



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's tap water has an average of 32 parts per million of trace minerals, so it is considered "soft" water.

In addition we get many questions on sodium and sulfate concentration, which are unregulated inorganic contaminants that we monitor for quarterly. In 2015, Charlotte Water averaged 8.9 mg/L sulfate and 4.4 mg/L sodium.

WHY DO I SMELL CHLORINE IN MY WATER?

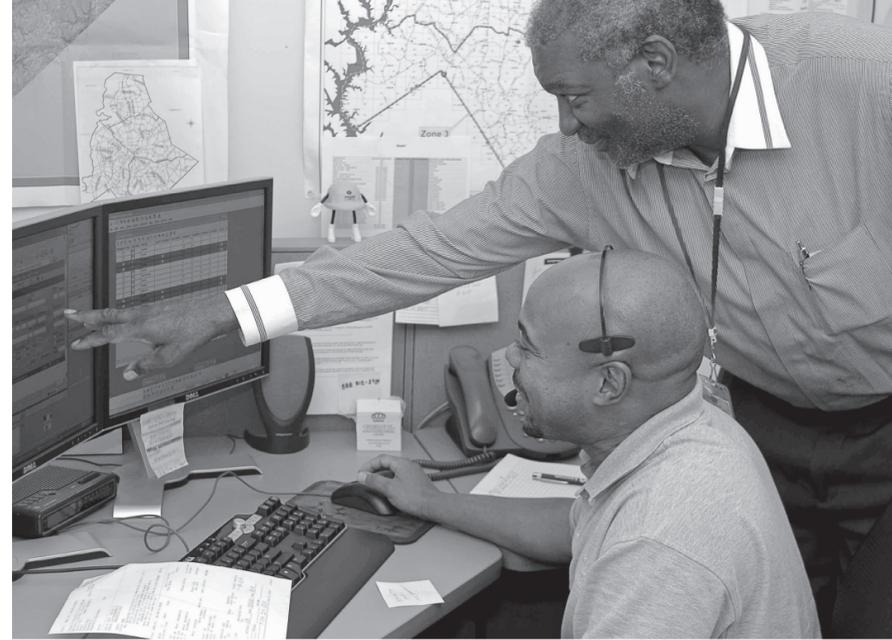
Chlorine is added to kill bacteria and prevent waterborne illnesses that may develop while water is traveling through 4,200 miles of distribution pipes after it has left the treatment plant.

WHY DOES CHARLOTTE WATER ADD FLUORIDE TO OUR WATER?

Fluoride has been proven to promote oral health. Charlotte Water has been adding it to the drinking water since 1949. As recommended by the American Dental Association, fluoride concentrations in Charlotte Water are approximately 0.7 milligrams per liter or less than one part per million.

WHAT ABOUT LEAD PIPES?

Charlotte Water tests for lead in the treated water leaving the treatment plants. Results consistently indicate that lead is not detected in the drinking water. In addition, lead piping and plumbing is not common in our community. However, there is still potential for lead to dissolve out of pipes and plumbing when they are made of lead materials. This is why Charlotte Water manages a corrosion control program to significantly reduce the risk of metals dissolving into drinking water from pipes and plumbing as it travels to your home or business.



CLOUDY OR BROWNISH WATER IN THE TAP?

When we are in your neighborhood, our maintenance work can sometimes change the look of the water temporarily. If you experience discolored water, let your cold water faucets run for about 20 minutes to flush out your plumbing. If flushing doesn't help, please call 311.

SEE A LEAK IN THE STREET? SPOT A SEWER OVERFLOW?

Call 311. Our staff work 24/7 to ensure you have safe, clean drinking water and functioning sanitary sewers.

Follow us on Twitter @cltwater or check out our blog CLTWaterblog.org for articles about the work we do in our community.

CHARLOTTE
WATER

 Operated by the City of Charlotte

A regional water supply master plan has been prepared by the Catawba-Watauga Water Management Group that aims to extend the water supply capacity beyond the year 2100. Read the entire Water Supply Master Plan at www.catawbawataugawmg.org.



Our trained lab and field staff conducted more than 150,000 drinking water tests in 2015, which far exceeds the required amount. Even the highest contaminant levels detected were well below federal limits.



CHARLOTTE
WATER

We've got good news inside
about your drinking water.

2015
DRINKING
WATER
QUALITY
REPORT

June 2016

Postal Customer

CHARLOTTE WATER takes its responsibility to provide high quality drinking water and to protect our environment very seriously. We send this report annually as required by the EPA, to help customers learn more about their drinking water supply and how it arrives to your home or business. **To review the full Consumer Confidence Report please go to www.CLTWaterWQReport.org.**

WHAT'S IN OUR WATER

Our treatment plants are designed and operated to treat water to a level of safety far exceeding that required by the Environmental Protection Agency (EPA).

Charlotte Water tests for more than 150 different substances throughout the year, and this report only lists those substances actually detected in our water. Many of these impurities occur naturally in the environment. The following information outlines the substances detected in your water in 2015, how those levels compare with federal limits and the likely source of those impurities.

OUR SHARED WATER SUPPLY

Our drinking water comes from Mountain Island Lake and Lake Norman, both part of the Catawba River basin, which provides water for more than 1.5 million people in our region. This is an excellent source and means a great start toward high quality drinking water.

TREATMENT PROCESS

Raw water from the lakes is pumped to one of our three drinking water treatment plants. The water is filtered and disinfected to become clean drinking water. This water travels through more than 4,200 miles of pipes to your home. Once you have used your water, it travels through an additional 4,200 miles of pipes to one of our five wastewater treatment plants. We treat the wastewater to remove solids, bacteria, nutrients and other pollutants. After rigorous testing, the water is put back into the creek.

YOUR DRINKING WATER CONTINUES TO MEET AND EXCEED ALL STATE AND FEDERAL DRINKING WATER STANDARDS

Charlotte Water is required to test for hundreds of possible contaminants. The following table describes key water quality indicators and the contaminants that were detected in 2015.

BACTERIA

Your Water: 0.1% Samples Positive

EPA Limit: No more than 5% samples are positive

Bacteria are naturally present everywhere and are a vital part of our environment. At certain levels though, bacteria can also have negative health effects in drinking water. A positive water sample indicates that the bacteria are present in the sample.

TURBIDITY

Your Water: 100% of samples were less than 0.3 NTU

EPA Standard: At least 95% of samples are less than or equal to 0.3 NTU

Turbidity is the measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of the filtration system. These samples represent filtered water measurements in our treatment process.

TOTAL ORGANIC CARBON

Your Water: 0.92 mg/L

Compliance Method: Less than 2.00 mg/L

Total organic carbon is measured by how much carbon is removed during water treatment. Organic carbon is naturally present in the environment. This information represents average concentrations from water leaving our treatment plants.

FLUORIDE

Your Water: 0.68 parts per million

EPA Limit: 4.0 parts per million

Fluoride can be naturally found in your water due to the erosion of natural deposits. The American Dental Association recommends adding flouride so the drinking water contains 0.7 parts per million. Fluoride supports good dental health and promotes strong teeth. This information represents average concentrations from water leaving our treatment plants.

CHLORINE

Your Water: 1.2 parts per million

EPA Limit: 4.0 parts per million

Chlorine is added at the treatment plant to ensure that as drinking water travels from the treatment plants to your home through 4,200 miles of pipes that it stays free of any harmful bacteria. This information represents average concentrations from water leaving our treatment plants.

DISINFECTION BYPRODUCTS - TTHM & HAA5

Total Trihalomethanes (TTHM)
Your Water: 77.3 parts per billion (highest average from 12 testing sites)

EPA Limit: 80.0 parts per billion locational running annual average

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

Charlotte Water observed slightly higher concentrations of disinfection byproducts in 2015 largely due to an increase in bromide concentrations in the raw water. More recent monitoring indicates that bromide levels are decreasing and disinfection byproducts are returning to normal levels.



CORROSION CONTROL - LEAD & COPPER

LEAD
Your Water: 90% of samples were less than 7 parts per billion

EPA Limit: 90% of samples must be below 15 parts per billion

Lead and copper testing is different than any other kind of monitoring Charlotte Water conducts. Samples are taken from taps from inside the homes of customers. This method is designed to measure Charlotte Water's corrosion control program. Three of the 53 sites tested exceeded EPA limits of 15 parts per billion.

Lead and copper testing is required every three years. Samples were taken in 2013. Next sampling occurs summer 2016.

COPPER
Your Water: 100% of samples were below 1.3 parts per million.

EPA Limit: 90% of samples must be below 1.3 parts per million

One part per million, or one milligram per liter (mg/L), would be equal to a single penny in \$10,000.



EPA limits 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.