

2021 ANNUAL DRINKING WATER QUALITY REPORT

May, 2022

Polk County Water System ID# NC 10-75-010

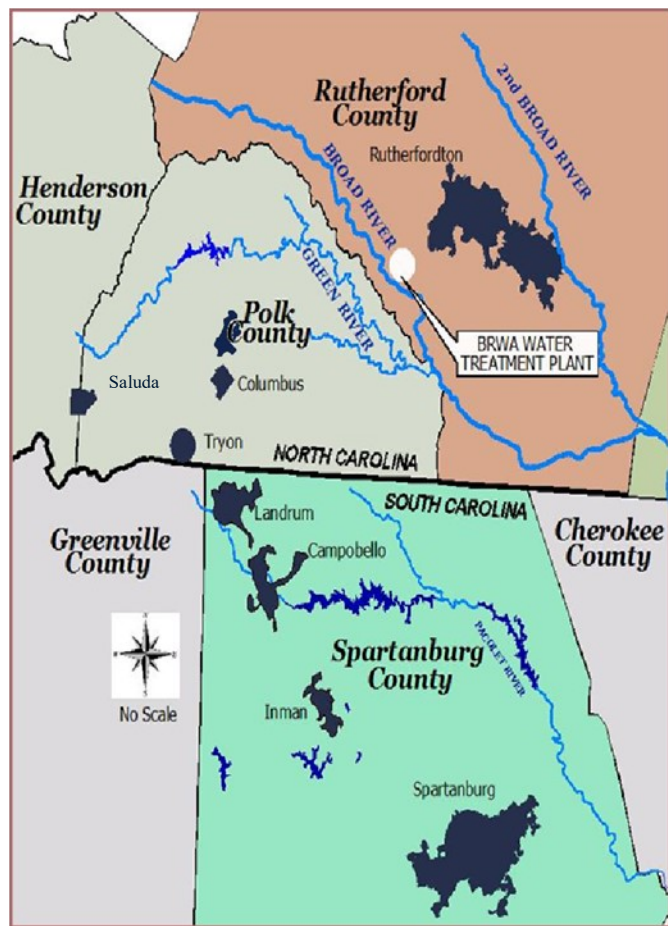
5 Prospect St., Inman, SC 29349

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

Polk County Water System and the Inman-Campobello Water District are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are the 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 want you to understand the efforts made to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information, because informed customers are our best allies.

SOURCE WATER ASSESSMENT PROGRAM (SWAP) RESULTS

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 surface water from the Broad River. The Broad River originates in the Hickory Nut Gorge area, above Lake Lure, N.C., 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 (PCS). The results for 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 Broad River Water Authority 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 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 internet at: 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. Please indicate your system name, PWSID, and provide your name, mailing address and phone number. If you have any questions about the SWAP report, please contact the Source Water Assessment Program staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of “high” does not imply poor quality, only the systems’ potential to become contaminated by PCS’s 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.

What the EPA Wants You to Know

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More important information about contaminants and potential health effects can be obtained by calling the **Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791)**.

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the **Safe Drinking Water Hotline (800-426-4791)**.

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 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 be naturally-occurring or result from urban storm 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 storm water 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 storm runoff, and septic systems; and radioactive contaminants, which can be naturally-occurring or be the result of oil and mining activities. In order to ensure that tap water is safe to drink, 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.

Special Information from the EPA

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. Polk County Water System 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 or at <http://www.epa.gov/safewater/lead>.

Water Quality Data Table of Detected Contaminants

Inman-Campobello Water District (ICWD), Broad River Water Authority (BRWA), and the North Carolina Department of Environmental Quality (DEQ) 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 were detected in the last round of sampling for the particular contaminant group. The presence of contaminants does not necessarily indicate that the water poses a health risk. *Unless otherwise noted, the data presented in these tables is from testing done January 1 through December 31, 2021.* The EPA or the State requires 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 one year old.

Public water systems are required to report only those contaminants which have been detected during the calendar year 2021, or in the most recent sample taken for parameters measured less frequently than once per year. The information must include the contaminant name, the MCLG and MCL, the highest level found (or the average for substances subject to secondary MCLs) and the range of measurements if multiple samples were taken, the date samples were taken, and the typical source or sources of the contaminants detected. Since no MCLs were exceeded, no health effects language is required. Normal levels of trihalomethanes and haloacetic acids, which are the expected by-products of chlorine disinfection, were observed, but these are not regulated at the treatment plant. Each system must report trihalomethane and haloacetic acid data from the monitoring of its own distribution system. All sources of drinking water are subject to potential contamination by substances that are naturally-occurring or man made. These substances can be microbes, inorganic chemicals and radioactive substances.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day for a lifetime at the MCL level to have a one-in-a-million chance of having the described health effect.

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although Cryptosporidium can be removed by filtration, the most commonly used filtration methods cannot guarantee 100% removal. The monitoring of our source water indicates the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immunocompromised people have more difficulty and are at greater risk of developing a severe life-threatening illness. Immunocompromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. Cryptosporidium must be ingested for it to cause disease, and it may be spread through means other than drinking water.

Important Drinking Water Definitions

Not Applicable (N/A) - Information not applicable/not required for that particular water system or for that particular rule.

Non Detect (ND) - Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

Parts per million (ppm) or Milligrams per liter (mg/l) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Pico curies per liter (pCi/L) - Pico curies per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

Maximum Residual Disinfection Level (MRDL) - 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.

Maximum Residual Disinfection Level Goal - The "Level" (MRDLG) 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.

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.

Maximum Contaminant Level (MCL) - The "Maximum Allowed" is 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 Contaminant Level Goal (MCLG) - The "Goal" is 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.

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.

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 color of drinking water. These aesthetic contaminants normally do not have any health effects and normally do not affect the safety of your water.

Microbiological Contaminants-Monitored by the ICWD					
Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL/TT	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	N/A	TT*	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	N	0	0	If 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. 1 positive sample/month Note: If either an original routine sample and/or its repeat sample(s) are E. coli positive, a Tier 1 violation exists.	Human & animal fecal waste

*If a system collecting fewer than 40 samples per month has two or more positive samples in one month, the system has a MCL violation.

Turbidity-Systems With Population > 10,000					
Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	N	Avg 0.03 Max 0.06	N/A	TT = 1 NTU	Soil runoff
		100%	N/A	TT = < 0.3 NTU	

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.

Inorganic Contaminants							
Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	Feb 2021	N	0.71	0.60 0.93	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

Note: The Fluoride level is controlled at approximately 0.70 ppm with the annual average being 0.71 ppm.

Lead and Copper Contaminants						
Contaminant (units)	Sample Date	Your Water	No. of Sites Found Above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90th percentile)	June-Sept. 2019	ND	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (ppb) (90th percentile)	June-Sept. 2019	ND	0	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits.

Note: Next lead and copper sampling due 2022.

Disinfection By-Product Precursors Contaminants							
Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (ppm) (TOCs)-RAW	Monthly 2021	N	1.21	<1.0 1.37	N/A	TT	Naturally present in the environment
Total Organic Carbon (ppm) (TOCs)-TREATED	Monthly 2021	N	ND	ND <1.0	N/A	TT	Naturally present in the environment

Note: Depending on the TOC in our source water, the system MUST have a certain % removal of TOC or must achieve alternative compliance criteria. If we do not achieve that % removal there is an "alternative % removal". If we fail to meet that, we are in violation of a Treatment Technique. Our water has a very low TOC content. Instead of using the % removal criteria we use Alternative 2, treated water TOC <2.0 mg/l as the method to comply with d/DBP treatment technique requirements.

Disinfection By-Product Contaminants-Monitored by the ICWD							
Contaminant (units)	MCL/ MRDL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination	
TTHM (ppb) [Total Trihalomethanes]	N	27.8	11.0 55.0	N/A	80	By-product of drinking water chlorination	
HAA5 (ppb)	N	27.9	9.4 58.0	N/A	60	By-product of drinking water disinfection	
Chlorine (ppm)	N	1.42	0.91 1.93	MRDLG=4	MRDL=4	Water additive used to control microbes	

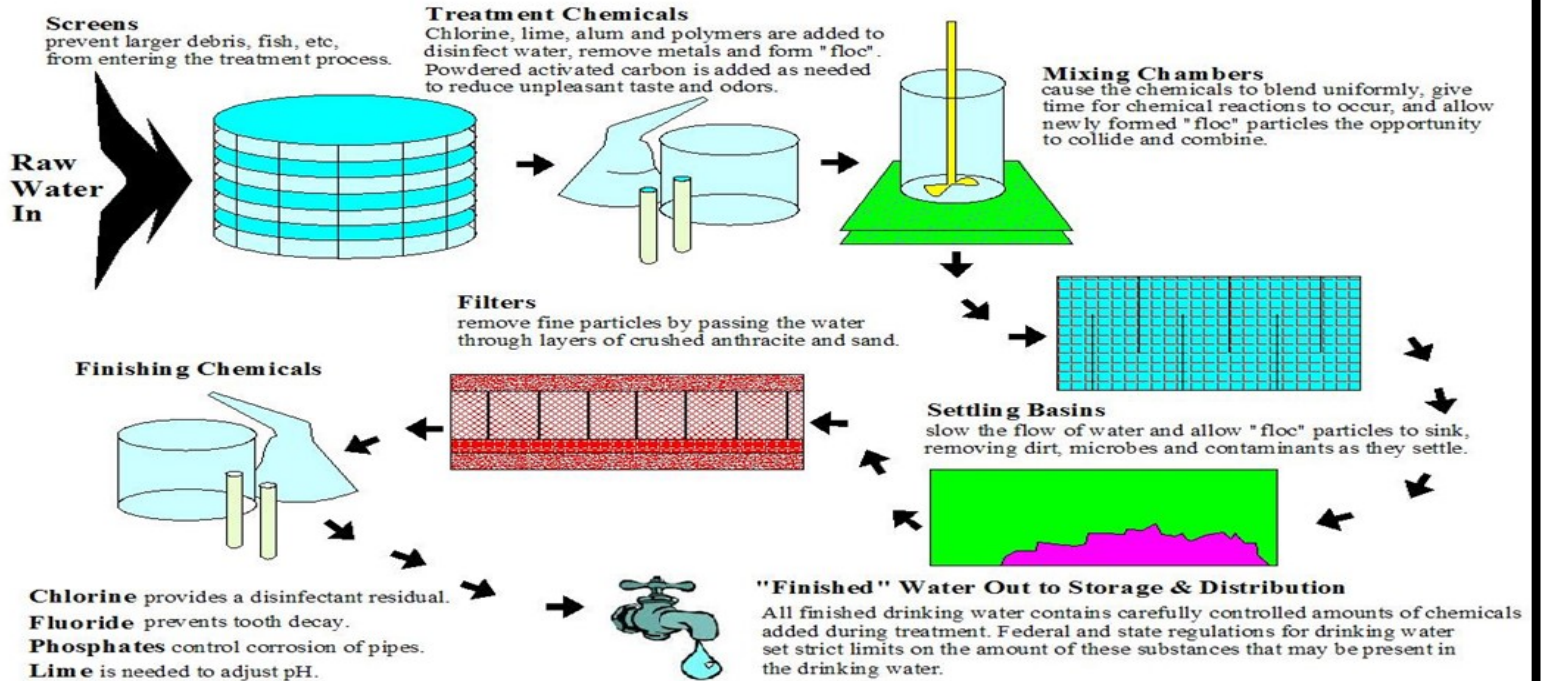
For TTHM: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. For HAA5: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Water Characteristics Contaminants					
Contaminant (units)	Sample Date	Your Water	Range Low High	Secondary MCL	
pH	Hourly	7.2	N/A	6.5 - 8.5	

Este informe contiene información muy importante. Tradúscalo o hable con un amigo quien lo entienda bien.



Water Must Be Treated
to reduce harmful organisms and other substances to safe levels.



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 District Office on the third Tuesday of each month at 8:15 A.M.