

# ANNUAL WATER QUALITY REPORT

Reporting Year 2024



*Presented By*  
**Town of Clayton**



## Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

## Where Does My Water Come From?

The Town of Clayton purchases all our water from Johnston County Public Utilities. The Johnston County water treatment facility is located one half mile east of the Town of Wilsons Mills. The Johnston County water treatment facility's source water is surface water from the Neuse River. Johnston County also purchases bulk water into its distribution system from the Town of Smithfield, Harnett County, City of Raleigh, City of Wilson, Sampson County, and Northwest and Southwest Wayne Sanitary Districts. To learn more about our watershed, visit U.S. EPA's How's My Waterway at [epa.gov/waterdata/how-my-waterway](http://epa.gov/waterdata/how-my-waterway).



## Community Participation

You can obtain additional information or share your comments at the bimonthly town council meetings. The public is welcome to attend. These meetings are held on the first and third Monday of every month at 6:00 p.m. in the Clayton Center Council Chambers, 111 East Second Street. You can also visit [townofclaytonnc.org](http://townofclaytonnc.org) and search "water quality," email us at [info@TownofClaytonNC.org](mailto:info@TownofClaytonNC.org), or follow us on Facebook or Instagram @townofclaytonnc, or X @TownofClayton for news and information regarding your drinking water.

## 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](http://epa.gov/safewater).



## Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit <https://bit.ly/3IeRyXy>.

## Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

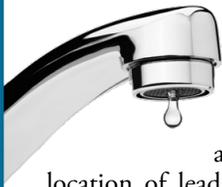
- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain it to reduce leaching to water sources, or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

## QUESTIONS?

For more information or for any questions relating to your drinking water, please contact Travis Jessup, Water Resources Operations Superintendent, at (919) 553-1530 or [water@townofclaytonnc.org](mailto:water@townofclaytonnc.org).

## 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. The Town of Clayton 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. If you are concerned about lead in your water and wish to have your water tested, contact the Town of Clayton at [water@townofclaytonnc.org](mailto:water@townofclaytonnc.org). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).



To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. For specific inquiries about the lead service line inventory, including access information, please contact [water@townofclaytonnc.org](mailto:water@townofclaytonnc.org). Please contact us if you would like more information about the inventory or any lead sampling that has been done.

## 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.

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.

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, 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](http://epa.gov/safewater).

## Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.



## Source Water Assessment

The North Carolina Department of Environment Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCS). 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 was determined by combining the contaminant rating (number and location of PCS 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). It is important to understand that a higher susceptibility rating does not imply poor water quality, only the system's potential to become contaminated by PCS in the assessment area. The assessment findings are summarized in the following table:

SUSCEPTIBILITY OF SOURCES TO POTENTIAL CONTAMINANT SOURCES (PCS)		
SOURCE NAME	SUSCEPTIBILITY RATING	SWAP REPORT DATE
Neuse River	Higher	September 2020

The complete SWAP assessment report may be viewed at [ncwater.org/SWAP\\_Reports/NC0351020\\_SWAP\\_Report-20200909.pdf](http://ncwater.org/SWAP_Reports/NC0351020_SWAP_Report-20200909.pdf). Note that because SWAP results and reports are periodically updated by the PWS Section, these results may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, 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 requests to [swap@ncdenr.gov](mailto:swap@ncdenr.gov). Please indicate your system name and number and provide your name, mailing address, and phone number. If you have any questions about the SWAP report, please contact the Source Water Assessment staff at (919) 707-9098.

## TTHM and HAA5 Site Data

Site	HAA5 (ppb)			TTHM (ppb)		
	LRAA	Low	High	LRAA	Low	High
B01	11.78	9.12	14	15.03	12.1	17.6
B02	13.59	9.7	14.1	16.87	10.8	15.5
B03	33.63	30.6	42.8	43.94	32.6	60
B04	29.23	23.6	41	40.06	29.4	55.5

## Definitions

**90th %ile:** 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 which a water system must follow.

**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.

**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.

**µmho/cm (micromhos per centimeter):** A unit expressing the amount of electrical conductivity of a solution.

# Test Results

We routinely monitor for over 150 contaminants in your drinking water according to federal and state laws. The following tables 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, 2024.

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. Some of the data, though representative of the water quality, is more than a year old.

REGULATED SUBSTANCES									
				Town of Clayton		Johnston County Utilities			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloramines (ppm)	2024	[4]	[4]	1.89	ND–3.96	2.59	1.05–3.97	No	Water additive used to control microbes
Chlorine (ppm)	2024	[4]	[4]	2.05	0.02–3.6	0.9	0.9–3.67	No	Water additive used to control microbes
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	37	9.1–42.8	38	11–66	No	By-product of drinking water disinfection
Total Organic Carbon [TOC] (units)	2024	TT <sup>1</sup>	NA	NA	NA	1.30	1.20–1.52	No	Naturally present in the environment
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	46	10.8–60	49	19–63	No	By-product of drinking water disinfection
Turbidity <sup>2</sup> (NTU)	2024	TT = 1 NTU	NA	NA	NA	0.034	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2024	TT = 95% of samples meet the limit	NA	NA	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community<sup>3</sup>

				Town of Clayton (2023)			Johnston County Utilities (2024)				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	Varies by Source	1.3	1.3	0.147	ND–0.579	0/30	ND	ND–0.231	0/unknown	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)		15	0	ND	ND–6	0/30	ND	ND	0/unknown	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

SECONDARY SUBSTANCES									
				Town of Clayton		Johnston County Utilities			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
pH (units)	2024	6.5-8.5	NA	8.43	6.64–9.66	7.4	NA	No	Naturally occurring

UNREGULATED SUBSTANCES <sup>4</sup>						
			Town of Clayton		Johnston County Utilities	
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Calcium (ppm)	2024	7.01	6–8.87	NA	NA	NA
Conductivity (µmho/cm)	2024	269.87	212–343	NA	NA	NA
Hardness (ppm)	2024	32.5	27–38	NA	NA	NA
Orthophosphate (ppm)	2024	0.98	0.25–1.47	NA	NA	NA
Sodium (ppm)	2024	NA	NA	35.14	NA	NA

<sup>1</sup> TOC removal ratio is calculated as the actual percent removal achieved divided by the required percent removal based on source water TOC. A ratio of 1.0 or greater indicates compliance with the treatment technique requirement.

<sup>2</sup> 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.

<sup>3</sup> The 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 [water@townofclaytonnc.org](mailto:water@townofclaytonnc.org).

<sup>4</sup> 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.