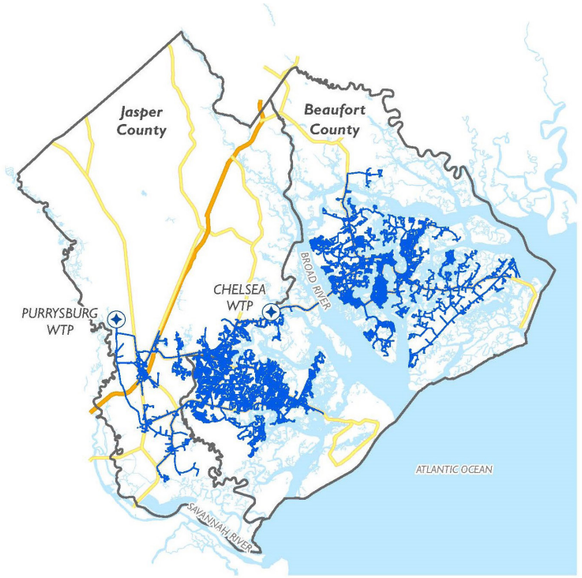
Consumer Confidence Report

Water Quality Compliance for Calendar Year 2023

BJWSA

BEAUFORT – JASPER
WATER & SEWER
AUTHORITY

WHERE YOUR DRINKING WATER COMES FROM



The Savannah River supplies water for both of our water treatment plants. The Chelsea Water Treatment Plant supplies drinking water to residences and businesses in northern Beaufort County and supplements the Purrysburg Water Treatment Plant, when necessary. The Purrysburg Water Treatment Plant supplies drinking water to southern Beaufort and Jasper counties and supplements the Chelsea Water Treatment Plant, when needed. These treatment plants have the capacity to provide up to 39 million gallons of water per day. BJWSA also uses water from the upper Floridan Aquifer, a large, underground bed of rock that holds and provides groundwater to streams and wells. The Floridan Aquifer extends through Florida, south Georgia and parts of Alabama and South Carolina. We operate and maintain Floridan Aquifer wells in Bluffton, Hardeeville and the Levy area, which add to the water supply during times of high water demand.

Drinking Water Contaminants: What EPA Says

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 U.S. Environmental Protection Agency **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, it may dissolve or pick up substances resulting from the presecence of animals or from human activity.

Contaminants that may appear in untreated source water include:

- Microbes, such as viruses and bacteria from sewage treatment plants, septic systems, livestock operations and wildlife.
- Inorganics, such as salts and metals, which can be naturally-occurring or from urban stormwater runoff, industrial discharges, mining or farming and landscaping.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- Organics, which can also come from urban stormwater runoff, industrial processes, gas stations, septic systems and landscaping.
- Radioactive particles, which can be naturally-occurring or the result of human activities.

In order to ensure drinking water safety, EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) establishes limits for contaminants in bottled water that provide the same protections for public health.

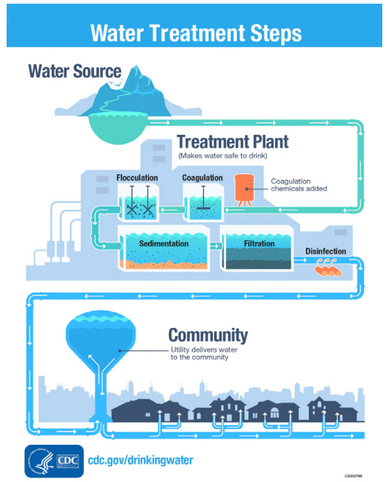
Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals can be particularly at risk from infections, such as a person with cancer undergoing chemotherapy; persons who have undergone organ transplants; people with HIV/AIDS or other immune system disorders; some elderly people and infants. These people should seek advice about drinking water from their health care provider. Guidelines from the Environmental Protection Agency and the Centers for Disease Control and Prevention, on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants, are available from the EPA's Safe Drinking Water Hotline.

HOW IT'S TREATED, MONITORED AND TESTED

Well and Water Quality Supervisor Justin Schmitt collects a water sample for testing.

The water quality tables on pages 4-5 are based upon tests conducted throughout the year 2023 for Beaufort-Jasper Water and Sewer Authority. The samples taken for testing came from various points in BJWSA's water treatment and distribution system.

Making sure that treatment processes are working correctly requires careful monitoring by a full-time staff of trained water quality engineers and technicians. Overall, BJWSA conducts more than 300 water quality tests daily at every stage of the treatment process, while instruments in the plants also monitor water quality continuously. Some of the testing is required by the Environmental Protection Agency (EPA) and some of it is voluntary, but it's all done to ensure that our customers have a drinking water supply that meets or exceeds compliance standards.



Source Water Protection

South Carolina's Source Water Assessment Program, mandated by 1996 Amendments to the Federal Safe Drinking Water Act, is aimed at protecting public drinking water supplies at the source – the rivers, lakes and streams all across South Carolina. As part of this program, a source water assessment of the Savannah River Basin has been completed. This assessment is part of a program to identify what and where pollution prevention efforts are necessary to ensure the future safety of our community's drinking water and to implement those protective measures. The SC Department of Health and Environmental Control (DHEC) has compiled the assessments from all water utilities in the state into a Source Water Protection Program.

DHEC's assessment included consideration of eight categories of potential contaminants: volatile organic compounds, petroleum products, metals, nitrates, pesticides/herbicides, pathogens, radionuclides, and undetermined. The assessment identified and mapped sources that could potentially release these contaminants, such as gas stations, dry cleaners, agricultural areas, automobile repair shops, landfills, septic systems, and manufacturers, businesses and facilities where potential contaminants are used or stored. DHEC compiled an initial inventory of potential contaminants at 22 sources within the Savannah River basin. Zero sources had a high susceptibility ranking. Seventeen had a moderate susceptibility ranking and five had a low susceptibility ranking. The information in the Source Water Assessment Report will be the foundation of a local effort to improve protection of our drinking water sources.

A copy of the Source Water Assessment Report is available for your review from SCDHEC. You can learn more about source water protection at https://scdhec.gov/environment/your-water-coast/source-water-protection.

2023 COMPLIANCE MONITORING RESULTS

CHELSEA WATER TREATMENT PLANT

(See page 6 for definitions)

Substance	Date Tested	Typical Source	EPA MCL	EPA MCLG	Level Found	Violation
Turbidity[1]	2023	Soil Runoff	TT=1 NTU TT= 95% of samples < 0.30 NTU	0	**0.17 NTU** **100%**	No

1 Turbidity is a measure of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Substance	Date Tested	Typical Source	EPA MCL	EPA MCLG	Range of Removal	Level	Violation
Total Organic Carbon	2023	Naturally present in the environment	TT	n/a	46.7-65.9% removal (35%-50% is required)	1.57 – 2.70 mg/L	No

PURRYSBURG WATER TREATMENT PLANT

(See page 6 for definitions)

Substance	Date Tested	Typical Source	EPA MCL	EPA MCLG	Level Found	Violation
Turbidity[1]	2023	Soil Runoff	TT=1 NTU TT= 95% of samples < 0.30 NTU	0	**0.06 NTU** **100%**	No

1 Turbidity is a measure of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Substance	Date Tested	Typical Source	EPA MCL	EPA MCLG	Range of Removal	Level Found	Violation
Total Organic Carbon	2023	Naturally present in the environment	TT	n/a	36.5-65.9% removal (35%-50% is required)	1.46 – 2.89 mg/L	No

2023 COMPLIANCE MONITORING RESULTS

MAIN DISTRIBUTION SYSTEM

(See page 6 for definitions and footnotes)

CONTAMINANT	DETECTED LEVEL	RANGE OF DETECTION	HIGHEST LEVEL ALLOWED (MCL)	GOAL (MCLG)	UNIT OF MEASURE	VIOLATION Y/N	YEAR	POSSIBLE SOURCE
TOTAL COLIFORM BACTERIA	Present in less than 1% of monthly samples taken	0.70%	Present in no more than 5% of monthly samples taken	0	Presence absence	N	2023	Naturally present in the environment.
FECAL COLIFORM or E.COLI BACTERIA	0	ND	0	0	Presence absence	N	2023	
FLUORIDE	0.87	0.82 - 0.87	4	4	PPM	N	2022	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE	0.7	0.030 – 0.70	10	10	PPM	N	2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
COPPER*	90th% = 0.063 0 samples >AL	0.0012 – 0.41	AL = 1.3	1.3	PPM	N	2021	Corrosion of household plumbing; erosion of natural deposits
LEAD**	90th % = 2.8 3 samples >AL	ND – 180***	AL = 15	0	PPB	N	2021	
Disinfection and Disinfection By-Products								
CHLORINE	2.28	1.93 – 2.43	4	4	PPM	N	2023	Water additive use to control microbes.
TTHM	Locational RAA: 61 PPB	25.8 – 100.8	80	0	PPB	N	2023	By-product of drinking water disinfection
HAA5†	Locational RAA: 61 PPB	19.4 – 70.4	60	0	PPB	Y	2023	

DEFINITIONS

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

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

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

Maximum Contaminant Level Goal (MCLG): The maximum level of a disinfectant added for water treatment at which no known or anticipated health effects occur, and which allows an adequate margin of safety.

Milligrams per Liter (mg/L): A measure of the concentration by weight of a substance per unit volume. One mg/L is equal to one part per million.

Million Gallons per Day (MGD): A measure of water flow. One MGD is equivalent to 1.547 cubic feet per second.

Non-Detected (ND): No measurable level of a substance or contaminant detected.

Parts per million (ppm): The equivalent of eight ounces in 62,500 gallons of water.

Parts per billion (ppb): The equivalent of eight ounces in 62.5 million gallons of water.

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

Turbidity (NTU): A measure of the cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system. Nephelometric turbidity units (NTU) is the measure of the clarity of the water.

Main Distribution System Footnotes

The 90th percentile is based on 50 samples.
*Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. Our water did not exceed the average MCL for copper, and we did not have a violation.

**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. BJWSA 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead. Our water did not exceed the average MCL for lead, and we did not have a violation.

*** Re-sampling at the two sites where the initial sample showed a quantity above the action level of 15 ppb indicated lead levels to be below detection limits.

†HAA5
In December 2023, BJWSA notified customers located south of the Broad River area that our Local Running Annual Average (LRAA) had exceeded the EPA's limit of .060 mg/L during the end of 2023 at the Rose Dhu Creek sample site for a group of disinfection byproducts collectively called HAA5s. Some people who drink water in excess of the MCL over many years may have an increased risk of getting cancer. The issue was isolated to BJWSA customers located south of the Broad River; those customers were notified of the exceedance by mail.

In response to this exceedance, our staff made treatment modifications and increased monitoring test frequency. Our enhanced monitoring indicated that the treatment changes were effective at reducing HAA5 levels.

Protecting your health is important to BJWSA

Tritium in your drinking water: For the year 2023, the average level of tritium in the Savannah River raw water was **375** pCi/L. Tritium is a regulated constituent and the U.S. EPA has set a maximum contamination level for its occurrence in water as 20,000 pCi/L. BJWSA's levels are less than 2 percent of the EPA's drinking water standard.

Unregulated Contaminant Monitoring Regulation: The EPA announced that it has determined that PFAS (per- and polyfluoroalkyl substances) data will be collected under the Unregulated Contaminant Monitoring Rule 5 (UCMR 5) effort. UCMR 5 will include the six PFAS analytes collected in UCMR 3 as well as 23 other PFAS analytes. Data acquired from the 29 PFAS analytes will be used by EPA to better understand occurrence and prevalence of PFAS in the nation's drinking water (https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule).

UCMR 5 Detections:

Facility Name	Sample Collection Date	Analyte Name	Result Measure	Result Below MRL	Unit Of Measure
Bluffton 3 Well	11/14/2023	PFPeA	0.003	N	ug/L
Bluffton 3 Well	11/14/2023	PFHxA	0.003	N	ug/L
Bluffton 3 Well	11/14/2023	PFOA	0.0053	N	ug/L
Bluffton 3 Well	11/14/2023	PFBS	0.005	N	ug/L
Purrysburg WTP	11/14/2023	PFBS	0.0048	N	ug/L
Purrysburg WTP	11/14/2023	PFOA	0.0054	N	ug/L
Purrysburg WTP	11/14/2023	PFOS	0.0042	N	ug/L
Chelsea WTP	11/14/2023	PFPeA	0.0036	N	ug/L
Chelsea WTP	11/14/2023	PFHxA	0.0032	N	ug/L
Chelsea WTP	11/14/2023	PFOA	0.0056	N	ug/L
Chelsea WTP	11/14/2023	PFOS	0.0045	N	ug/L
Chelsea WTP	11/14/2023	PFBS	0.0057	N	ug/L

Definitions
MRL: Maximum residue limits

PFBS: perfluorobutanesulfonic acid

PFHxA: perfluorohexanoic acid

PFOA: perfluorooctanoic acid

PFOS: perfluorooctanesulfonic acid

PFPeA: perfluoropentanoic acid

ug/L: A measure of concentration of a substance in water. One ug/L is equivalent to 1 ppm, or eight ounces in 62.5 million gallons of water.

Common Question: Should I be concerned about PFAS?

Per- and Polyfluoroalkyl Substances (PFAS) are everywhere. EPA estimates that 80 percent of exposure comes from consumer products like non-stick cookware, food packaging, stain-proofing and water-proofing compounds on fabrics and carpets and dental floss.

BJWSA is sampling and collecting data to determine baseline levels of PFAS in both our source water and the water leaving our treatment plants, and has been doing so for many years. Our initial test results indicate that our levels are well below average results from rivers and lakes based on S.C. Department of Health and Environmental Control's data.

In 2023, BJWSA started regular monthly testing. This additional data will help us better understand the PFAS levels in our source water. It is important to know that BJWSA is committed to assuring that our water will meet all state and federal guidelines and will make any adjustments necessary to reduce PFAS levels.

For more information, visit https://bjwsa.org/234/Emerging-Contaminants.

Maintaining compliance with Lead and Copper Rule Revision

In early 2021, the U.S. EPA finalized the Lead and Copper Rule Revision. The goals of the new rule are to:

1. Better protect children at schools and daycares;
2. Get the lead out of drinking water, and
3. Empower communities through information.

The new rule requires all utilities to create and publish a service line inventory showing the lead status of pipe materials from the water main to each customer's house. The inventory will be on BJWSA's website in October 2024.

This has been a multi-year project, and multiple departments at BJWSA have been working since 2021 to build BJWSA's inventory.

BJWSA has a robust corrosion control program and has been in full compliance with the 1991 Lead and Copper Rule. Most lead in drinking water comes from pipes or plumbing fixtures in homes, which is leached from the metal into the water. Lead pipes were banned by federal law in 1986, and BJWSA has been using plastic pipe for service lines since the 1970s.

Purrysburg Water Treatment Plant Expansion

Work on the Purrysburg Water Treatment Plant expansion is continuing according to plan. The project is necessary to meet the demand of unprecedented population growth in our service and will expand the amount of water the plant can treat from 15 to 30 million gallons per day. Combined with the treatment capacity of the Chelsea, BJWSA will be able to treat 54 million gallons of water per day.

Though completion of this first expansion is expected in the summer of 2025, BJWSA is looking at a variety of initiatives – old and new – to stay ahead of demand and to prepare for the future of its 750-square-mile service area.

Want to know more?

Call 843-987-9200 or email info@bjwsa.org to:

- **Ask about your water quality**
- **Report a water or sewer emergency**
- **Pay a bill over the phone**
- **Make billing inquiries**

PUBLIC WELCOME AT MONTHLY BOARD MEETINGS

The public is invited to attend BJWSA Board of Directors meetings to participate in decisions that may affect their water quality. Meetings are held at 8 a.m. on the fourth Thursday of each month.

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