

2023 Drinking Water Quality Report

This report summarizes the Consumer Confidence Report (CCR), required by state and federal governments to be published and mailed annually by every drinking water supplier.

For Detailed Results...

To view the full CCR report, visit [CLTWaterWQReport.org](https://www.charlottenc.gov/water/Water-Quality)

Additional details on laboratory data, versions in multiple languages and more are available on our website's water quality pages at: <https://www.charlottenc.gov/water/Water-Quality>

Translation of this document is available by calling 311 or 704-336-7600.

Charlotte Water is committed to responsible financial stewardship on behalf our customers. This report was printed at a cost of \$0.10 per unit. This document was printed on paper from well-managed FSC®-certified forests and from recycled materials. FSC is dedicated to the promotion of responsibly managed forests and a commitment to environmental stewardship each step along the supply chain.

Water Quality Testing

Charlotte Water's top priority is to ensure that the water you use to drink, wash your hands, bathe your children, and prepare healthy meals is not only safe to use, but meets all state and federal drinking water standards.

Our highly trained laboratory analysts and water quality professionals perform more than 170,000 tests per year to ensure the safety and quality of your drinking water.

According to public health experts at the U.S. Environmental Protection Agency (EPA), drinking water may reasonably be expected to contain very small amounts of impurities. It is important to note that the water is safe when tests reveal the presence of impurities that are below health levels.

At our state-of-the-art and independently certified laboratory facilities, we test for more than 150 regulated contaminants and more than 700 unregulated contaminants.

Charlotte Water staff also monitor over 380 field sampling stations to ensure drinking water remains high quality from the treatment plant to your tap.

Charlotte Water is accredited by the National Environmental Laboratory Accreditation Program (NELAP), in which laboratories voluntarily participate in a rigorous program aimed to ensure quality and reliability of environmental data.

Compliance with EPA Standard for PFAS "Forever Chemicals"

PFAS, known as "forever chemicals," are a family of thousands of compounds that do not break down naturally in the environment or in the human body. Charlotte Water proactively monitors for more than

70 PFAS chemicals and results show low or undetectable amounts. Any detections found are within the four parts per trillion (ppt) maximum contaminant level (MCL).

Read more: <https://cltwaterblog.org/2023/03/pfas-and-pfoa-what-to-know-for-charlotte/>

Lead Free CLT: Charlotte Water's Lead Reduction Program

In 2021, the Environmental Protection Agency (EPA) updated and revised its Lead and Copper Rule (LCRR), which strengthened regulations for eliminating lead from drinking water to better protect children and communities.

Charlotte Water has monitored lead and copper since 1991 and has always met state and federal standards. Charlotte Water actively conducts corrosion control measures, such as delivering drinking water at an average pH of 8.6 to prevent corrosion during distribution. Generally, lead corrosion is of limited concern in Charlotte because the city experienced most development after the initial federal lead ban. However, small amounts of lead can get into water from customer owned water service lines and household plumbing that contains lead.

In compliance with the recently strengthened Lead and Copper Revised Rule, Charlotte Water will be undertaking a multi-year project to inventory pipe materials, increase testing, and reduce lead risk.

To learn more, visit charlottewater.org/lead.

Did you Know?

Potential contaminants are often measured and regulated in parts per million all the way to parts per trillion!

One part per million (ppm) is like dropping two drops of ink into a 10-gallon fish tank. One part per trillion (ppt) is equal to one drop of water in approximately 20 Olympic-sized swimming pools.

Charlotte Water Alerts

Our Charlotte Water Alerts system notifies customers when unexpected outages happen. It is our top priority to communicate as quickly as possible and last year, we sent over 2,000 alerts. Property managers and renters can also sign up by visiting charlottewater.org

Register to stay informed about:

- Water outages (if your phone number isn't in the billing system)
- Wastewater spills
- Construction alerts
- Water quality advisories

To learn more about Charlotte Water Alerts, please visit our website:
<https://www.charlottenc.gov/water/Customer-Care/Alerts>

Charlotte Water Maintains

326,187 total water service lines

4,570 miles of water mains

Statistics above are from fiscal year 2023, ending in June 2023.

Highlights of 2023 Water Quality Tests and Results

Contaminant or Water Quality Metric Tested	What is it?	Why We Test	Likely Source?	Was it a Safety Concern at the Levels Detected?
Total Organic Carbon	Decaying natural organic matter (NOM) as well as synthetic sources	Has no health effects, however, organics provide a medium for the formation of disinfection byproducts. The TOC compliance criterion applies only to treated water.	Naturally present in the environment	No
2, 4-D	2,4-D is a widely used herbicide that controls broadleaf weeds that has been used as a pesticide since the 1940s.	Low toxicity for humans, except certain acid and salt forms can cause eye irritation	Runoff from herbicide used on land	No
Turbidity	Measures of the effectiveness of filtering	The clearer the water, the better!	Common soil runoff	No
Fluoride	Naturally occurring compound, additive proven to strengthen teeth	High levels can cause stains on teeth	Erosion of natural deposits	No

Lead and Copper	Metal Contaminant due to plumbing corrosion	High levels can lead to health issues	Corrosion of indoor plumbing, erosion of natural deposits	No
Disinfectant residuals and byproducts like chlorine, trihalomethanes, haloacetic acids	Byproducts of the disinfection process	High levels can cause cancer	Water purification process – controlled levels of chlorine prevent bacterial growth in pipes	No

Charlotte Water is committed to serving our community 24/7, 365 days a year.

Partnership for Safe Water

Charlotte Water proactively participates in the American Water Works’ Partnership for Safe Water, aimed to optimize water system operations.

Did you know?

We receive our water from Mountain Island Lake and Lake Norman. Water from Mountain Island Lake goes to Franklin and Vest Water Treatment Plants. Water from Lake Norman flows to Lee S. Dukes Water Treatment Plant. **Across our plants, we pumped an average of 116 million gallons a day (MGD) in 2023!**

Plant	Daily Capacity (MGD)	Number of Water Quality violations in 2023
Franklin	181	0
Vest	24	0
Dukes	25	0

*Vest Treatment Plant was online only May – June 2023 due to renovations

History Spotlight

This year, we celebrated 100 years of service for the Vest Water Treatment Plant. The facility was put into service in 1924.