



# ANNUAL DRINKING WATER QUALITY REPORT 2023

May 2024



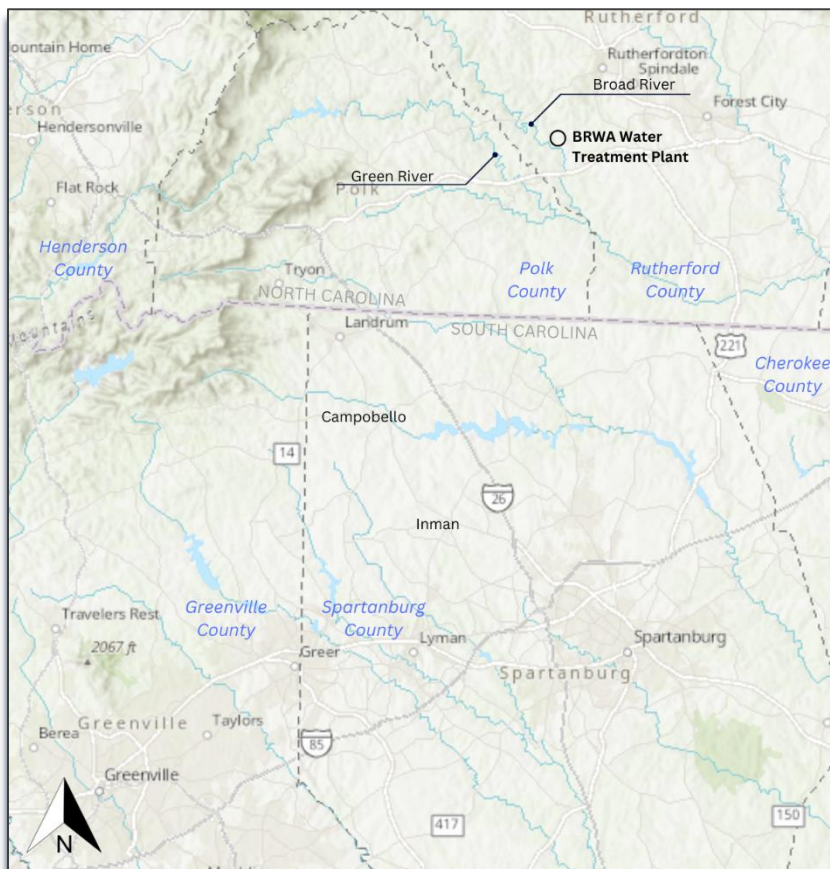
Polk County Water System  
System No. NC 10-75-010

5 Prospect Street  
Inman, SC 29349

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúscalo o hable con alguien que lo entienda bien.

## CONSUMER CONFIDENCE REPORT

Polk County Water System and the Inman-Campobello Water District are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is a snapshot of the water quality from last year and includes details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe, dependable supply of drinking water. We are committed to providing you with information because informed customers are our best allies.



## SOURCE WATER INFORMATION

Polk County Water System and the Inman-Campobello Water District purchase water from the Broad River Water Authority (BRWA) for distribution to residential, commercial, and industrial customers. The water that is used by this system is purchased from BRWA and is surface water from the Broad River. The Broad River originates in the Hickory Nut Gorge area, above Lake Lure, NC, and flows southeast through Rutherford County. The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose for the assessment 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 the source for the BRWA 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 assessment findings are summarized in the table below.

Susceptibility of Sources to Potential Contaminant Sources (PCSs)		
Source Name	Susceptibility Rating	SWAP Report Date
Broad River	Moderate	September 9, 2020

The complete SWAP Assessment Report for the Broad River Water Authority may be viewed on the Web at: [https://www.ncwater.org/SWAP\\_Reports/NC0181035\\_SWAP\\_Report-20200909.pdf](https://www.ncwater.org/SWAP_Reports/NC0181035_SWAP_Report-20200909.pdf). To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email your request to [swap@ncdenr.gov](mailto:swap@ncdenr.gov). Please indicate your system name, PWSID (NC 10-75-010) 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 by phone at 919-707-9098.

It is important to understand that a susceptibility rating of “moderate” does not imply poor water quality, only the systems’ potential to become contaminated by PCSs in the assessment area.

Protection of drinking water is everyone’s responsibility. You can help protect your community’s drinking water source(s) in several ways: dispose of chemicals properly, take used motor oil to a recycling center, volunteer in your community to participate in group efforts to protect your source, etc.

### CONTAMINANTS

The sources of drinking water (both tap 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:

- 1) Microbial contaminants such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- 2) Inorganic contaminants such as salts and metals, which can be naturally-occurring or the result of urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- 3) Pesticides and herbicides which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- 4) 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 storm water runoff, and septic systems.
- 5) Radioactive contaminants which can be naturally-occurring or the result of oil and gas production and mining activities.

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 indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA’s Safe Drinking Water Hotline (800-426-4791)**. In order to ensure the tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, or even some elderly and infants at particular risk from infections should seek advice about drinking water from their health care

providers. EPA/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 (800-426-4791).

### ADDITIONAL INFORMATION FOR LEAD

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 material and components associated with service lines and home plumbing. Inman-Campobello Water District is responsible for providing high quality drinking water but 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 2 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 (800-426-4791) or online at <http://www.epa.gov/safewater/lead>.

### DESCRIPTION OF WATER TREATMENT PROCESSES

Your water is treated by filtration and disinfection. Filtration removes particles suspended in the source water. Particles typically include clays and silts, natural organic matter, iron and manganese, and microorganisms. Your water is also treated by disinfection. Disinfection involves the addition of chlorine or other disinfectants to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water. Disinfection is considered to be one of the major public health advances of the 20<sup>th</sup> century.

### DEFINITIONS AND UNIT DESCRIPTIONS

The Water Quality Test Results tabulated in the next section contain specific terms, measures, and abbreviations that may require explanation. Please refer to the definitions and unit descriptions below for clarification.

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

**Average (Avg):** Regulatory compliance with some Maximum Contaminant Levels (MCLs) are based on a running average of monthly samples.

**Level 1 Assessment:** A Level 1 assessment is a study of a water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in a water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of a water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in a water system on multiple occasions.

**Locational Running Annual Average (LRAA):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

**Maximum Contaminant Level Goal (MCLG):** 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.

**Maximum Contaminant Level (MCL):** 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.

**Maximum Residual Disinfectant Level Goal (MRDLG):** 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.

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

Secondary Maximum Contaminant Level (SMCL): The maximum permissible level of a contaminant that is allowed in drinking water. Secondary contaminants are substances that affect the taste, odor, and/or coloring of drinking water. These aesthetic contaminants normally do not have any health effects and normally do not affect the safety of your water.

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

#### Unit Descriptions

ppm: parts per million, milligrams per liter, or one ounce in 7,350 gallons of water.

ppb: parts per billion, micrograms per liter, or one ounce in 7,350,000 gallons of water.

N/A: not applicable

ND: not detected

NTU: Nephelometric Turbidity Unit is the unit of measure used to indicate water clarity.

SU: Standard Unit is the unit of measure used to indicate how acidic or basic water is on the pH scale.

## WATER QUALITY TEST RESULTS

Inman-Campobello Water District, Broad River Water Authority, the South Carolina Department of Health and Environmental Control (SCDHEC), and the North Carolina Department of Environmental Quality (NCDEQ) routinely monitor for over 150 contaminants in your drinking water, according to federal and state laws. The tables below show the results of monitoring for contaminants which have been detected during the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2023. **No MCLs were exceeded for the contaminants listed below.**

MICROBIOLOGICAL CONTAMINANTS (MONITORED BY ICWD)					
Contaminant	MCL Violation Y/N	Your Water	MCLG	MCL/TT	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	N/A	TT 1	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	N	0	0		Human and animal fecal waste
Notes:					
<sup>1</sup> Under the Revised Total Coliform Rule (RTCR), a Treatment Technique (TT) violation is defined as any of the following: <ul style="list-style-type: none"> <li>• E. coli-positive repeat sample following a total coliform-positive routine sample.</li> <li>• Total coliform-positive repeat sample following an E. coli routine sample.</li> <li>• Failure to take all required repeat samples following an E. coli-positive routine sample.</li> <li>• Failure to test for E. coli when any repeat sample tests positive for total coliform.</li> </ul>					

LEAD AND COPPER (MONITORED BY ICWD)								
Constituent	Date Sampled	MCLG	MCL	90 <sup>th</sup> Percentile	No. Sites over AL	Units	Violation	Likely Source of Contamination
Copper <sup>1</sup>	June – Sept 2022	1.3	AL = 1.3	0.092	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead <sup>1</sup>	June – Sept 2022	0	AL = 15	ND	0	ppb	N	
Notes: <sup>1</sup> Next Lead and Copper sampling due in 2025.								

REGULATED CONTAMINANTS (MONITORED BY ICWD)								
Disinfectants and Disinfection By-Products	Collection Date	Highest Level Found	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2023	1.90	1.01-1.78	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes
Haloacetic Acids (HAA5) <sup>1</sup>	2023	LRAA <sup>3</sup> = 42.5	19.0-26.0	No goal for total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) <sup>2</sup>	2023	LRAA <sup>3</sup> = 42.0	24.0-53.0	No goal for total	80	ppb	N	By-product of drinking water disinfection
Notes: <sup>1</sup> HAA5: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. <sup>2</sup> TTHM: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. <sup>3</sup> Compliance for HAA5 and TTHM are based on Locational Running Annual Averages (LRAA), not individual sample values. The calculated LRAA may include data from 2022 not reported herein, while range of levels found represents sampled collected during 2023 only.								

FLUORIDE (MONITORED BY BRWA)							
Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range of Levels Detected	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	February 2023	N	0.71 <sup>1</sup>	0.51-0.95	4.0	4.0	Erosion of natural deposits; Water additive which promotes strong teeth
Notes: <sup>1</sup> The fluoride level is controlled at approximately 0.70 ppm with the annual average being 0.71 ppm.							

TURBIDITY – SYSTEMS WITH POPULATION > 10,000 (MONITORED BY BRWA)					
Contaminant	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	N	Avg 0.03 Max 0.08	N/A	TT = 1 NTU	Soil runoff
		100%	N/A	TT = % of samples < 0.3 NTU <sup>1</sup>	

Notes:  
<sup>1</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 below 0.3 NTU.

DISINFECTION BY-PRODUCT PRECURSOR (DBPP) CONTAMINANTS (MONITORED BY BRWA)							
Contaminant (units)	Sample Date	MCL/TT Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (TOC) (ppm) RAW	Monthly 2023	N	1.54	1.11 2.16	N/A	TT <sup>2</sup>	Naturally present in the environment
TOC <sup>1</sup> (ppm) TREATED	Monthly 2023	N	0.45	ND 1.08	N/A	TT <sup>2</sup>	Naturally present in the environment

Notes:  
<sup>1</sup> TOC has no health effects. However, TOC in the environment provides a medium for the formation of DBPs, which necessitates monitoring.  
<sup>2</sup> Due to the fact that the raw water has a very low TOC content, and the treatment plant utilizes enhanced coagulation, the State has approved alternative compliance criteria in the form of a treatment technique (TT) in lieu of percent removal for DBPPs. To maintain compliance with the TT, the treated water TOC level must be less than 2.0 ppm in accordance with Alternative 2.

WATER CHARACTERISTICS CONTAMINANTS (MONITORED BY BRWA)				
Contaminant (units)	Sample Date	Your Water	Range Low High	Secondary MCL
pH (SU)	Hourly	7.2	N/A	6.5 – 8.5
Sodium	February 2023	4.6	N/A	n/a

### UNREGULATED CONTAMINANTS

Unregulated contaminants are those that do not have a drinking water standard set by the EPA. The EPA is required by the Safe Drinking Water Act to identify a list of potential contaminants every five years, make a rule for testing by the water systems, and then make a decision whether regulations are necessary. The latest mandated testing rule for selected contaminants is Unregulated Contaminant Monitoring Rule 5 (UCMR5), which

includes 29 different types of per- and polyfluoroalkyl substances (PFAS) and lithium. The ICWD began testing for this rule in May 2023 and the final samples were taken in February 2024. All 30 samples over the four quarters of testing came in below the minimum reporting limit. For this reason, there is nothing to report at this time.

If you have any questions about this report or questions concerning your water quality, please contact October Ivester at 828-863-2295. Polk County is governed by a Board of Commissioners who generally meet on the first and third Monday of each month. For time and location, you may call 828-894-3301. The ICWD is governed by a Board of Commissioners who generally meet at the ICWD Office on the third Tuesday of each month at 8:15 am.