



# CONSUMER CONFIDENCE REPORT

Water Quality Compliance  
for Calendar Year 2024



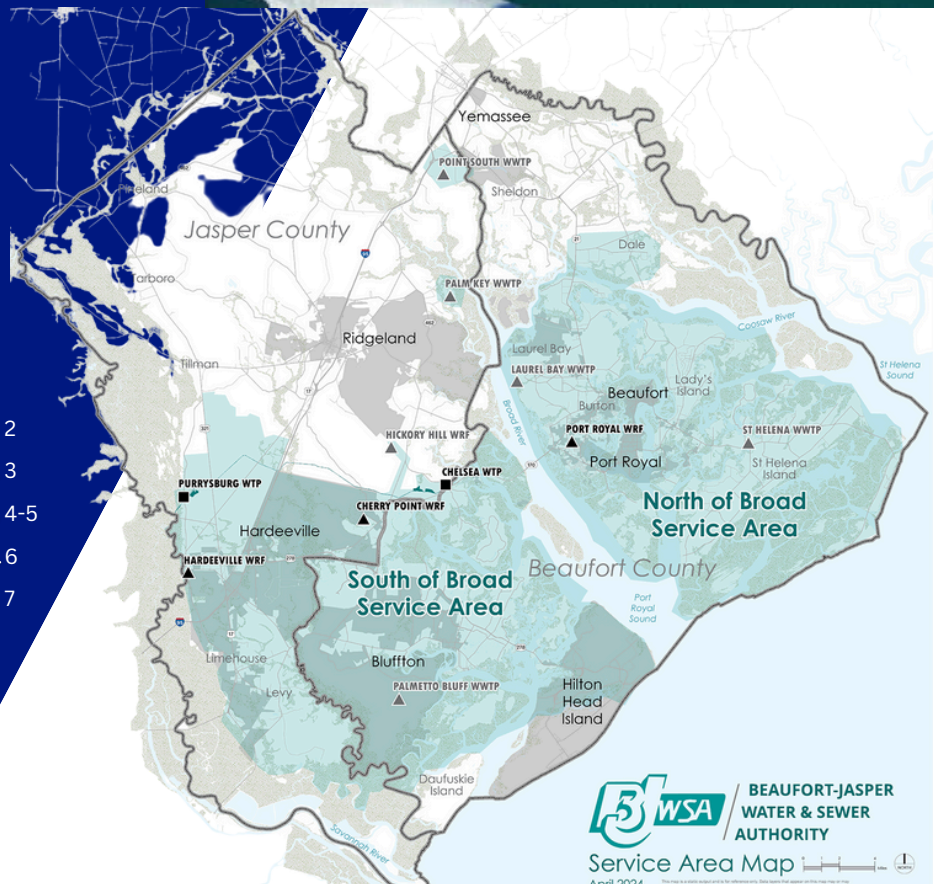


**OUR MISSION: PROVIDE  
QUALITY WATER AND  
WASTEWATER SERVICES  
TO OUR CURRENT AND  
FUTURE CUSTOMERS IN  
THE LOWCOUNTRY**

# SAVANNAH RIVER

The Savannah River provides 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 combined 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.



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# EPA: DRINKING WATER CONTAMINANTS

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 presence 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.

## DEFINITIONS

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

**Contaminant:** Any physical, chemical, biological or radiological substance or matter in water.

**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 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.

**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.

**Minimum Reporting Level (MRL):** The minimum concentration that can be reported by a laboratory as a quantitated value for a method analyte in a sample following analysis.

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

**Presence/Absence (P/A):** Indicates whether a specific biological contaminant exists in a sample.

**Parts per billion (PPB):** Or, micrograms per liter ( $\mu\text{g/L}$ )

**Parts per million (PPM):** Or, milligrams per liter ( $\text{mg/L}$ )

**Parts per trillion (PPT):** Or, nanograms per liter ( $\text{ng/L}$ )

**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.



# 2024 COMPLIANCE MONITORING RESULTS

## Chelsea Water Treatment Plant

(see page 3 for definitions)

Substance	Date Tested	Typical Source	EPA MCL	EPA MCLG	Level Found	Violation
Turbidity <sup>1</sup>	2024	Soil Runoff	TT=1 NTU	0	0.10 NTU	No
			TT= 95% of samples < 0.30 NTU		100%	

<sup>1</sup> 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	2024	Naturally present in the environment	TT	n/a	37.3-70.2% removal (35%-50% is required)	1.53 – 3.34 mg/L	No

## Purrysburg Water Treatment Plant

Substance	Date Tested	Typical Source	EPA MCL	EPA MCLG	Level Found	Violation
Turbidity <sup>1</sup>	2024	Soil Runoff	TT=1 NTU	0	0.45 NTU	No
			TT= 95% of samples < 0.30 NTU		100%	

Substance	Date Tested	Typical Source	EPA MCL	EPA MCLG	Range of Removal	Level Found	Violation
Total Organic Carbon	2024	Naturally present in the environment	TT	n/a	43.6-72.2% removal (35%-50% is required)	1.45 – 3.29 mg/L	No



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.

The water quality tables on pages 4-5 are based upon tests conducted throughout the year 2024 for Beaufort-Jasper Water and Sewer Authority. The samples taken for testing came from various points in BJWSA's water treatment and distribution system

# Main Distribution System

(see page 3 for definitions)

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 2% of monthly samples taken	2.1	Present in no more than 5% of monthly samples taken	0	P/A	N	2024	Naturally present in the environment.
FECAL COLIFORM or E.COLI BACTERIA	0	ND	0	0	P/A	N	2024	Naturally present in the environment.
FLUORIDE	0.82	ND – 0.82	4.0	4.0	PPM	N	2024	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
NITRATE	0.21	ND – 0.21	10	10	PPM	N	2024	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
SELENIUM	9.9	ND – 9.9	50	50	PPB	N	2024	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
COPPER*	90th % = 0.067 0 samples >AL	0.00097 – 0.09	AL = 1.3	1.3	PPM	N	2024	Corrosion of household plumbing; erosion of natural deposits.
LEAD**	90th % = 0.62 0 samples >AL	ND – 2.1	AL = 15	0	PPB	N	2024	Corrosion of household plumbing; erosion of natural deposits.

## Synthetic Organics, Pesticides, and Herbicides

Dalapon	1.4	ND – 1.4	200	200	PPB	N	2024	Runoff from herbicide used on rights of way.
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## Disinfection and Disinfection By-Products

CHLORINE	Locational RAA: 2.21 PPM	1.35 – 2.34	4	4	PPM	N	2024	Water additive use to control microbes.
TTHM	Locational RAA: 52 PPB	19.7 – 72.7	80	0	PPB	N	2024	By-product of drinking water disinfection.
HAA5	Locational RAA: 39 PPB	2.8 – 73.0	60	0	PPB	N	2024	By-product of drinking water disinfection.

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.

\*\*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 and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact BJWSA at 843-987-9200. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

## TRITIUM IN OUR DRINKING WATER

For the year 2024, the average level of tritium the Savannah River raw water was 313 pCi/L. Tritium is a regulated constituent and the U.S. Environmental Protection Agency (EPA) has set a maximum contamination level for its occurrence in water as 20,000 pCi/L. BJWSA's levels are less than 2% of the EPA's drinking water standard.

## 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 Environmental Services (SCDES) has compiled the assessments from all water utilities in the state into a Source Water Protection Program. SCDES' 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. SCDES 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://des.sc.gov/programs/bureau-water/source-water-protection>.

## UNREGULATED CONTAMINANT MONITORING

The EPA requires that PFAS (per- and polyfluoroalkyl substances) data will be collected under the Unregulated Contaminant Monitoring Rule 5 (UCMR 5) effort. UCMR 5 includes 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>). Of the 29 substances analyzed, only these five were detected.

Unregulated Contaminant	Average (PPT)	Range (PPT)	MRL (PPT)
Perfluorobutanesulfonic acid (PFBS)	2.1	0-5.7	3.0
Perfluorohexanoic acid (PFHxA)	0.3	0-3.2	3.0
Perfluorohexanoic acid (PFOA)	2.3	0-5.6	4.0
Perfluorooctanesulfonic acid (PFOS)	1.7	0-5.3	4.0
Perfluoropentanoic acid (PFPeA)	0.3	0-3.6	3.0



## 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:

- Better protect children at schools and daycares;
- Get the lead out of drinking water; and
- 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. In 2024, BJWSA completed its [service line inventory](#). BJWSA's inventory does not contain lead service lines.

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.

The EPA released new rules about lead water pipes since lead has been connected to serious health complications, especially in young children. BJWSA is working with the EPA and S.C. Department of Environmental Services (SCDES) to eliminate lead in plumbing with special attention given to schools and daycares.

BJWSA already takes steps to prevent lead from leaching into the water it distributes. BJWSA conducts routine tests to confirm that lead levels remain below actionable levels. Nonetheless, BJWSA is working with the SCDES and EPA to eliminate lead plumbing materials to further protect children and communities.

In 2025, BJWSA is offering free water testing for daycares and elementary schools who are BJWSA customers. Results are provided to the facilities and to SCDES.



### WANT TO KNOW MORE?

Call 843-987-9200 or email [info@bjwsa.org](mailto: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 9 a.m. on the fourth Thursday of each month.

### BEAUFORT-JASPER WATER & SEWER AUTHORITY

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