

2018 Charleston Water System Water Quality Report

We met or surpassed all water quality requirements.

These were the only compounds found in our water during required, regulatory testing. All were below the regulatory limit.

	Required Regulatory Report	Maximum Contaminant Level (MCL) set by EPA	Maximum Contaminant Level Goal (MCLG)	Actual Level in CWS Water for 2018	Possible Sources in Water	
	Turbidity A measure of the amount of suspended particles in the water (cloudiness); an indicator of overall water quality and filtration effectiveness.	Requires a specific treatment technique; 95% of monthly samples must be less than 0.3 NTU	NA	0.10 NTU Highest level detected 100% of monthly samples met the limit Range: 0.06 - 0.10	Soil runoff	
	Cryptosporidium A parasite spread through human and animal waste that causes gastrointestinal illness.	None	Zero Cryptosporidium oo cysts per 1 liter of water	0.0	Human and animal sources	
	Giardia A parasite spread through human and animal waste that causes gastrointestinal illness.	None	Zero Giardia oocysts per 1 liter of water	0.0	Human and animal sources	
spu	Copper A metal widely used in household plumbing that may corrode into water.	90th percentile of all samples collected must be less than the 1.3 ppm action level	1.3 ppm	0.12 ppm (No samples exceeded the action level) Range: 0 to 0.18 ppm	Corrosion of household plumbing materials EPA requires testing for copper and lead once every three years.	
Inodwo	Lead A metal no longer used in water pipes, but may be present in plumbing fixtures or old pipes; may corrode into water.	90th percentile of all samples collected must be less than the 15 ppb action level	0 ppb	90th percentile = 2.3 ppb (No samples exceeded the action level) Range: 0 to 11 ppb	Corrosion of household plumbing materials EPA requires testing for copper and lead once every three years.	
rganic C	Nitrate/Nitrite Nitrates and nitrites are nitrogen-oxygen compounds that can become a source of pollution in the form of unwanted nutrients.	10 ppm	10 ppm	0.09 ppm	Runofffrom fertilizers	
luo	Fluoride A substance that is naturally occurring in some water sources, particularly ground water. It is also added to drinking water to help prevent tooth decay.	4 ppm	4ppm	0.16 ppm in source water 0.35 ppm in finished water Range < 0.10 to 0.56 ppm	Naturally occurring in source water and adjusted during treatment to prevent tooth decay.	
tants	Chlorine Dioxide A disinfection agent added in small amounts to protect against microbes.	800 ppb	800 ppb	260 ppb Range: 0 to 260 ppb	Added for disinfection	
Disinfed	Chloramine Residual A compound of chlorine and ammonia added in small amounts to treated water to protect against microbes.	4 ppm MRDL	4 ppm MRDLG	2.71 ppm Running Annual Average Range: 2.4 – 3.1 ppm	Added for disinfection	
tion	Total Trihalomethanes (Stage 2) Stage 2 of the Disinfectants and Disinfection Byproducts Rule requires the locational running annual average (LRAA) for each sampling location to be below the MCL. CWS has eight sampling locations.	Locational Running Annual Average must be below 80 ppb	NA	Highest level detected: 17.01 ppb Range: 0 — 17.01 ppb	Byproduct of disinfection	
Disinfect	Total Haloacetic Acids (Stage 2) Stage 2 of the Disinfectants and Disinfection Byproducts Rule requires the locational running annual average (LRAA) for each sampling location to be below the MCL. CWS has eight sampling locations.	Locational Running Annual Average must be below 60 ppb	NA	Highest level detected: 17.8 ppb Range: 6.97 — 17.8 ppb	Byproduct of disinfection	
	Chlorite A byproduct formed when chlorine dioxide is used to disinfect water.	1 ppm	1.0 ppm	Highest level detected: 0.78 ppm Range: 0.4 — 0.78 ppm	Byproduct of disinfection	
Organics & Bacteria	Total Organic Carbon (TOC) The measure of organic substances in a body of water, mostly from naturally occurring sources such as plant material. TOC provides a measurement for the potential formation of disinfection byproducts.	No MCL; EPA requires a specific treatment technique.	Required % removal varies from 35% - 55% TOC removal, depending on source water quality	Removal Range: 52% to 66% 58.2 % removed	Naturally present in the environment	
	Total Coliform Bacteria A group of bacteria whose presence in water indicates possible contamination with soil or waste from warm blooded animals.	Presence of coliform bacteria greater than or equal to 5% of monthly samples	0%	3.1% highest % of positive monthly samples Range: 0 — 3.1% All repeat samples were satisfactory	Naturally present in the environment MONITORING VIOLATION: Due to human error, repeat samples were collected from the wrong locations. The error was corrected as soon as it was discovered.	
Abbrev	riations: ppm: Parts per million (mg/L)	ot: Parts per trillion (ng/L) LRAA: Locational Ru	nning Annual Average RAA: R	Running Annual Average NTU : Nephelometric Turbidit	y Units	

	These unregulated compounds have EPA Health Advisories and all were detected below their EPA Health Advisory level.	
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Compounds With Health Advisories	Units	Aug 2018	Nov 2018	Feb 2019	May 2019	Aug 2020	Nov 2021	Feb 2022	May 2023	EPA Health Advisory	Secondary Drinking Water Standards	
Atrazine	ppt	22	19	7.2						700,000 ppt*		
Barium	ppb	14	12	16						7,000 ppb*		T
Bromodichloromethane	ppb	5.6	3.7	3.3						100 ppb*		
Chloroform	ppb	7.2	2.7	2.6						350 ppb*		
Dibromochloromethane	ppb	2.6	2.0	1.6						700 ppb*		
Manganese	ppb	13	6.4	3.3						1,600 ppb*		
Perchlorate	ppb	NA	NA	0.13						0.25 ppb*		1
PFOA	ppt	5.0	4.1	4.4						70 ***		
PFOS	ppt	9.7	6.1	6.3						70 ppt**		
Simazine	ppt	NA	6.9	14						700,000 ppt*		
Strontium	ppb	53	41	43						20,000 ppb*		
Zinc	ppb	NA	NA	6.3						10,000 ppb*		
Additional un regulated compounds detected during unregulated compound testing.												
1,4 Dioxane	ppb	0.11	0.14	0.32						NA		
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	ppt	NA	4.0	NA						NA		
Acesulfame-K	ppt	NA	32	160						NA		
Aluminum	ppb	74	58	38						NA	50 to 200 ppb	
Boron	ppb	37	32	26						NA		
Chromium, hexavalent	ppb	0.06	0.06	0.06						NA		
DEET	ppt	NA	12	NA						NA		
Iohexal	ppt	NA	19	19						NA		
Lincomycin	ppt	NA	24	NA						NA		
NDMA	ppt	7.5	3.4	5.6						NA		
NMEA	ppt	NA	2.5	NA						NA		
PFBA	ppt	7.0	NA	NA						NA		
PFBS	ppt	3.8	4.0	3.2						NA		
PFHpA	ppt	3.2	2.9	2.3						NA		
PFHxA	ppt	5.6	5.7	4.3						NA		
PFHxS	ppt	3.3	2.8	2.1						NA		
PFPeA	ppt	7.5	7.5	4.7						NA		
Quinoline	ppt	NA	19	NA						NA		
Sucralose	ppt	NA	950	640						NA		
Theobromine	ppt	NA	NA	16						NA		
Total Trihalomethanes	ppb	15.4	8.4	7.5						NA		
	1		1	1				1			1	4

Thirty-four compounds on the EPA Health Advisory list were not analyzed because there are no analytical methods available at this time.

Notes

August 2018: we analyzed 597 individual compounds.

November 2018: we analyzed 595 individual compounds.

February 2019: We analyzed 627 individual compounds.

An EPA Health Advisory is an estimate of acceptable drinking water levels for a substance based on health effects information. It's not a legally enforceable Federal standard, but serves as technical guidance to assist Federal, State, and local officials.

*EPA Drinking Water Equivalent Level (DWEL).

**EPA Lifetime Health Advisory, as the data is not available as DWEL.

See our Unregulated Compounds Position Statement on the Water Quality Reports page at www.charlestonwater.com.



Water Characteristics These parameters affect aesthetics, such as taste, odor, hardness, etc. The EPA has secondary standards for some of these parameters, which are recommended guidelines Highest Level 2018 Average Parameter Recommended by EPA Chloride 250 ppm 19 ppm Color 4 PCU 15 PCU <0.10 ppm 0.3 ppm <0.05 ppm 0.05 ppm Manganese Total Dissolved Solids (TDS) 115 ppm 500 ppm 13 ppm Alkalinity 29 ppm Conductivity 197 µmhos/cm No Standard Hardness 58 ppm (3.39 gpg) Ortho-phosphate 1.2 ppm 7 ppm 69.8° F (21°C) Temperature

DEFINITIONS

ppm: Parts per million PCU: Platinum Cobalt Units gpg: Grains per gallon µmhos/cm: Micromohs/cm

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.

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

Action Level (AL)

The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

Maximum Residual Disinfectant Level (MRDL) The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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 contamination.

FLUORIDE POSITION STATEMENT

Adopted by the Board of Commissioners October 24, 2017

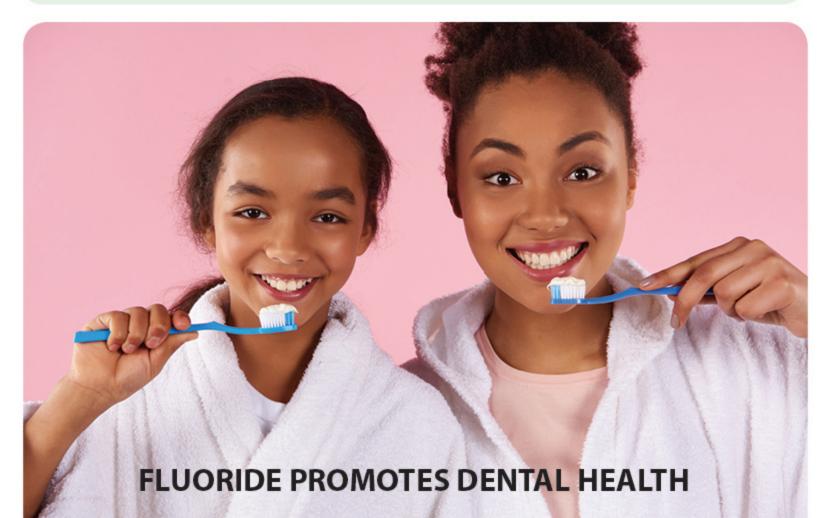
The Charleston Water System (CWS) supports the recommendations of the World Health Organization, American Medical Association, Canadian Medical Association, Centers for Disease Control and Prevention (CDC), American Dental Association, Canadian Dental Association, South Carolina Dental Association and other professional organizations in the medical community, for the proper fluoridation of public water supplies as a public health benefit. We also support regular scrutiny of the most current peer reviewed research on fluoride and the positions of the medical and dental community.

We adjust the naturally occurring level of fluoride in our drinking water in a responsible, effective, and reliable manner that includes monitoring and controlling fluoride levels as mandated by state and/or federal laws, regulations and recommendations. We carefully monitor and adjust potable water to achieve the scientifically recommended concentration of fluoride for protection against dental caries, which is 0.7 parts per million. Our annual cost for this program is about \$110,000, which equates to \$0.25 per person across the approximately 450,000 people in our water service area.

The CWS participates in the fluoridation of water under the guidance of the South Carolina Department of Health and Environmental Control (SCDHEC), Oral Health Division. SCDHEC coordinates their program in conjunction with the CDC and the U.S. Department of Health and Human Services.

If there are questions regarding these programs, please contact: SCDHEC, Division of Oral Health, 2100 Bull Street, Columbia, S.C. 29201

P: (803) 898-9577 • F: (803) 898-2065



Questions / Extra Copies:

Communications Manager: (843) 727-7146 En Español:

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien. Get Involved:

Our Board of Commissioners meets monthly and meetings are open to the public. Citizen participation is welcomed. Meetings are typically held the fourth Tuesday of every month at 9 a.m. at 103 St. Philip Street. More information: www.charlestonwater.com.

This report is published annually in May.

Public Water System ID#: 1010001

f @CharlestonWater

@ChasWaterSystem



YouTube.com/CharlestonWater

www.charlestonwater.com

24/7 Customer Service: (843) 727-6800

Main Office (Downtown) 103 St. Philip Street Charleston SC, 29403

North Area Office 6296 Rivers Avenue North Charleston, SC 29418

MESSAGE FROM THE EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons with HIV/AIDS or other immune system disorders, persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, some elderly and some infants can be particularly at risk from infections.

These people should seek advice 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).



POSSIBLE CONTAMINANTS IN SOURCE 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 land and into waterways, it dissolves natural minerals and picks up substances from animals or human activity.

To protect public health, water treatment plants reduce contaminants to safe levels established by regulations.

Microbes, such as viruses and bacteria, may come from septic systems, livestock, pets and wildlife.

Organic compounds, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, can also come from gas stations, runoff, and septic systems.

Inorganic compounds, such as salts and metals, which can be naturally occurring or the result of storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

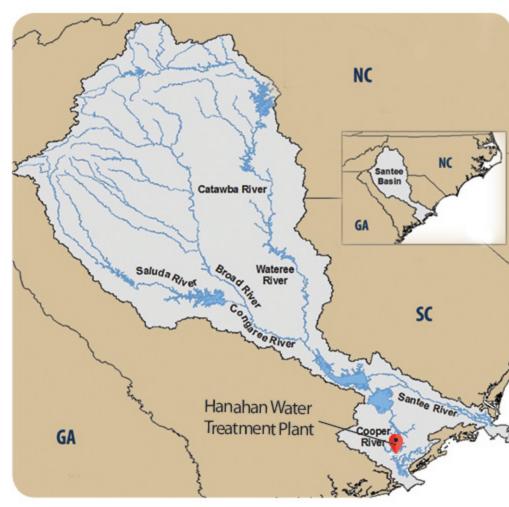
Radioactive compounds can be naturally occurring or the result of oil and gas production and mining activities.

Pesticides and herbicides may come from agriculture, runoff, and residential uses. NOTE: None were found in our source water or treated water when we tested for more than 250 of them in 2017. See website for complete list at www. charlestonwater.com



Hanahan Water Treatment Plant

BUSHY PARK RESERVOIR WATERSHED



Source Water Protection

To raise awareness about preventing water pollution, SC DHEC identifies potential sources of contamination for each drinking water source in the state. www.scdhec. gov/HomeAndEnvironment/Water/ SourceWaterProtection/

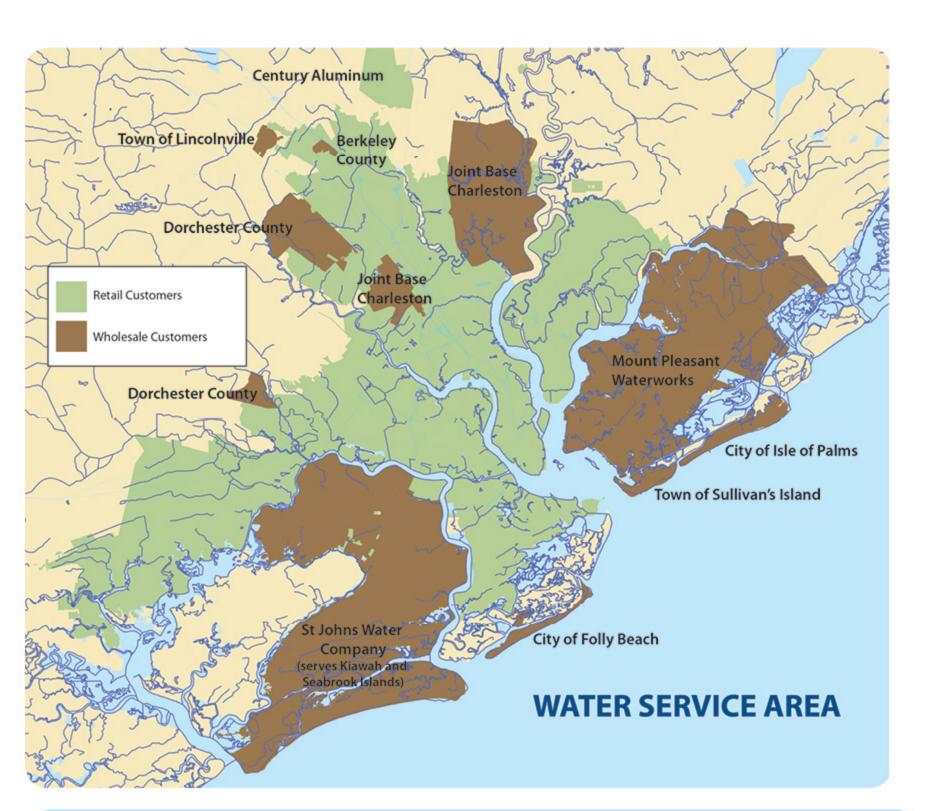
You Can Help!

Stormwater runoff pollutes waterways.

Pick up the poop! Pet waste adds bacteria and excess nutrients, which contribute to algae growth that chokes out plants and wildlife. Don't over-fertilize your lawn. It washes into storm drains, streams, rivers and oceans.

No dumping in storm drains. They empty directly into a waterway.

Proper disposal of oils, paints, and other



QUICK FACTS

- 1 Largest water treatment plant by permitted capacity in S.C.
- 2 Second largest watershed on the east coast (Santee-Cooper)
- 9 Wholesale customers
- 20,000 Total annual water quality tests
- \$60,000 Spent annually on voluntary unregulated compound testing
- 120,000 Retail customer accounts
- 450,000 People served in the tri-county area
- 58 MGD Average daily volume of treated water
- 105.5 MGD Largest recorded volume treated in one day

115.4 MGD DHEC permitted capacity

MGD = Million Gallons Per Day

Raw Water Sources

Bushy Park Reservoir (Primary)

(Coagulation)

(Taste & Odor Control)

Lime

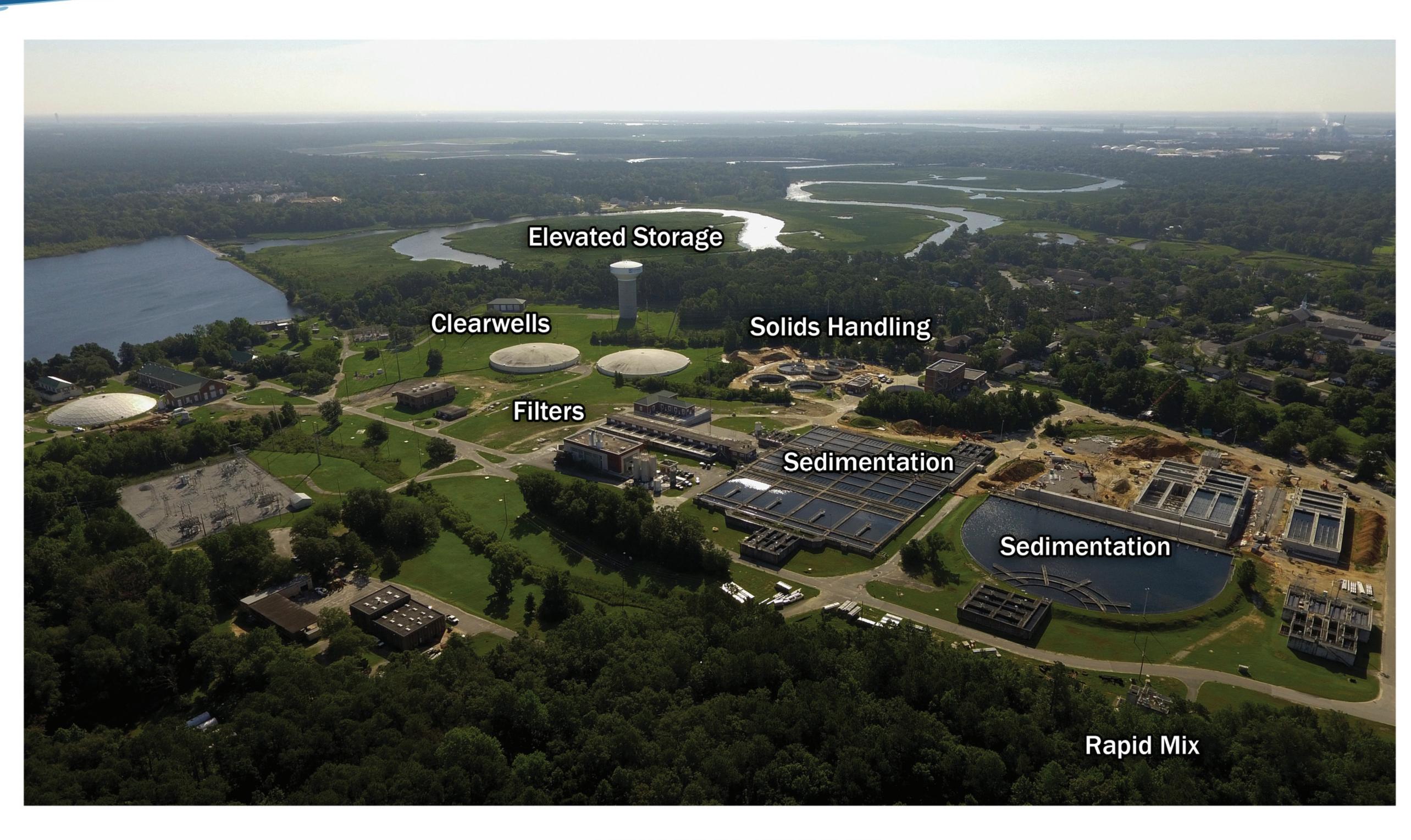
Alum (aluminum sulfate) helps the

impurities stick together to form bigger particles called floc. Gentle

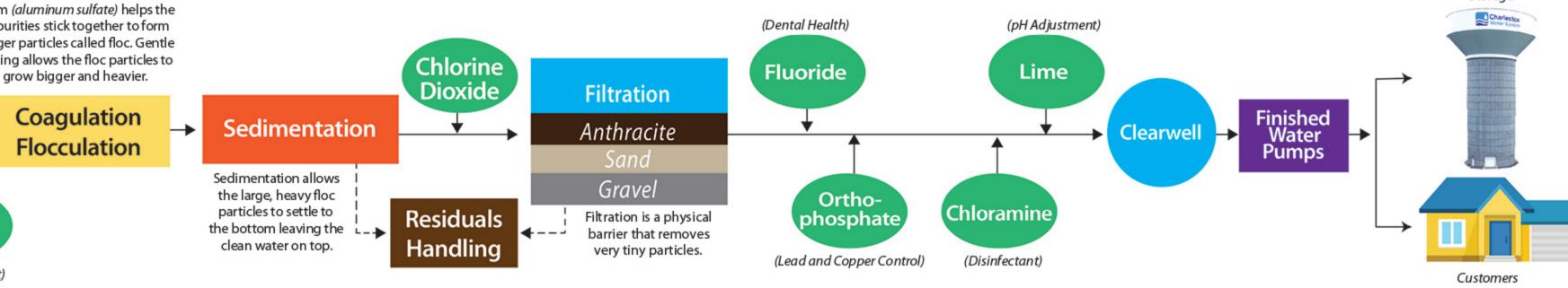
mixing allows the floc particles to

grow bigger and heavier.

Flocculation



TREATMENT PROCESS



Berkeley County Water & Sanitation 212 Oakley Plantation Dr. Moncks Corner, SC 29461

As you can see by the enclosed table, our system had no violations. We are proud that your drinking water meets or exceeds all federal and state requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

EPA requires that all annual water quality reports contain the following statements:

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. 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 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. Moncks Corner Public Works Commission 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 drinking 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.

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 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. The contaminants that may be present in source water include: microbial (viruses & bacteria), inorganic (salts & metals), pesticides and herbicides, organic chemicals (by-products of industrial processes), and radioactive (natural or result of oil & gas production/mining). The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA's) Safe Drinking Water Hotline at 1-800-426-4791.

As a means of providing you with the best water possible, the Santee Cooper Regional Water System, EPA, and American Water Works Association have joined forces as part of the Partnership for Safe Water Program. This voluntary program is designed to go beyond the required regulations to provide the highest quality water possible.

Annual Drinking Water Quality Report



We're pleased to report that your water is safe and meets all federal and state requirements.



The Safe
Drinking Water
Act requires all
public water
systems to issue
an annual
report to their
customers.

This report is to inform you about the quality water and services we deliver every day. As a service to you, we are pleased to provide you with this annual drinking water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. Our water source is Lake Moultrie, a 60,000 acre fresh-water lake that is part of the Catawba-Santee water basin. The Source Water Assessment has been completed for the Santee Cooper Regional Water System. A copy of this report can be found on the internet at www.scdhec.gov/HomeAndEnvironment/ Water/SourceWaterProtection/.

In order to provide you with the highest quality water at the most economical price, Berkeley County Water & Sanitation, the City of Goose Creek, Moncks Corner Public

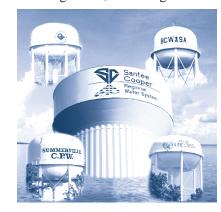
Works Commission, and the **Summerville Commissioners** of Public Works have joined forces with Santee Cooper in the development of the Santee Cooper Regional Water System. The Santee Cooper Regional Water System is comprised of a 40 million gallon per day surface water treatment plant and 26 miles of water transmission pipeline. This facility began commercial operation in 1994. The regional system treats and transmits the water to



your local water utility for distribution to your home. Your local water utilities maintain approximately 600 miles of distribution pipelines.

We want our valued customers to be informed about their water utility. If you have any questions about your water provider or this report, please contact your local utility listed on the inside of this report. If you want to learn more, please plan to attend one of your local water utilities' regularly scheduled meetings also listed on the inside of this report.

Santee Cooper Regional Water System and your local water utility routinely monitor for constituents in your drinking water according to federal and state laws. The enclosed table shows the results of our monitoring for the period of January 1 to December 31. Some constituents do not require annual testing, therefore, the most recent results have been reported. No reported results are more than 5 years old. All drinking water, including bottled water, may reasonably be



expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these constituents does not necessarily pose a health risk. More information about contaminants and potential health effects can be

obtained by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791.

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What's in the water?

Monitoring Period of Jan. 1 - Dec. 31, 2018

Constituent (units)	MCLG	MCL	Level Detected	Range of Detections	Violation Yes/No	Source of Constituent
Total Coliform Bacteria (P/A)	0	5%	0	0	No	Naturally Present in the Environment
Fecal Coliform and E. Coli (P/A)	0	0	0	0	No	Human and Animal Fecal Waste
*Turbidity (NTU)	0.3	TT=1 NTU	0.2	0.06 - 0.20	No	Soil Runoff
Turbinity (1410)		% ≤ 0.3 NTU	100%	0.00 0.20		
*Nitrate (measured as nitrogen) (ppm)	10	10	0.081	0.081	No	Runoff from fertilizer use; leaching from septic tanks & sewage; erosion on natural deposits.
TTHM (Total Trihalomethanes) (ppb)	none	80	RAA = 29	0 - 25.6	No	By-product of Drinking Water Disinfection
HAA5 (Haloacetic Acid 5) (ppb)	none	60	RAA = 22	0 - 23.7	No	By-product of Drinking Water Disinfection
*Fluoride (ppm)	4	4	0.55	0.55	No	Erosion of natural deposits; water additive for strong teeth; discharge from fertilizer & aluminum factories.
*TOC (Total Organic Carbon) (ppm)	N/A	TT	N/A ^a	1.0 - 3.1	No	Naturally Present in the Environment
Lead (ppb)	0	AL = 15	90 th% = 0.6 0 > AL	ND - 9.1	No	Corrosion of household plumbing. Erosion of natural deposits.
Copper, Free (ppm)	1.3	AL = 1.3	90th% = 0.11 0 > AL	0.0041 - 0.25	No	Corrosion of household plumbing. Erosion of natural deposits.
Constituent (units)	MRDLG	MRDL	Level Detected	Range of Detections	Violation Yes/No	Source of Constituent
*Chloramines (ppm)	4	4	3.10 ^b	3.00 - 3.10	No	Water additive used to control microbes
Chlorine (ppm)	4	4	3.9	1.0 - 3.9	No	Water additive used to control microbes

- * Sampling location is Santee Cooper Regional Water System's Treatment Facility
- ^a Running Annual Average Removal Ratio for TOC is 1.23. Treatment Technique requires RAA Removal Ratio to be > 1.0
- b Highest Quarterly Average

Note: Lead and Copper Results are from the 2017 sampling period.

Fluoride is a naturally occurring element; added to toothpaste, mouthwash, and public water supplies to help prevent tooth decay. The Santee Cooper Regional Water System maintains fluoride concentrations in accordance with EPA and DHEC recommendations.

Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) are formed as a by-product of the disinfection process to kill harmful bacteria. In order to minimize the level of TTHMs and HAA5s, a secondary disinfectant (chloramines) which minimizes the formation of TTHMs and HAA5s is added to the distribution system.

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

General Interest

Monitoring Period of Jan. 1 - Dec. 31, 2018

MCL	Average Level Detected
No Standard	17
No Standard	21
No Standard	91
No Standard	19.9
6.5 to 8.5	7.88
500	81.25
	No Standard No Standard No Standard No Standard 6.5 to 8.5

WHAT'S NOT IN THE WATER?

For more information, contact your local water provider at:

Berkeley County Water & Sanitation Attn: Mike Blankenship 212 Oakley Plantation Drive Moncks Corner, SC 29461 Phone: (843) 719-2370

> Public meetings normally scheduled: 1003 Hwy. 52 Moncks Corner, SC 29461

4th Monday of each month 7:00 pm

Abbreviations & Definitions

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

MCL - Maximum Contaminant Level - 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.

MCLG - Maximum Contaminant Level 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.

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 contamination.

MRL - Minimum Reporting Limit

NO Detectable - laboratory analysis indicates that the constituent is not present at the detection limit.

NTU - Nephelometric Turbidity Unit - measure of the clarity of water

P/A - Present/Absent

pCi/l - picocuries per liter - measure of the radioactivity in water

ppb - parts per billion or ug/l - micrograms per liter - one part per billion corresponds to one minute in 2,000 years

ppm - parts per million or mg/l - milligrams per liter - one part per million corresponds to one minute in two years

SU - Standard Unit

TT - Treatment Technique - required process intended to reduce the level of a contaminant in drinking water

umhos/cm - micro mhos per centimeter

ANNUAL CONSUMER CONFIDENCE REPORT (CCR) PERIOD: JANUARY 1, 2018 TO DECEMBER 31, 2018

Bull Swamp Rural Water Company, Inc. 3820001

We are pleased to present to you this year's annual CCR. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our primary water source is from three active ground water wells located within our service area. If needed, we also purchase water from the Town of Swansea whose water source is the West Columbia Lake Murray Surface Water Plant provided through the Joint Water & Sewer Commission distribution system. A copy of their CCR is also attached for your complete information.

These reports show the water quality and what it means. If you have any questions about these reports or concerning your water quality contact Rick Bryan at 803-568-2835. If you want to learn more, please attend any of our regularly scheduled meetings. They are held every other month, on the third Tuesday at Swansea's Town Hall at 7pm.

Bull Swamp Rural Water Company, the Town of Swansea, Joint Water & Sewer Commission and West Columbia Water routinely monitors for contaminants in your drinking water according to Federal and State laws. These tables show the results of our monitoring for the period January 1st to December 31st, 2018. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water including bottled water may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In these tables, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-detects (ND) - Laboratory analysis indicates that the constituent is not present.

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

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

Picocuries per liter (pCi/l) - Picocuries per liter is a measure of the radioactivity in water.

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

<u>Maximum Contaminant Level (MCL) (mandatory language</u>) - The "Maximum Allowed" (MCL) 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.

<u>Maximum Contaminant Level Goal (MCLG) (mandatory language)</u> - The "Goal" (MCLG) 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.

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 at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganics or organic chemicals and radioactive substances. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPAs) Safe Drinking Water Hotline at 1-800-426-4791.

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 (Center for Disease Control) 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).

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. Bull Swamp Rural Water Company 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 drinking 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.

Bull Swamp Rural Water & The City of West Columbia Source Water Assessment Plans are available for your review at

http://www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/
If you do not have internet access, please contact our office at (803) 568-2835 to make arrangements to review this plan.

Important Information About Your Drinking Water – Availability of Monitoring Data for Unregulated Contaminant for the Bull Swamp Rural Water System:

Our water system has sampled for a series of unregulated contaminates. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customer, you have a right to know that this data is available. If you are interested in examining the results, please contact Rick Bryan at (803)-568-2835 or by mail at P.O. Box 429, Swansea, SC 29160.