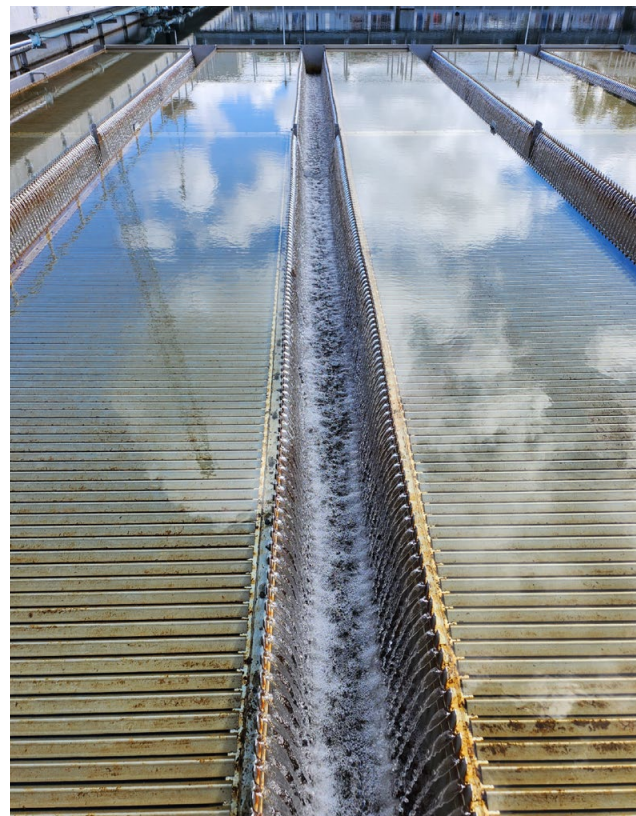
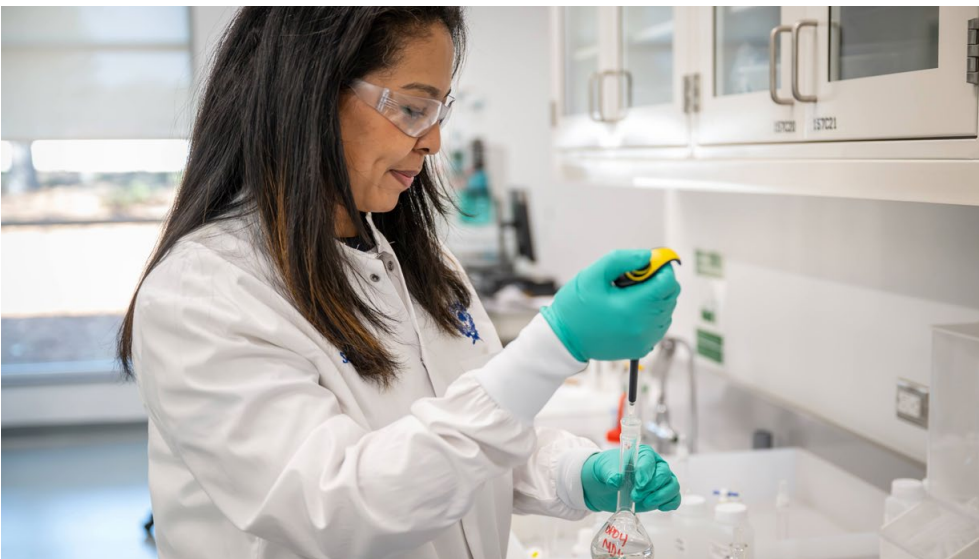


ANNUAL WATER QUALITY REPORT

Reporting Year 2025



Presented By



**Raleigh
Water**

PWS ID#: NC0392010





Introduction

We are pleased to provide the 2025 Consumer Confidence Report, which is a summary of last year’s drinking water quality. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. Our goal is to provide you with a safe and dependable supply of drinking water. We do this by investing in our infrastructure, integrating new technology into our processes, and complying with industry programs that go above and beyond regulatory requirements.

Every day, we provide critical drinking water services to approximately 650,000 residents and help support over \$120 billion in economic activity in Raleigh. This service requires the operation and maintenance of two water treatment plants, 27 elevated water storage tanks, about 2,600 miles of water line, approximately 70,000 water valves, and over 26,000 fire hydrants.

Tap In: Drinking Water Sources

Raleigh’s source water comes from Falls Lake, located in northern Wake County, and Lake Benson, which is located in Garner.

To help reduce potential impacts of upstream contaminant sources, Raleigh Water established a watershed protection program, which to date has helped permanently protect over 11,000 acres and 120 miles of streams in our drinking watersheds. More information about this program is available at raleighnc.gov/water-and-sewer/services/watershed-protection-program.

Source Water Assessment

The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducts assessments for all drinking water sources across North Carolina. The purpose of the assessments is to determine the susceptibility of each drinking water source (well or surface water intake) to potential contaminant sources (PCSs). The results of the assessment are available in SWAP assessment reports that include maps, background information, and a relative susceptibility rating of higher, moderate, or lower.

The relative susceptibility rating of each source for Raleigh Water was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

SOURCE NAME	SUSCEPTIBILITY RATING	DATE OF ASSESSMENT
Falls Lake	High	September 9, 2020
Lake Benson	High	September 9, 2020

More information about the SWAP for the City of Raleigh’s drinking water sources is available from the DEQ at ncwater.org/SWAP_Reports/NC0392010_SWAP_Report-20200909.pdf. If you are unable to access your SWAP report online, you may mail a written request for a printed copy to: Source Water Assessment Program - Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email to swap@deq.nc.gov. Please include your system name and number, and provide your name and mailing address. If you have any question about the SWAP program, please call (919) 707-9098.

Lead in Home Plumbing

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Raleigh Water is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family’s risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. We understand how important water safety and peace of mind are for you and your household. Request a free lead test kit by scanning the QR Code below. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

Your residence is connected to the public water distribution system through a small-diameter pipe called a service line. In some older systems throughout the U.S., these service lines contain lead components and could represent a source of lead in drinking water. To date, Raleigh Water has never found a lead pipe, and given the age of our system, we do not expect to find any. Most lead typically enters drinking water through lead solder or household fixtures. While we occasionally encounter a lead gooseneck connecting the service line to the water main, these are extremely rare in our system. If a service line is galvanized iron, lead from a gooseneck could adhere to the inside of pipes and potentially be released into a residence. Therefore, to ensure compliance with Lead and Copper Rule Improvements, Raleigh Water has been using field verifications and machine learning tools to identify galvanized service lines and replace them. More information about your service line is available here: Service Line Inventory - How to Identify Lead or Copper Pipes | Raleighnc.gov or visit the City of Raleigh website <https://raleighnc.gov/water-and-sewer/services/how-identify-lead-or-copper-pipes>.



Raleigh Water Celebrates Ribbon Cutting for New State-of-the-Art Water Lab

After years of planning, designing and construction, the new Raleigh Water Lab is complete.

It wasn't just a ribbon cutting; it felt a bit like a housewarming for the city's newest guardian of clean water. Raleigh's Drinking Water Compliance Laboratory officially opened its doors - or rather, its beakers - to the public and press on April 9. The shiny, new 15,000-square-foot facility in Wake Forest is more than just a building; it's a promise of safe, clean water for generations.



Tucked away at 10700 Star Road, the lab hums with the quiet efficiency of cutting-edge technology, a place where science meets community. It's where the city's water gets its check-up. This new home will analyze samples from more than 650,000 residents across Raleigh, Garner, Wake Forest, Rolesville, Knightdale, Wendell, and Zebulon, making sure every drop is just right.

"We're not just looking for the obvious," said Martesa Webb, Raleigh Water laboratory manager, with a smile that hinted at the quiet dedication in her team. "Raleigh Water Lab is committed to detect and report those . . . well, let's call them 'uninvited guests,' ensuring our water goes beyond what's expected."

It's easy to take clean water for granted, but behind the scenes, there's a small army of dedicated folks. Keep this in mind:

- The Raleigh Water laboratory team logs roughly 38,083 miles a year, crisscrossing the region to collect samples. That's a lot of windshield time for the sake of good water!
- The lab checks for 71 things in drinking water and 41 in wastewater. Think of it as a very detailed health report for our taps.
- The team handles about 52,664 samples a year. That's a lot of tiny vials, and a lot of care.

This is Raleigh Water's first certified drinking water lab. It's a reminder that keeping our water safe is a constant, quiet effort, a little bit of everyday magic that makes life here just a little bit better.

Community Participation

The Raleigh City Council meets regularly at the Raleigh Municipal Building, Council Chambers, 222 West Hargett Street. Regular meeting sessions are held on the first and third Tuesday of each month at 1p.m., with evening sessions on the first Tuesday at 7 p.m. Residents are welcome to attend and participate in discussions on topics related to water quality and utility services. To speak during a public comment session, you must sign up in advance by going to this link: [Public Comment Period - Sign Up to Speak | Raleighnc.gov](#)



Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or epa.gov/safewater.

QUESTIONS? We remain committed to ensuring the high quality of your drinking water and providing you with this information. please contact the Raleigh Water Communications team at RW.Communications@raleighnc.gov or (919) 975-7916.

Test Results

We routinely monitor for over 150 contaminants in your drinking water according to federal and state laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done from January 1 through December 31, 2025.

The U.S. EPA and the state allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloramines (ppm)	2025	[4]	[4]	2.80	0.02–4.00	No	Water additive used to control microbes
Chlorine (ppm)	2025	[4]	[4]	2.26	0.09–3.95	No	Water additive used to control microbes
Fluoride (ppm)	2025	4	4	0.71	0.14–0.71	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA5] (ppb)	2025	60	NA	22.0	4.28–33.6	No	By-product of drinking water disinfection
Total Organic Carbon [TOC] (removal ratio)	2025	TT ¹	NA	1.48	1.29–1.72	No	Naturally present in the environment
Total Trihalomethanes [TTHMs] (ppb)	2025	80	NA	34.2	7.60–42.8	No	By-product of drinking water disinfection
Turbidity ² (NTU)	2025	TT = 1 NTU	NA	0.08	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2025	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community³

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED 90TH PERCENTILE	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2025	1.3	1.3	0.04	ND–0.08	0/85	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2025	15	0	ND	ND–4	0/85	No	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions

90th Percentile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Herbicide: Any chemical(s) used to control undesirable vegetation.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Pesticide: Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

Removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

SECONDARY SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
pH (units)	2025	6.5–8.5	NA	8.40	8.30–8.45	No	Naturally occurring
Sulfate (ppm)	2025	250	NA	46.3	37.6–46.3	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED SUBSTANCES ⁴				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity (ppm)	2025	29.8	22.8–46.0	NA
Hardness, Total [as CaCO ₃] (ppm)	2025	25.2	21.9–35.3	NA
Sodium (ppm)	1/9/2025	24.3	22.8–24.3	NA

¹ Depending on the TOC in our source water, the system MUST have a certain percentage removal of TOC or must achieve alternative compliance criteria. If we do not achieve that percentage removal, there is an alternative percentage removal. If we fail to meet the alternative percentage removal, we are in violation of a treatment technique.

² Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

³ This table summarizes our most recent lead and copper tap sampling data. If you would like to review the complete lead tap sampling data, please email kimberly.holmes-iverson@raleighnc.gov.

⁴ Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; Inorganic Contaminants, such as salts and metals, which can occur naturally in the soil or groundwater or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; We stay ahead of emerging water quality issues like PFAS by conducting voluntary testing—you can find our results and helpful FAQs on our dedicated webpage at <https://raleighnc.gov/water-and-sewer/services/perfluorinated-chemicals-data-and-information>; Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, and septic systems; and Radioactive Contaminants, which can occur naturally or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by contacting the U.S. EPA by calling the Safe Drinking Water Hotline at (800) 426-4791 or visiting epa.gov/safewater.

