



## 2023 Water Quality Report

### **Board of Public Works Water Exceeds all Treatment Standards**

The Gaffney Board of Public Works (BPW) is pleased to present our 2023 Water Quality Report. In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (DHEC) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. These standards protect consumers from waterborne disease, organisms and harmful chemicals. The U.S. Food and Drug Administration (FDA) establish limits for contaminants in bottled water which provides the same public health protection. In accordance with EPA and DHEC regulations, thousands of tests are conducted every year in our DHEC-certified laboratory.

Annually, water systems are required to provide customers with water quality information. The table presented in this report shows the results of our monitoring for the period of January 1st to December 31st, 2023. As you review this report, you will find where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. **We are very happy to report your drinking water surpasses all Federal and State treatment standards.** The BPW is committed to providing you with the safest, most reliable water supply possible. We continue to believe that informed consumers are our best allies in maintaining safe drinking water.

If you have any questions about this report or concerning your drinking water, please call our office at (864) 488-8800 and ask to speak with our professionals at the Water Treatment Plant.

You can also learn more about the Board of Public Works by attending any of our regularly scheduled board meetings held the first Tuesday of each month at 9 am at the Operations Center located at 210 East Frederick Street or by visiting our website at [www.gbpuw.com](http://www.gbpuw.com).



# Annual Drinking Water Quality Data

Results are for January 1 — December 31, 2023

## 2023 Primary Drinking Water Standards

Parameter	Units	MCL	MCLG	Level Detected	Range Detected	Typical Sources	Violation
<b>Inorganic Compounds</b>							
Nitrate	ppm	10	10	0.40	0.40-0.40	Runoff from fertilizer use; Leaching from septic tanks; Erosion of natural deposits	No
<b>Organic Compounds</b>							
TOC (Total Organic Carbon)	NA	TOC % Removal & SUVA Alternate Criteria		Range (% Removal) 37.4-73.3	Avg. Removal Rate 57.8%	Naturally present in the environment.	No
Sodium	ppm	NA	NA	Non Detect	NA	Erosion of natural deposits.	No
<b>Disinfectants</b>							
Chlorine	ppm	4	4	Avg = 1.41	0.59-1.62	Water additive used to control microbes.	No
TTHM's - (Total Trihalomethanes)	ppb	80	NA	59 Highest Level Detected	29.4-100.0	By-product of drinking water chlorination	No
HAA (Halo acetic Acids)	ppb	60	NA	38 Highest Level Detected	11.2-71.3	By-product of drinking water chlorination	No

## Physical Characteristics - All Data is 2023

Parameter	Units	MCL	MCLG	Avg. Level Detected	Range Detected	Typical Sources	Violation
Turbidity	NTU	<0.3	<0.1	0.054	0.021-0.162	Soil Runoff	No

## Lead and Copper - All Data is from samples collected 8/25/21—9/1/21

Parameter	Units	Action Level	MCLG	90th Percentile	Sites Exceeding Action Level	Typical Sources	Violation
Lead (Customer Plumbing)	ppb	15	0	0	0	Corrosion of household plumbing systems; Erosion of natural deposits.	No
Copper (Customer Plumbing)	ppm	1.3	0	0.075	0	Corrosion of household plumbing systems; Erosion of natural deposits.	No

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 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>.

Contaminate from UCMR4 sampled from 2020					
Parameter	Sample Point Type	Units	Average	Range	Source
Manganese	EP	ppb	0.5755	0.516-0.635	Naturally occurring
Bromide	SR	ppb	39	39-39	Naturally occurring
HAA5	DS	ppb	36.46	10.54-51.02	Disinfection Byproducts
HAA6Br	DS	ppb	3.99925	2.351-6.06	Disinfection Byproducts
HAA9	DS	ppb	40.45925	12.891-57.08	Disinfection Byproducts
Total Organic Carbon	SR	ppb	2806.666667	1100-3980	Naturally occurring

Through the UCMR, public water systems provide the EPA data about the presence of these unregulated contaminants in drinking water. The data allows the EPA to determine if the population is being exposed, quantify the level of exposure, and assess the impact of these unregulated contaminants on the environment and public health. This is the first step in the EPA's process to determine what new contaminants may need to be regulated. For more information, visit the EPA Web site at [water.epa.gov](http://water.epa.gov). A complete list of results for the UCMR4 can be requested at the 864-488-8800 or email the request at [customerservice@gbpw.com](mailto:customerservice@gbpw.com)

### **Abbreviations Used in the Table:**

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

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

**ppm (Parts per Million):** This is the same as milligrams per liter or one penny out of \$10,000.

**ppb (Parts per Billion):** This is the same as micrograms per liter or one penny out of \$10,000,000.

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

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

**Contaminant:** Any substance dissolved or suspended in water. Contaminants may be natural or result from the activities of people. Many contaminants are not harmful at all, and others are harmful only if present above a certain level.

**NTU (Nephelometric Turbidity Units):** Units of measure to indicate water clarity.

**LRAA (Locational Running Annual Average):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

### **Important Health Information**

Some people may be more vulnerable to contaminants in drinking water than the general populations. Immune compromised 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 for 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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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 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 is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/asfewater/lead>.

## Where does our water come from?

The BPW draws water from Lake Whelchel and the Broad River. The Board can pump directly from the Broad River to the Water Treatment Plant but primarily water is pumped from the Broad River to Lake Whelchel and then flows to the Water Treatment Plant. Lake Whelchel is also fed by Allison Creek. The BPW has a boat landing and picnic area on Lake Whelchel offering recreational opportunities to our customers. For park hours, boating and fishing permits or more information, call customer service at (864) 488-8800.

## How is my water treated?

Raw water flows from Lake Whelchel to the BPW water treatment plants located on Filter Plant Road. Chemicals are mixed with the raw water to promote the removal of naturally occurring minerals and metals and to eliminate taste and odor. The water then moves to the sedimentation basins where particles settle removing dirt, microbes and contaminants as they settle. Filters remove fine particles and chlorine is added as a disinfectant. The treatment plant is rigidly maintained and monitored by the BPW State Certified Treatment Plant Operators.

## Our Dedication

The BPW water treatment professionals are dedicated to providing you the highest quality water possible. Since 2006, the BPW has received the Area-Wide Optimization Program Excellence Award presented by SCDHEC. The goal of the program is to optimize particle removal and disinfection at all filtration plants to maximize the public health protection. AWOP was originally focused on microbial contaminants, but has expanded to include a disinfectant byproducts components.

## What's in our water?

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 activities.

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 water 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 water runoff, and septic systems.

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

DHEC conducted a source water assessment for the Board of Public Works system. The goal of the assessment was to assess the sources of potential contaminants and implement preventative measures to keep both groundwater and surface water from becoming contaminated instead of relying solely on treatment to provide safe drinking water. The state source water assessment included a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can enter the Board's source waters. A copy of our source water assessment may be requested at:

**<http://www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/>**

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 at (800) 426-4791.