2018 Consumer Confidence Report

January 1 – December 31, 2018
Water System 2310005
Published May 2019
Greer Commission of Public Works
Greer, South Carolina
864-848-5500 · www.GreerCPW.com

We are pleased to present to you this year's Annual Consumer Confidence Report for the period of January 1 through December 31, 2018. This report is intended to provide you with important information about your drinking water and the efforts made by Greer CPW to provide safe drinking water. For more information regarding this report, please contact our Water Plant Manager at (864) 848-5527. We want our valued customers to be informed about their water quality. If you want to learn more, please attend any of our regularly scheduled public meetings. They are typically held on the fourth Monday of each month at our Administration & Operations center at 301 McCall Street in Greer. Call our main phone number (864) 848-5500 to confirm the day and time.

The results of extensive laboratory testing for hundreds of potential contaminants show that our drinking water had **no violations** of water quality standards. We strive to continue to supply Greer and the surrounding area with drinking water that exceeds all Federal and State requirements. Through our ongoing monitoring and testing, you can be assured that the EPA has determined that your water **is safe**.

The South Carolina DHEC Watershed Program has traditionally shared extensive water quality information through published Watershed Water Quality Assessments. These assessments have been replaced by the **SC Watershed Atlas**. The web-based application brings the Agency's most current and comprehensive watershed and water quality information into a user-friendly, statewide application. This searchable atlas includes watershed descriptions, base maps, water quality assessments and trends, use support, monitoring sites, permitted facilities, MS4s, TMDLs and much more. Learn more and view the atlas at: http://gis.dhec.sc.gov/watersheds/.

The U.S. EPA wants you to know that 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.

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. 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 microbial contaminants are available from the Safe Drinking Water Hotline listed above.

Required general statement about drinking water sources- 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. 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 be the result of oil and gas production and mining activities.

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

Annual Drinking Water Quality Data

Results are for January 1st – December 31st, 2018

2018 Primary Drinking Water Standards

Parameter	Units	Violation	Range Detected	Highest Level Detected	MCL	MCLG	Possible Sources
INORGANIC COMPOUNDS							
Fluoride	ppm	NO	0.64 - 0.67	0.67	4	4	Drinking Water Additive to prevent tooth decay
Nitrate/Nitrite (as Nitrogen)	ppm	NO	0.23	0.23	10	10	Erosion, Fertilizer runoff
ORGANIC COMPOUNDS							
TOC (Total Organic Carbon)	NA	NO	Avg. Removal Rate 46%	Range (% Removal) 39% - 63%	Required Removal Rate 35%		Naturally occuring in the environment

Parameter	Units	Violation	Range Detected	Highest Level Detected	MCL	MCLG	Possible Sources
DISINFECTANTS							
Chloramine	ppm	NO	2.69 - 2.97	Average = 2.81	4	< 3.0	Drinking water additive to control microbe formation
Total Trihalomethanes	ppm	NO	.019 - .053	0.035 RAA	0.080	0	By-Product of Disinfection
Total Haloacetic Acids	ppm	NO	.008 - .031	0.027 RAA	0.060	0	By-Product of Disinfection
Unregulated Contaminent Monitoring (Results from 2011)							
Nitrosodimethylamine (NDMA)	ppb	NO	BDL	NA	NA	NA	By-Product of disinfection

2018 Microbial and Physical Characteristics

Parameter	Units	Violation	Range Detected	Highest Level Detected	MCL	MCLG	Possible Sources
Total Coliform	% Pos Monthly	NO	0	0	< 5%	0	Human and animal waste found in the environment
Turbidity	NTU	NO	0.03 - 0.06	0.06	< 0.30	< .10	Soil Runoff

2016 Lead and Copper - (Next Round of Sampling due summer 2019)

Parameter	Units	Violation	Action Level	90th Percentile	Sample Sites Exceeding Action Level	Possible Sources
Lead - Customer Plumbing	mg/l	NO	0.015	7.70	2	Corrosion of Household Plumbing
Copper - Customer Plumbing	mg/l	NO	1.30	0.084	0	Corrosion of Household Plumbing

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.

Long Term 2, Enhanced Surface Water Treatment Rule Monitoring (April 2015 through March 2017)

Lake Cunningham - Cryptosporidium : **ND (None Detected)**

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

2018 Greer CPW Data for Unregulated Contaminant Monitoring Rule 4 (UCMR4) ,

Our water system has sampled for a series of unregulated contaminants as required by US EPA throughout 2018.
Unregulated contaminants are those that do not have an established drinking water standard.
The purpose of monitoring for these contaminants is to assist EPA's decision whether these contaminants should be regulated.
Greer CPW customers have a right to know that this data has been provided to EPA and is now available.
The results of Assessment Monitoring (AM1, AM2, and AM3) are as follows:

UCMR4 Assessment Monitoring

Assessment Monitoring 1 – Metals and Pesticides
Sample location: Entry Point to Distribution System
Sample Dates: 2/25/2018, 5/15/2018, 8/14/2018, 11/13/2018

Method	Constituent	ug/l
EPA 200.8	1032: manganese	<MRL
	1053 germanium	<MRL
EPA 530	2433 butylated hydroxyanisole	<MRL
	2434 o-toluidine	<MRL
	3435 quinoline	<MRL
	2084 1-butanol	<MRL
	2431 2-methoxyethanol	<MRL
	2432 2-propen1-ol	<MRL
EPA 525.3	2057 chlorpyrifos	<MRL
	2114 total permethrin	<MRL
	2115 alpha-hexachlorocyclohexane	<MRL
	2116 dimethipin	<MRL
	2117 oxyfluorfen	<MRL
	2118 profenofos	<MRL
	2119 tebuconazole	<MRL
	2120 tribufox	<MRL
	7570 ethoprop	<MRL

Assessment Monitoring 2 - Disinfection By-Product Haloacetic Acid (HAA)

	Sample Date 1: 2/26/2018			Sample Date 2: 5/15/2018			Sample Date 3: 8/14/2018			Sample Date 4: 11/13/2018		
			ug/l			ug/l			ug/l			ug/l
Site 1	EPA 552.3	2456 HAA5	17.75	EPA 552.3	2456 HAA5	29.68	EPA 552.3	2456 HAA5	28.7	EPA 552.3	2456 HAA5	18.78
		2457 HAA6Br	2.89		2457 HAA6Br	3.55		2457 HAA6Br	3.97		2457 HAA6Br	2.62
		2459 HAA9	20.64		2459 HAA9	33.23		2459 HAA9	32.67		2459 HAA9	21.4
Site 2	EPA 552.3	2456 HAA5	17.96	EPA 552.3	2456 HAA5	32.23	EPA 552.3	2456 HAA5	30.2	EPA 552.3	2456 HAA5	19.35
		2457 HAA6Br	2.67		2457 HAA6Br	3.68		2457 HAA6Br	3.19		2457 HAA6Br	2.74
		2459 HAA9	20.63		2459 HAA9	35.91		2459 HAA9	33.39		2459 HAA9	22.09
Site 3	EPA 552.3	2456 HAA5	17.23	EPA 552.3	2456 HAA5	28.61	EPA 552.3	2456 HAA5	28.00	EPA 552.3	2456 HAA5	19.00
		2457 HAA6Br	2.85		2457 HAA6Br	3.55		2457 HAA6Br	3.77		2457 HAA6Br	2.69
		2459 HAA9	20.08		2459 HAA9	32.16		2459 HAA9	31.77		2459 HAA9	21.69
Site 4	EPA 552.3	2456 HAA5	16.41	EPA 552.3	2456 HAA5	28.13	EPA 552.3	2456 HAA5	24.96	EPA 552.3	2456 HAA5	17.94
		2457 HAA6Br	2.516		2457 HAA6Br	3.45		2457 HAA6Br	3.65		2457 HAA6Br	2.57
		2459 HAA9	18.926		2459 HAA9	31.58		2459 HAA9	28.61		2459 HAA9	20.51
South Tyger River	EPA 300.0	1004 Bromide	<MRL	EPA 300.0	1004 Bromide	21.8	EPA 300.0	1004 Bromide	<MRL	EPA 300.0	1004 Bromide	<MRL
	St Meth 5310C	2920 TOC	2640	St Met 5310C	2920 TOC	2530	St Met 5310C	2920 TOC	2630	St Met 5310C	2920 TOC	3320

Assessment Monitoring 3 – Cyanotoxins
Sample location: Entry Point to Distribution System
Sample Dates: 5/7, 5/21, 6/4, 6/18, 7/2, 7/16, 8/6, 8/20/2018

		ug/l
EPA 545	3302 cylindrospermopsin	<MRL
	3311 anatoxin-a	<MRL
EPA 546	3301 total microcystin	<MRL

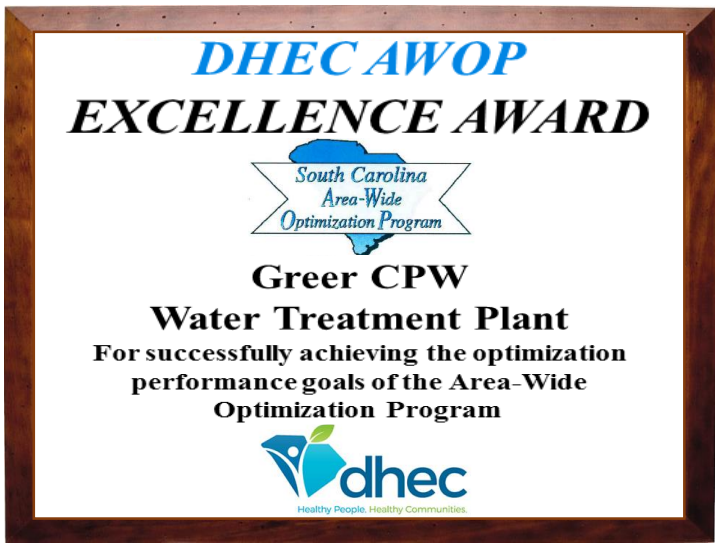
Ug/l – Microgram per Liter or Parts per Billion
MRL – Minimum Reporting Level
TOC – Total Organic Carbon

Our Mission

The Commission of Public Works has been producing fresh drinking water for over 100 years for Greer and the surrounding communities. We pride ourselves in producing the best water we can that is both economical to our customers and goes above and beyond the State and Federal requirements with our voluntary water quality goals. As innovative production methods have been developed throughout the industry, Greer CPW has improved its facilities and operations ahead of national standards. Our constant mission is to supply Greer and our customers in Greenville and Spartanburg Counties each and every day with a safe, high quality abundant supply of drinking water.

Our Dedication

Greer CPW has received numerous awards in water quality over the years, with 2018 being no different as we have satisfied the requirements for the Area-Wide Optimization Program presented by SC DHEC. The goal of the program is to optimize particle removal and disinfection at all filtration plants to maximize public health protection. AWOP was originally focused on microbial contaminants, but has expanded to include a disinfectant byproducts component.



CPW's Water Treatment Plant has satisfied performance by SC DHEC for Eleven consecutive years!

Our Source

CPW draws water from Lake Cunningham and is supplemented by Lake Robinson located on the South Tyger River in Northern Greenville County. There are no industries located above these two reservoirs which cover 1,100 acres with a combined capacity of over five billion gallons. The raw water is pumped directly from Lake Cunningham to CPW's water treatment plant located north of Greer. This water is treated by applying conventional methods of chemical mixing, coagulation, flocculation, sedimentation and filtration. The finished water is then transferred as needed to our customers through our distribution system.

In addition to a clean water source, Lakes Robinson and Cunningham offer recreational opportunities for everybody to enjoy. Picnicking, fishing, limited boating and event hosting are available. Both lakes offer stunning views of the beautiful North Greenville landscape. For park hours, boating & fishing permits, or more information, call the Lake Warden's office at (864)895-3645.

Our Service

The elaborate distribution system is maintained by the Water Operations Department. This department operates and maintains the City's six elevated storage tanks, over four hundred miles of distribution main, over fourteen hundred fire hydrants, and almost nineteen thousand customer service connections. Water Department personnel have been certified in Drinking Water Distribution by State and National associations.

If you would like more information about drinking water treatment or any subject discussed here, please visit our internet website at www.GreerCPW.com or telephone our professionals at the Water Treatment Plant directly at (864) 848-5527.

General Interest Constituents

Parameter	Units	2018 Avg.
Alkalinity	ppm	16.54
Ammonia	ppm	1.00
Hardness	ppm	11.03
Potassium	ppm	0.35
pH	SU	7.65
Phosphate	ppm	0.27
Sodium	ppm	8.6

We use only safe & proven methods to produce our drinking water

The Commission uses only approved chemicals throughout the water treatment process, and meets all of the current standards set by US EPA, SC DHEC, NSF International and ANSI. Our current process filters out biological and natural impurities from our surface water source, and treats the water with a chlorine/ammonia combination for disinfection to protect against water-borne illnesses. A small amount of caustic soda is added for pH control, polyphosphate is added for corrosion control, and fluoride is added for tooth decay prevention. As emerging technologies are developed & evaluated, future improvements will be reviewed & guided by our elected Board of Commissioners. Greer CPW produces all of the drinking water within our system.

Abbreviations Used in the Table:

(BDL) *-Below the detectable limit* of laboratory analysis.
(NA) – Not Applicable or not required.
(ppm) *-Parts per million* or Milligrams per liter.
(ppb) *-Parts per billion* or Micrograms per liter.
(ppt) *- Parts per trillion* or Nanograms per liter.
(NTU) - Nephelometric Turbidity Unit for water clarity.
(Action Level) - the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
(HLD) *- Highest Level Detected* – The maximum found in any sample.
(TT) *- Treatment Technique* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
(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 the best available treatment technology.
(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.
(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.
(MRDLG) *- Maximum Residual Disinfectant 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.
(RAA) *- Running Annual Average.*
(TOC) *- Total Organic Carbon* Removal – The percent removal must be at least 1 or the system is in violation.

GREERMADE SOUTH CAROLINA

PARTNERSHIP FOR SAFE WATER

811 Know what's below. Call before you dig.

Water Quality & Conservation Resources

www.greercpw.com
www.scdhec.gov
www.awwa.org
www.epa.gov/your-drinking-water

Web sites with more information and activities for children:
www.epa.gov/safewater/kids/index.html

How Small Is It? *One Part per Billion (ppb) is equal to one second out of 32 years, or one drop of water in an Olympic size pool, or one blade of grass on a football field!*

Greer CPW's Water Filtration Plant can *produce up to 24 million gallons per day of clean, fresh drinking water.*

Did You Know that CPW's water supply comes from man-made lakes? The water we use is naturally replenished by rainwater.

Greer CPW offers information, customer service forms, & water and energy saving tips on our website and social media. Check us out:
www.GreerCPW.com facebook.com/GreerCPW twitter.com/GreerCPW

GREER CPW

Electricity • Natural Gas • Water • Sewer

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