over 120 integral water and wastewater improvement projects are slated for the next 5 years, working to repair and prepare for growth throughout the community.

One part per million (ppm) is like dropping two drops of ink into a 10-gallon fish tank.



**Undetected Contaminants**

Staff test for over 150 regulated compounds in your drinking water. Only the detected, regulated compounds are listed in the Consumer Confidence Report.

A full list of the regulated compounds tested is published on the Charlotte Water website.

Charlotte Water has partnered with the Mecklenburg County Health Department to promote the I Heart Water campaign. The campaign encourages everyone to make water their go-to drink where they live, work, learn and play.

In 2019, two public school-based challenges were held to get youth involved in promoting water as their go-to drink. These two challenges led to the installation of state-of-the-art water bottle refill stations at 14 schools.

