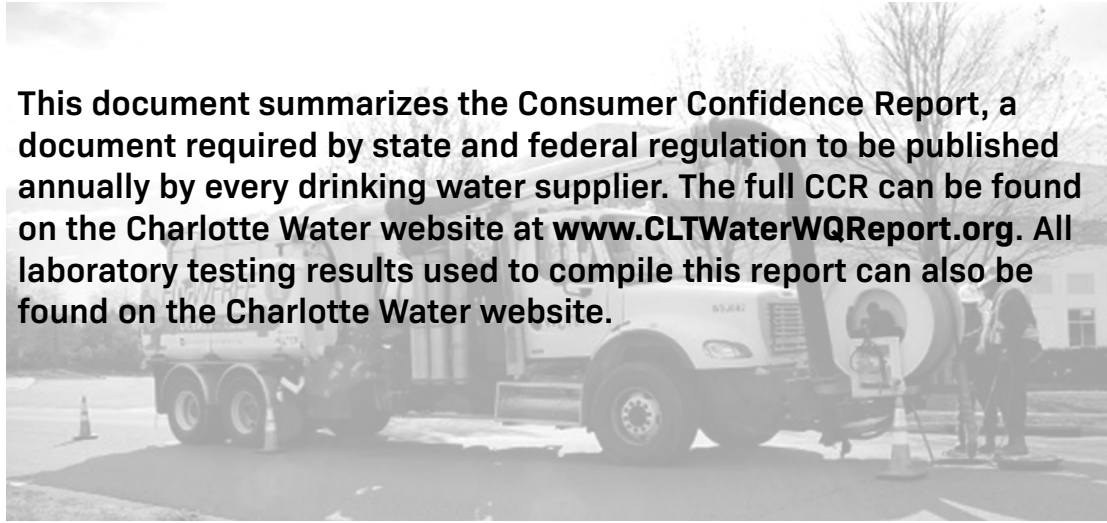


**Your Drinking Water Meets
 and Exceeds Drinking Water
 Standards**

**2017
 DRINKING
 WATER
 QUALITY
 REPORT**

JUNE 2018

Postal Customer



This document summarizes the Consumer Confidence Report, a document required by state and federal 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. All laboratory testing results used to compile this report can also be found on the Charlotte Water website.

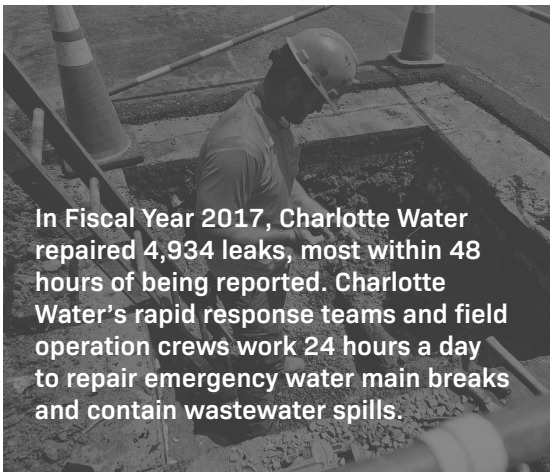


<http://charlottewater.org>

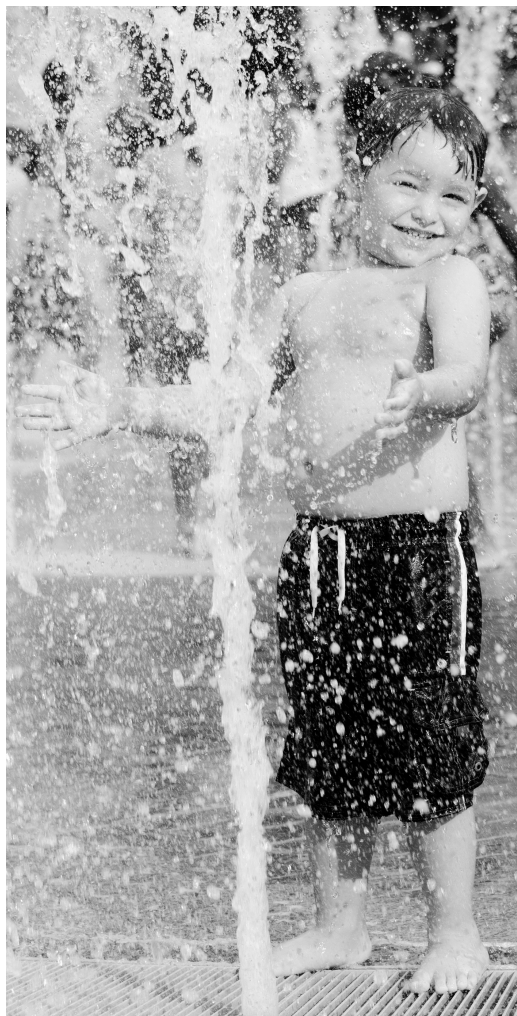
[CLTWaterBlog.org](http://www.CLTWaterBlog.org) [/CharlotteWater](https://www.facebook.com/CharlotteWater) [@CLTWater](https://twitter.com/CLTWater)

CHARLOTTE
WATER

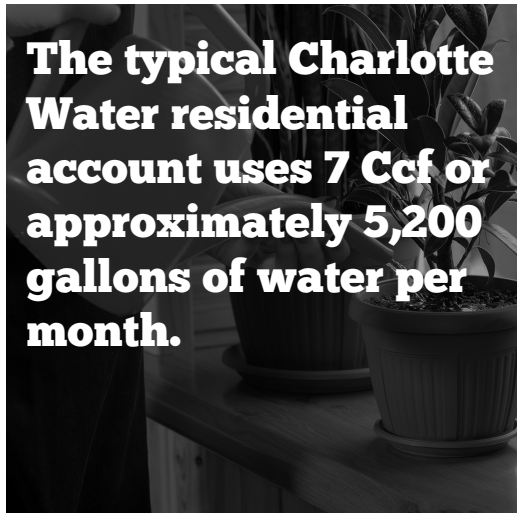
CHARLOTTE. Operated by the City of Charlotte



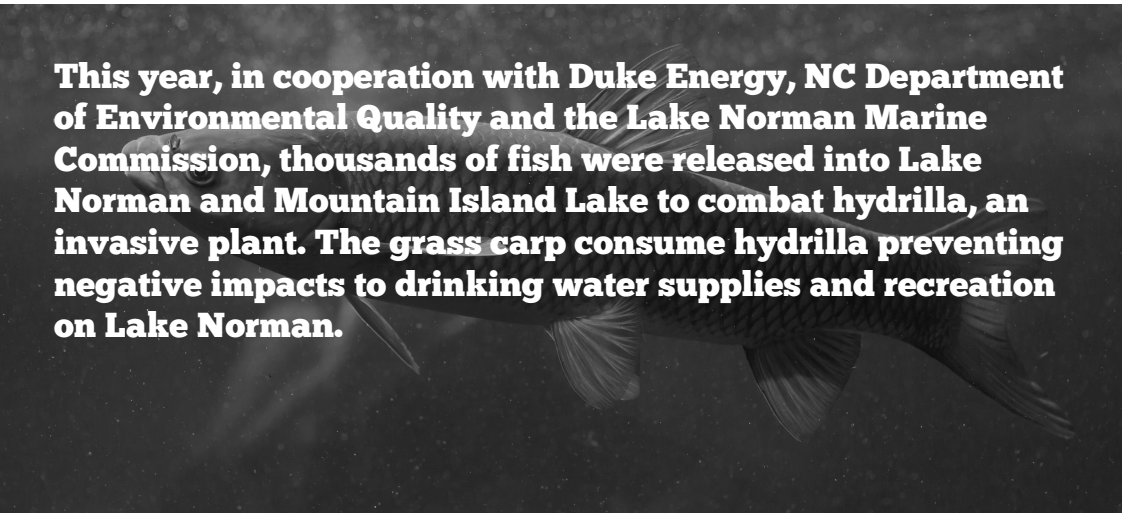
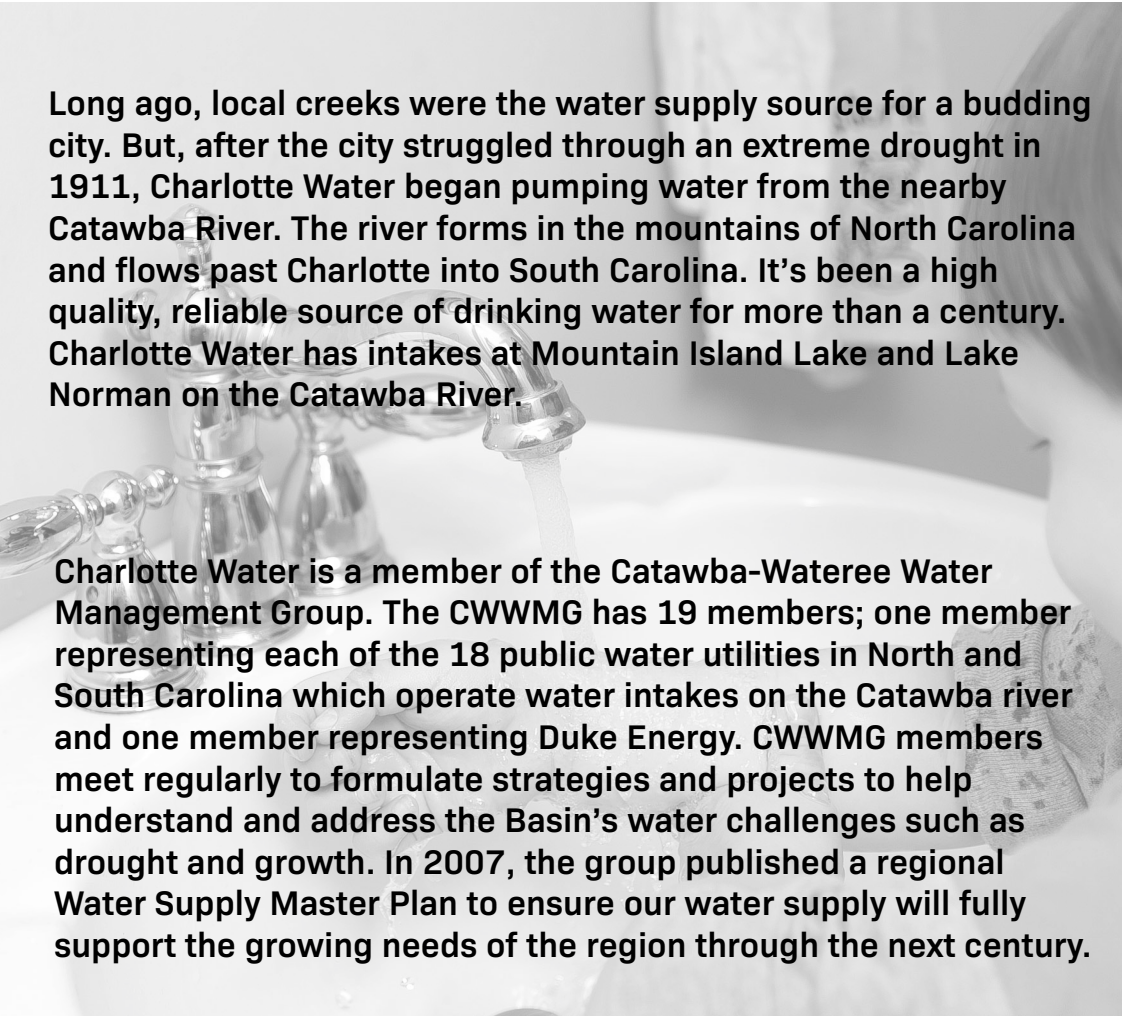
In Fiscal Year 2017, Charlotte Water repaired 4,934 leaks, most within 48 hours of being reported. Charlotte Water's rapid response teams and field operation crews work 24 hours a day to repair emergency water main breaks and contain wastewater spills.



**In Fiscal Year 2017,
 46,464 feet (8.8 miles)
 of water system pipes
 were replaced or
 rehabilitated.**



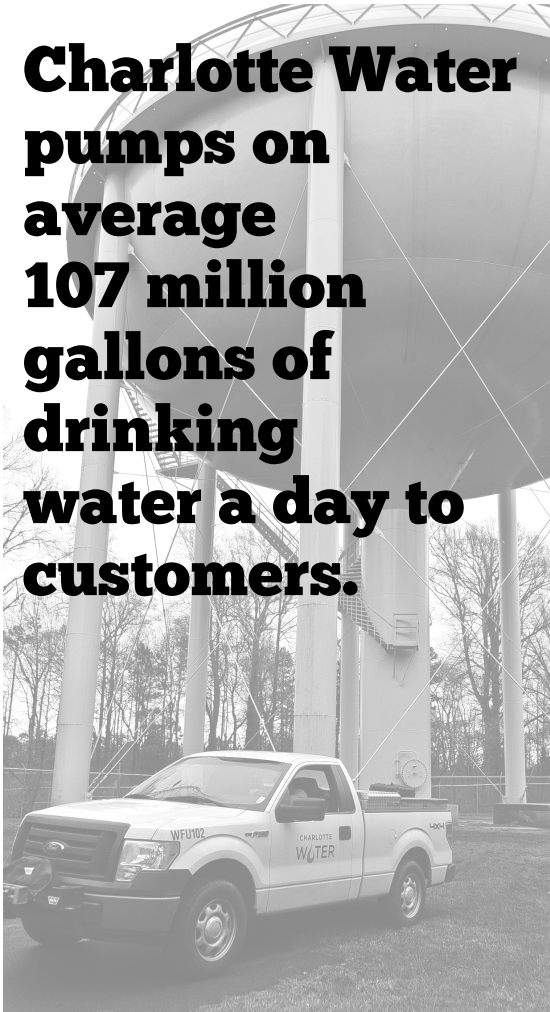
**The typical Charlotte
 Water residential
 account uses 7 Ccf or
 approximately 5,200
 gallons of water per
 month.**



This year, in cooperation with Duke Energy, NC Department of Environmental Quality and the Lake Norman Marine Commission, thousands of fish were released into Lake Norman and Mountain Island Lake to combat hydrilla, an invasive plant. The grass carp consume hydrilla preventing negative impacts to drinking water supplies and recreation on Lake Norman.

Long ago, local creeks were the water supply source for a budding city. But, after the city struggled through an extreme drought in 1911, Charlotte Water began pumping water from the nearby 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 has intakes at Mountain Island Lake and Lake Norman on the Catawba River.

Charlotte Water is a member of the Catawba-Wataree Water Management Group. 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 to help understand and address the Basin's water challenges such as drought and growth. In 2007, the group published a regional Water Supply Master Plan to ensure our water supply will fully support the growing needs of the region through the next century.

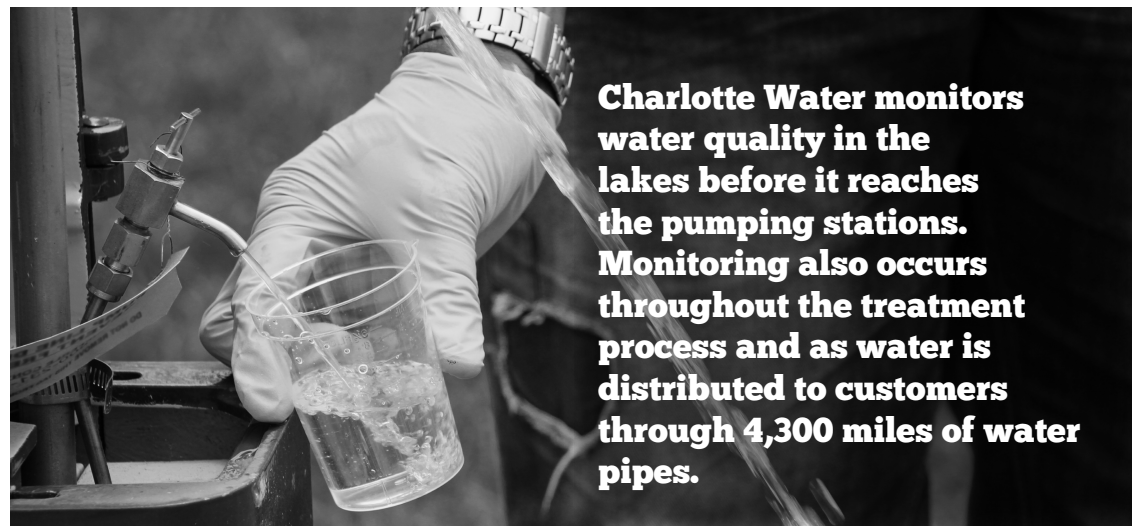


**Charlotte Water
 pumps on
 average
 107 million
 gallons of
 drinking
 water a day to
 customers.**



Is our water hard or soft?

Water hardness is defined by the amount of trace minerals present, such as calcium and magnesium. Water is considered "hard" if it has more than 125 parts per million (ppm) of trace minerals. Charlotte Water is considered "soft" water because the average trace mineral concentration in 2017 is 30 ppm.



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



The following information describes the substances detected in your water in 2017. Your drinking water continues to meet all state and federal drinking water standards.

EPA standards are set at very stringent levels. 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 a contaminant that is allowed in drinking water for a lifetime to have one-in-a-million chance of having the described health effect.



Undetected Contaminants Monitoring

Charlotte Water tests for over 150 contaminants in your drinking water. A full list of the contaminants tested for but not detected is published on the Charlotte Water website.



E. Coli Bacteria

No Violation

2017 value =
No Positive Samples

Turbidity

No Violation

2017 highest single value =
0.10 NTU (Franklin)
0.10 NTU (Vest)
0.16 NTU (Dukes)



Our trained lab and field staff conducted more than 250,000 drinking water tests in 2017 which far exceeds the required number. Even the highest contaminant levels detected were well below federal limits.

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



Corrosion Control Lead & Copper

No Violation

To satisfy monitoring requirements for lead and copper, Charlotte Water is required to test 50 samples once every 3 years. However, Charlotte Water tested at least 50 samples in 2015, 2016 and 2017.

Organic Carbon

No Violation

2017 removal ratio value =
1.12 (Franklin)
1.08 (Vest)
1.00 (Dukes)

Fluoride

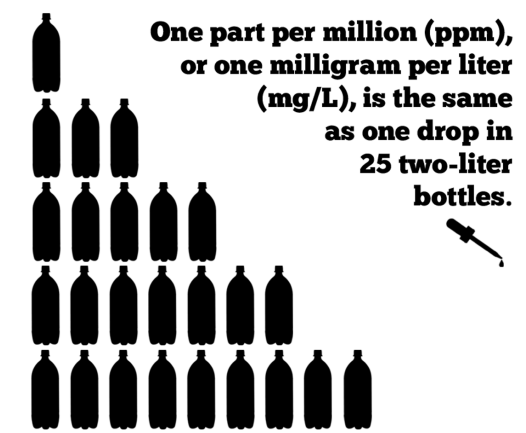
No Violation

2017 value =
0.68 ppm (Franklin)
0.69 ppm (Vest)
0.69 ppm (Dukes)



Chlorine in Water

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 pipes to customers to prevent bacteria growth.



Unregulated Contaminants Monitoring

Unregulated contaminants monitoring helps the EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. Charlotte Water participated when the EPA conducted this program in 2014.

Disinfection Byproducts

No Violation

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

Chlorine

No Violation

2017 value =
1.29 ppm (Franklin)
1.30 ppm (Vest)
1.28 ppm (Dukes)
1.07 ppm (Pipe System)