Grand Strand Water and Sewer Authority 2024 Water Quality Report

GSWSA – BULL CREEK REGIONAL WATER SYSTEM EXCEEDS ALL WATER QUALITY U.S. STANDARDS In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) and South Carolina Department of Environmental Services (SCDES) prescribes strict 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. The amounts of these contaminants are measured by SCDES and are reported in the table on the back of this page. The few contaminants that were detected in our water are present at very low concentrations and in all cases are much less than the amounts considered unsafe by the EPA.

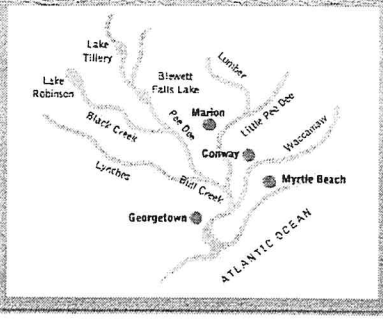
SOURCE OF DRINKING WATER The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity. 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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

CONTAMINANTS THAT MAY BE PRESENT IN THE 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 be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-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 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 microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

THE SOURCE OF YOUR WATER

The Great Pee Dee watershed is the source of our fresh surface water. Originating in North Carolina, it includes waters from Lake Tillery, Blewett Falls Lake, Lumber River, Little Pee Dee River, Great Pee Dee River, Lake Robinson, Black Creek, and Lynches River. Fresh surface water is pumped from Bull Creek, a branch of the Pee Dee River. Bull Creek lies a few miles north of the intersection with the Waccamaw and Pee Dee Rivers. All the rivers combine to flow through Winyah Bay into the Atlantic Ocean.



Water Tested Daily

Water leaving the treatment plant is tested every day for the presence of coliform bacteria. Each month, approximately 180 samples from the distribution system are also tested. During 2024, the coliform bacteria samples were found to be less than the maximum contaminant level as per SCDES regulations.

Drinking water is tested every day for the presence of undissolved particles. Tiny particles may provide hiding places for bacteria or other micro-organisms. These particles might make the water appear cloudy or muddy. The amount of particles in a water sample is expressed as turbidity. Turbidity of less than 0.3 Turbidity Units (NTU) in 95% of the samples tested is considered acceptable by the EPA. In 2024 we measured turbidity of less than 0.3 NTU in 100% of the samples tested.

Our goal is to remove or destroy any organism that is considered harmful to human health. We do this using disinfectants called chloramine and chlorine as well as a very efficient filtration system. The system is monitored 24 hours per day for turbidity and particle counts using modern electronic laser detection equipment. Filters are taken offline and washed to restore efficiency whenever turbidity or particle counts reach predetermined levels.

WE WELCOME YOUR SUGESTIONS

Are you interested in learning more about the water treatment process, water quality or participating in the decision making process?

For general questions please contact our Customer Service Department at (843) 443-8202. For general water quality information call (843) 443-8290. For detailed water quality data and technical questions, please call GSWSA at (843) 443-8288.

The public is invited to attend any of the monthly Board of Directors meetings scheduled for the 4th Monday of each month at 6:00 pm at our Administrative Office Building off Jackson Bluff Road.

Please visit our website for additional information at www.gswsa.com.

LEAD INFORMATION

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. GSWSA 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, 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 GSWSA at (843) 443-8290. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead. Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems. For more information on lead and copper awareness and to view GSWSA's service line inventory please visit https://lead.gswsa.com/ .

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

GRAND STRAND WATER & SEWER AUTHORITY

WATER QUALITY TABLE FOR BULL CREEK SWTP

ANALYSES FOR 2024 *

REGULATED AT THE TREATMENT PLANT**

Substance	Units	Date Sampled	MCL	Detected Levels (Range or Single Analysis)	MCLG	Most Likely Source of Contaminant
Turbidity	NTU	2024	<0.3 for 95% of samples	Range: 0.03 – 0.089 95th Percentile: 0.087	TT	Soil runoff.
Beta/photon emitters (MCL = 4 mrem/yr) ***	pCi/L	2019	50.0	3.0	N/A	Decay of natural and man-made deposits..
Fluoride	ppm	2024	4.0	0.70 – 3.70 Average: 2.72	4.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	ppm	2024	10.0	Range: ND – 0.58 Average: 0..29	10.0	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Chlorobenzene	ppb	2024	100.0	0.50	100	Discharge from chemical and agricultural chemical factories.
Gross Alpha Including Radon & Uranium	pCi/L	2023	15.0	Range: 0.396 – 0.622 Average: 0.495	0	Erosion of natural deposits

REGULATED AT THE CUSTOMERS' TAP

Substance	Units	Date Sampled	MCL	Detected Levels (Range or Single Analysis)	# Samples Exceeding AL	MCLG	Most Likely Source of Contaminant
Copper- action level at consumer taps	ppm	2023	1.3 (AL)	Range: 0.006 – 7.4 90th Percentile: 0.13	0	1.3	Erosion of natural deposits; Corrosion of household plumbing systems.
Lead- action level at consumer taps	ppb	2023	15 (AL)	Range: ND – 0.089 90th Percentile: 0.56	0	0	Erosion of natural deposits; Corrosion of household plumbing systems.

REGULATED AT THE DISTRIBUTION SYSTEM

Substance	Units	Date Sampled	MCL	Detected Levels (Range or Single Analysis)	MCLG	Most Likely Source of Contaminant
Chloramines	ppm	2024	4 (MRDL)	Range: 0.93 - 3.17 Average: 2.05	4 (MRDLG)	Water additive used to control microbes.
Total Trihalomethanes (TTHMS)	ppb	2024	LRAA: 80	Range: 0 – 46.40 LRAA: 35.00	N/A	By-product of drinking water disinfection.
Total Haloacetic Acids (HAA5)	ppb	2024	LRAA: 60	Range: 0 – 33.60 LRAA: 28.00	N/A	By-product of drinking water disinfection.

SECONDARY PARAMETERS

Substance	Units	Date Sampled	MCL	Detected Levels (Range or Single Analysis)	MCLG	Most Likely Source of Contaminant
Sodium	ppm	2024	N/A	Range: 14.00 – 270.00 Average: 193.60	N/A	Erosion of natural deposits.
Metolachlor	ppm	2024	N/A	0.02	N/A	Runoff from herbicide.
Dicamba	ppb	2024	N/A	ND	N/A	Runoff from herbicide.
Atrazine	ppb	2021	3	Range: 0E-9 – 0.90	3	Runoff from herbicide on row crops.

* Some analyses are not performed every year. The most recent analysis performed will be the one reported in that instance.
** The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by EPA.
*** EPA considers 50 pCi/L to be a level of concern for beta particles.

The data presented in this table contains abbreviations and terms that may seem complicated. The following definitions are important for understanding this data:

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 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.
Treatment Technique (TT) -A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
Action Levels (AL) –Regulations set Action Levels for some contaminants, for example lead and copper-An Action Level is the concentration of a contaminant which triggers treatment or other requirements which a water system must follow.
AVG - Average
Parts Per Million (ppm) -The equivalent of one penny in $10,000.
Parts Per Billion (ppb) - The equivalent of one penny in $10,000,000.
Picocuries per liter (pCi/L) - A measure of radioactivity in water.
< - Less than
NA – Not Applicable
ND – Not Detected-lab analysis indicates constituent is not present.
NGE - No goal established
NTU – Nephelometric turbidity unit-measure of clarity –turbidity in excess of 5 NTU is just noticeable to the average person.
90th Percentile- Statistical measurement of probability of 90% of samples meeting a certain criteria.
MRDL – Maximum Residual Disinfectant Level is the highest level of a disinfectant that is allowed in finished drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG –Maximum Residual Disinfectant Level Goal-Level of disinfectant in drinking water below which there is no known or expected health effect. MRDLG does not reflect the benefits of using disinfectants to control microbial disinfectants.
RAA – Running Annual Average.

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Unregulated Contaminant Monitoring

The EPA selected GSWSA to participate in the Unregulated Contaminant Regulation 4 (UCMR 4) program in 2020. Unregulated contaminants are constituents in the water that do not have a drinking water standard set by the EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. For more information on the contaminants or UCMR 4, please contact SCDES at (803) 898-4300. For a complete list of parameters tested during the UCMR 4 sampling event, please call Customer Service at (843) 234-8460.

SUBSTANCE	DETECTED LEVELS (RANGE OR SINGLE ANALYSIS)	MOST LIKELY SOURCE OF CONTAMINANT
Total Haloacetic Acids (HAA9)	Range: 25.6 – 57.2 ppb LRAA: 43.2 ppb	By-product of drinking water disinfection.
Manganese	Range: 0.7 – 30.9 ppb Average: 4.4 ppb	Erosion of natural deposits.
Bromide	Range: 22.6 – 36.6 ppb Average: 29.6 ppb	Naturally occurring element.
Total Organic Carbon	Range: 10,700 – 13,100 ppb Average: 11,725 ppb	Leaching from vegetation.

SOURCE WATER ASSESSMENT SCDES has completed a source water assessment for this system. A copy of this assessment for System Number 2620004 can be obtained on the web at https://des.sc.gov/programs/bureau-water/drinking-water or by calling the Bureau of Water at (803) 898-4300.

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