



# ANNUAL WATER QUALITY REPORT

Reporting Year 2023



*Presented By*  
Town of Pittsboro



PWS ID#: 0319015



## 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, 2023. Included are details about your source 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.

## Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. The town's public meetings happen on the second Monday of each month at 6:00 p.m.



“When the well is dry, we know the worth of water.”

—Benjamin Franklin

## 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (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 <http://water.epa.gov/drink/hotline>.



## Where Does My Water Come From?

The Town of Pittsboro's raw water is taken from the Haw River and treated at Pittsboro's water treatment plant. The treatment process consists

of a series of steps. First, raw water is drawn from the

raw water source and delivered to the water treatment plant. The raw water is rapidly mixed with polyaluminum chloride and ferric sulfate. The addition of these

substances causes small particles, called “floc,” to adhere to one another, making them heavy enough to settle into a basin from which the sediment is removed. At this point the water is filtered through layers of anthracite coal and silicate sand. As smaller suspended particles are removed, the cloudiness of the water disappears, and clear water merges. Chloramines are then added as a precaution against any bacteria that may be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of the water without compromising taste.) A sodium hydroxide solution is used to adjust the final pH and alkalinity. Fluoride (to prevent tooth decay) and orthophosphate (a pipe corrosion inhibitor) are added before the water is pumped into the distribution system, water towers, and your home or business.



## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Cory Saulsbury, Pittsboro Water Plant Superintendent, at (919) 542-3530.

## Lead in Home Plumbing

If present, elevated levels of 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. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).





## Source Water Assessment

The North Carolina Department of Environment and Natural Resources (DENR), 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 (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 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 watershed and its delineated assessment area).

The complete SWAP Assessment Report may be viewed at <https://www.ncwater.org/?page=600>. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this website may differ from the results that were available at the time this Consumer Confidence Report 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.

## Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring 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 may also come from gas stations, urban stormwater runoff, and septic systems;

**Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## 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).

**ppt (parts per trillion):** One part substance per trillion parts water (or nanograms 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.

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>1,2-Dichloroethane</b> (ppb)	2023	5	0	ND	0.5–5	No	Discharge from industrial chemical factories
<b>Alachlor</b> (ppb)	2023	2	0	ND	0.2–2	No	Runoff from herbicide used on row crops
<b>Arsenic</b> (ppb)	2023	10	0	ND	5–10	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
<b>Atrazine</b> (ppb)	2023	3	3	ND	1–3	No	Runoff from herbicide used on row crops
<b>Barium</b> (ppm)	2023	2	2	ND	0.400–2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
<b>Benzene</b> (ppb)	2023	5	0	ND	0.5–5	No	Discharge from factories; Leaching from gas storage tanks and landfills
<b>Beryllium</b> (ppb)	2023	4	4	ND	NA	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
<b>Cadmium</b> (ppb)	2023	5	5	ND	1–5	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
<b>Carbofuran</b> (ppb)	2023	40	40	ND	0.9–40	No	Leaching of soil fumigant used on rice and alfalfa
<b>Carbon Tetrachloride</b> (ppb)	2023	5	0	ND	0.5–5	No	Discharge from chemical plants and other industrial activities
<b>Chloramines</b> (ppm)	2023	[4]	[4]	3.3	2.0–4.0	No	Water additive used to control microbes
<b>Chlorine</b> (ppm)	2023	[4]	[4]	3.6	2.0–4.0	No	Water additive used to control microbes
<b>Chlorobenzene</b> (ppb)	2023	100	100	ND	0.5–100	No	Discharge from chemical and agricultural chemical factories
<b>Chromium</b> (ppb)	2023	100	100	ND	20–100	No	Discharge from steel and pulp mills; Erosion of natural deposits
<b>Cyanide</b> (ppb)	2023	200	200	ND	50–200	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
<b>Cis-1,2-Dichloroethylene</b> (ppb)	2023	70	70	ND	0.5–70	No	Discharge from industrial chemical factories
<b>Dalapon</b> (ppb)	2023	200	200	ND	1–200	No	Runoff from herbicide used on rights-of-way
<b>Dichloromethane</b> (ppb)	2023	5	0	ND	0.5–5	No	Discharge from pharmaceutical and chemical factories
<b>Dinoseb</b> (ppb)	2023	7	7	ND	0.2–7	No	Runoff from herbicide used on soybeans and vegetables
<b>E. coli</b> (# positive samples)	2023	TT <sup>1</sup>	0	0	NA	No	Human and animal fecal waste
<b>Ethylbenzene</b> (ppb)	2023	700	700	ND	0.5–700	No	Discharge from petroleum refineries
<b>Fluoride</b> (ppm)	2023	4	4	0.22	0.30–1.0	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>Haloacetic Acids [HAAs]–Stage 2</b> (ppb)	2023	60	NA	4	10–60	No	By-product of drinking water disinfection
<b>Heptachlor</b> (ppt)	2023	400	0	ND	40–400	No	Residue of banned pesticide
<b>Hexachlorocyclopentadiene</b> (ppb)	2023	50	50	ND	0.1–50	No	Discharge from chemical factories
<b>Methoxychlor</b> (ppb)	2023	40	40	ND	0.1–40	No	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock

## REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Nitrate (ppm)	2023	10	10	ND	1–10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	2023	1	1	ND	0.10–1	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Oxamyl [Vydate] (ppb)	2023	200	200	ND	1.0–200	No	Runoff/leaching from insecticide used on apples, potatoes, and tomatoes
Picloram (ppb)	2023	500	500	ND	0.1–500	No	Herbicide runoff
Simazine (ppb)	2023	4	4	ND	0.047–4	No	Herbicide runoff
Tetrachloroethylene (ppb)	2023	5	0	ND	0.5–5	No	Discharge from factories and dry cleaners
Toluene (ppm)	2023	1	1	ND	0.0005–1.0	No	Discharge from petroleum factories
Total Coliform Bacteria (positive samples)	2023	TT	NA	0	NA	No	Naturally present in the environment
Total Organic Carbon [TOC] (removal ratio)	2023	TT <sup>2</sup>	NA	1.43	1.0–3.0	No	Naturally present in the environment
Trans-1,2-Dichloroethylene (ppb)	2023	100	100	ND	0.5–100	No	Discharge from industrial chemical factories
Trichloroethylene (ppb)	2023	5	0	ND	0.5–5	No	Discharge from metal degreasing sites and other factories
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2023	80	NA	21	10–80	No	By-product of drinking water disinfection
Turbidity <sup>3</sup> (NTU)	2023	TT = 1 NTU	NA	0.21	ND–0.21	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2023	TT = 95% of samples meet the limit	NA	0.11	NA	No	Soil runoff
Xylenes (ppm)	2023	10	10	ND	0.0005–10	No	Discharge from petroleum factories; Discharge from chemical factories

## SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Color (ppm)	2023	15	NA	1.54	1–15	No	Naturally occurring organic materials
Fluoride (ppm)	2023	2.0	NA	0.22	0.30–0.80	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Iron (ppb)	2023	300	NA	ND	0.10–0.50	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2023	50	NA	0.01	0.1–0.50	No	Leaching from natural deposits
pH (units)	2023	6.5–8.5	NA	7.3	7.2–8.0	No	Naturally occurring

<sup>1</sup> Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.

<sup>2</sup> Depending on the TOC in our source water, the system must have a certain percentage removal of TOC or 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.

<sup>3</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.

