

Grassy Pond Water Corporation

Water System Number: SC 11-20-002

Consumer Confidence Report 2018

Is my water safe?

We 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 designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

The water that is used by this system is purchased from multiple sources. Approximately 25% of Grassy Pond Water Company's water comes from the Gaffney Board of Public Works which uses surface water from both the Broad River and Cherokee Creek. This water is treated at the Gaffney Water Treatment Plant. Approximately 75 % of our water is purchased from the Broad River Water Authority, who also uses surface water from the Broad River and then treats it at the Rutherford County Water Treatment Facility located in Rutherford County, North Carolina. The Broad River originates above Lake Lure, NC in the Hickory Nut Gorge area, flowing southeast through Rutherford County, North Carolina.

Source water assessment and its availability

The complete SWAR reports for Grassy Pond Water Company and the Gaffney Board of Public Works can be found on the web at www.scdhec.gov/HomeandEnvironment/Water/SourceWaterProtection/ Or you may contact the persons named below to review the South Carolina Swap Reports, Phillip Sarratt of Grassy Pond Water Company at (864) 489-7777 or Kim Fortner of the Gaffney Board of Public Works at (864) 488-8800.

Why are there contaminants in my drinking water?

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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 pick up substances resulting from the presence of animals or from human activity: microbial contaminants, such as viruses and bacteria, that 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; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your

community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed Information Network's How to Start a Watershed Team.

- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

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 materials and components associated with service lines and home plumbing. Grassy Pond Water Corporation 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

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Microbiological Contaminants in the Distribution System - Broad River Water Authority: 2018

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	NO	0	0	1 positive sample / month*	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (presence or absence)	NO	0	0	Note: If either an original routine sample and/or its repeat samples(s) are fecal coliform or <i>E. coli</i> positive, a Tier 1 violation exists.	Human and 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* Broad River Water Authority: 2018

Contaminant (units)	Treatment Technique (TT) Violation Y/N	Your Water	MCLG	Treatment Technique (TT) Violation if:	Likely Source of Contamination
Turbidity (NTU) - Highest single turbidity measurement	No	Avg. 0.06 NTU Max. 0.13 NTU	N/A	Turbidity > 1 NTU	Soil runoff
Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits	No	100 %	N/A	Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU	

Turbidity* Gaffney Board of Public Works: 2017

Contaminant (units)	Treatment Technique (TT) Violation Y/N	Your Water	MCLG	Treatment Technique (TT) Violation if:	Likely Source of Contamination
Turbidity (NTU) - Highest single turbidity measurement	No	0.098 NTU	N/A	Turbidity > 1 NTU	Soil runoff
Turbidity (NTU) - Lowest monthly	No	0.020 NTU	N/A	Turbidity > 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 less than or equal to 0.3 NTU.

Inorganic Contaminants: Broad River Water Authority

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	February 2018	N	0.70	0.65 – 0.79	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 0.69 ppm.

Nitrate/Nitrite Contaminants: Gaffney Board of Public Works

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)	2018	No	0.32	0.32 – 0.32	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Lead and Copper Contaminants: Broad River Water Authority (next samples due in 2020)

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	2017	0.09	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90 th percentile)	2017	ND	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

Lead and Copper Contaminants: Grassy Pond SC: (next samples due in 2020)

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	2017	0.075	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90 th percentile)	2017	0.001	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

Lead and Copper Contaminants: Grassy Pond NC (next samples due in 2021)

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	June 2018	0	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90 th percentile)	June 2018	0	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

Lead and Copper Contaminants: Gaffney Board of Public Works

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	Aug & Sept 2018	0.085	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90 th percentile)	Aug & Sept 2018	0	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

Total Organic Carbon (TOC): Broad River Water Authority

Contaminant (units)	Sample Date	TT Violation Y/N	Your Water	Range Low - High	MCLG	TT	Likely Source of Contamination
Total Organic Carbon (ppm) – RAW	Monthly 2018	No	1.32	<1.0 – 1.50	N/A	TT	Naturally present in the environment
Total Organic Carbon (ppm)- TREATED	Monthly 2018	No	ND	<1.0 – ND	N/A	TT	Naturally present in the environment

Note: Depending on the TOC in our source water the system MUST have a certain % of removal of TOC or must achieve alternative compliance criteria. If we do not achieve that % of removal there is an alternative % of removal. If we fail to meet that requirement, we are then in violation of a Treatment Technique. Our water contains very little Total Organic Carbon (TOC) so instead of using the % of removal criteria, we use an alternative (Alt 2), treated water TOC <2.0 mg/l as the method to comply with DBP treatment technique requirements.

Total Organic Carbon (TOC): Gaffney Board of Public Works: 2018

Contaminant (units)	TT Violation Y/N	Your Water (RAA Removal Ratio)	Range Monthly Removal Ratio Low - High	MCLG	TT	Likely Source of Contamination
Total Organic Carbon (removal ratio) (TOC)-TREATED	No	50.5%	38.6% – 60.6 %	N/A	TT	Naturally present in the environment

Your water is treated by disinfection. Disinfection involves the addition of chlorine to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Disinfectant Residuals Summary: Broad River Water Authority

	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range		MRDLG	MRDL	Likely Source of Contamination
				Low	High			
Chlorine (ppm)	2018	N	1.76	0.89	2.21	4	4.0	Water additive used to control microbes

Disinfectant Residuals Summary: Grassy Pond Water SC

	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range		MRDLG	MRDL	Likely Source of Contamination
				Low	High			
Chlorine (ppm)	2018	N	1.04	0.87	1.20	4	4.0	Water additive used to control microbes

Disinfectant Residuals Summary: Grassy Pond Water NC

	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range		MRDLG	MRDL	Likely Source of Contamination
				Low	High			
Chlorine (ppm)	2018	N	1.05	0.4	1.5	4	4.0	Water additive used to control microbes

Disinfectant Residuals Summary: Gaffney Board of Public Works

	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range		MRDLG	MRDL	Likely Source of Contamination
				Low	High			
Chlorine (ppm)	2018	N	1.31	0.52	1.54	4	4.0	Water additive used to control microbes

**Stage 2 Disinfection Byproduct Compliance - Based upon Locational Running Annual Average (LRAA)
Grassy Pond Water Corporation - NC**

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM (B01 location)	2018	N	33 ppb	17.0	43.3	N/A	80	Byproduct of drinking water disinfection
TTHM (B02 location)	2018	N	29 ppb	13.2	58.4	N/A	80	Byproduct of drinking water disinfection
HAA5 (B01 location)	2018	N	32 ppb	18.4	26.0	N/A	60	Byproduct of drinking water disinfection
HAA5 (B02 location)	2018	N	37 ppb	22.3	27.2	N/A	60	Byproduct of drinking water disinfection

Disinfection Byproduct Compliance: Broad River Water Authority

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM	2018	N	28	10	50	N/A	80	Byproduct of drinking water disinfection
HAA5	2018	N	20	11	30	N/A	60	Byproduct of drinking water disinfection

Disinfection Byproduct Compliance: Gaffney Board of Public Works

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM	2018	N	46	23.2	80.0	N/A	80	Byproduct of drinking water disinfection
HAA5	2018	N	26	14.6	36.8	N/A	60	Byproduct of drinking water disinfection

Disinfection Byproduct Compliance: Grassy Pond SC

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM – 403 Oak ridge Rd, Gaffney, SC	2018	N	46.58	23.0	70.4	N/A	80	Byproduct of drinking water disinfection
HAA5 – 403 Oak Ridge Rd, Gaffney, SC	2018	N	25.98	19.0	32.4	N/A	60	Byproduct of drinking water disinfection
TTHM – 234 Oak Forest Cir, Gaffney, SC	2018	N	25.45	16.6	33.7	N/A	80	Byproduct of drinking water disinfection
HAA5 – 234 Oak Forest Cir, Gaffney, SC	2018	N	20.48	16.4	23.4	N/A	60	Byproduct of drinking water disinfection

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.*

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water. These are listed on the following page.

Other Miscellaneous Water Characteristics Contaminants: Broad River Water Authority

Contaminant (units)	Sample Date	Your Water	Range		SMCL
			Low	High	
pH	Hourly	7.1		N/A	6.5 to 8.5

Cryptosporidium

The Broad River Water Authority monitored for *Cryptosporidium* monthly (Jan - Sept) in 2018 and found an average level of 0.04. The highest level detected was 0.19 and the lowest level detected was 0.00.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection.

Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Tables for Unit Descriptions and Important Drinking Water Definitions

Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required but recommended.

Important Drinking Water Definitions	
Term	Definition
MCLG	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.
MCL	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection 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.
MRDL	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Other Important Drinking Water Definitions:

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.

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.

For more information please contact:

Phillip Sarratt at the Grassy Pond Water Corporation (SC 11-20-002) Office at (864) 489-7777. The office is located at 626 Chesnee Hwy, Gaffney, SC 29341.