

WHAT YOU SHOULD KNOW ABOUT YOUR DRINKING WATER



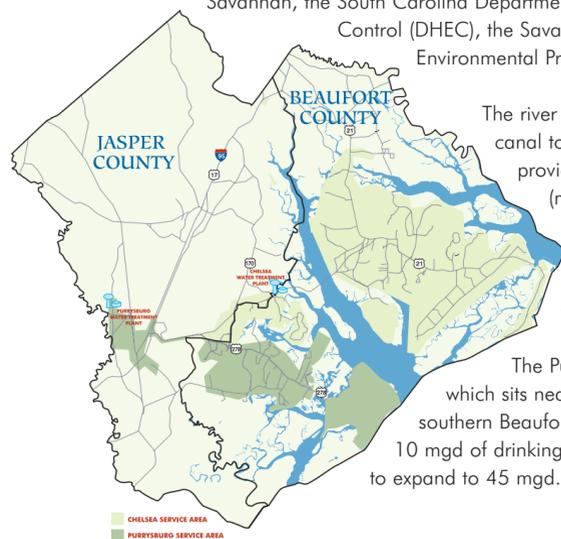
Your drinking water, treated and delivered by Beaufort-Jasper Water and Sewer Authority (BJWSA), consistently met or surpassed all the water quality standards and inspections from both the EPA and the South Carolina Department of Health and Environmental Control in 2005.



Este Informe contiene información muy importante. Tradúscalo o hable con un amigo quien lo entienda bien.

Where Your Water Comes From

The Savannah River is the water source for both of BJWSA's water treatment plants. The water quality of the river is regularly sampled and tested by BJWSA, the City of Savannah, the South Carolina Department of Health and Environmental Control (DHEC), the Savannah River Site (SRS), and the U.S. Environmental Protection Agency (EPA).



The river water travels 18 miles via an open canal to the Chelsea Water Treatment Plant, providing up to 24 million gallons a day (mgd) to residences and businesses in northern Beaufort County. The Plant also supplements the new Purrysburg Water Treatment Plant when necessary.

The Purrysburg Water Treatment Plant, which sits near the Savannah River, supplies southern Beaufort and Jasper counties with up to 10 mgd of drinking water. The Plant has been designed to expand to 45 mgd.

Protecting the Future Safety of Your Drinking Water

In order to protect public drinking water supplies—our rivers, lakes and streams—the State of South Carolina has established a Source Water Assessment Program. As part of this program, DHEC has completed an assessment of the Savannah River Basin. This assessment has helped to identify what and where pollution prevention efforts are necessary to ensure the future safety of our community's drinking water.

DHEC's evaluation included consideration of nine categories of potential contaminants: volatile organic compounds, petroleum products, metals, nitrates, pesticides/herbicides, pathogens, radionuclides and undetermined. The assessment identified sources that could possibly release these contaminants, such as gas stations, dry cleaners, agricultural areas, septic systems, and facilities where they are used or stored. DHEC compiled an initial inventory of potential contaminants at 38 sources within the Savannah River basin. Four sources had a high susceptibility ranking; 25 had a moderate susceptibility ranking and nine had a low susceptibility ranking.

The Source Water Assessment Report is serving as a foundation for our efforts to improve protection of our drinking water sources. DHEC has compiled the assessments from all water utilities in the state into a Source Water Protection Program. A copy of the Source Water Assessment Report is available for your review at the BJWSA Administration Office or at www.scdhec.net/water.

Do you know why you have high quality drinking water?

Before it ever reaches your faucet, water travels through an elaborate system that treats, moves and stores it. BJWSA and DHEC take samples at the Savannah River, the treatment plants, in the distribution system, and at water taps in homes scattered across the service area.

At the Savannah River

- The Savannah River Site and DHEC collect monthly samples for tritium upstream of our intake and provide the test results to BJWSA. BJWSA and the City of Savannah also have monitoring programs for tritium.
- Annual samples for over 100 contaminants are tested by a certified, independent lab.

At our Water Treatment Plants

- Tests are performed every hour of every day throughout the eight treatment processes.
- Finished water is tested for fluoride twice a day.
- The BJWSA Lab tests for alkalinity, hardness, and bacteria on untreated and treated water daily.
- Turbidity and chlorine are constantly tested by automatic samplers that are calibrated daily.
- BJWSA collects monthly samples of untreated water to test for giardia and cryptosporidium by a certified independent lab.
- BJWSA reports test results regularly to DHEC.
- DHEC performs surprise tests and checks water samples on a regular basis.

In the Distribution System

- BJWSA collects monthly samples from over 80 sites throughout the two county service area to test for bacteriological contamination and chlorine.
- Monthly samples of ten additional sites in the service area are analyzed by the BJWSA Lab for pH, turbidity, color, alkalinity, hardness, iron, ortho and total phosphates, bacteria, free and total chlorine, aluminum, temperature and conductivity.
- Water samples for trihalomethanes and haloacetic acids are collected monthly by BJWSA, quarterly by DHEC, and analyzed by a certified independent lab.

Keeping Citizens Informed

As a service provider, we are committed to providing clear, consistent information and opportunities for our customers to express their questions and concerns. Through our website and many publications, BJWSA gives residents information on a variety of topics.

Our newsletter, *Splash*, keeps customers up-to-date on BJWSA operations and improvements, as well as providing information on water and wastewater treatment issues, new regulations, and tips on water conservation. In addition, we have brochures that explain the water and wastewater treatment processes at each of our plants, including what is done to safeguard our water quality and the environment. The BJWSA customer service packet provides a comprehensive overview of everything a customer needs to know about our services. If you would like copies of any BJWSA publications, call our Customer Service Department at 843/987-9292 or 843/757-2667 or our Public Affairs Office at 987-9213 or send your request through our website, www.bjwsa.org.

We also encourage public comment on decisions affecting drinking water. BJWSA Board meetings are held the fourth Thursday of each month at our Chelsea administration offices on Highway 170, beginning at 8:00 a.m.

Where to Go for More Information

We'll be happy to answer any questions about BJWSA and our water quality. Call our Customer Service Department at 843/987-9292 or 843/757-2667 or our Public Affairs Office at 987-9213. Here are some additional sources of information:

- www.bjwsa.org
Beaufort Jasper Water & Sewer Authority
- www.scdhec.net
The South Carolina Department of Health and Environmental Control
- sc.water.usgs.gov/
USGS Water Resources of South Carolina
- www.srs.gov/
Savannah River Site
- www.epa.gov/safewater
Environmental Protection Agency's Safe Drinking Water
- EPA Safe Drinking Water Hotline**
800-426-4791
- www.epa.gov/safewater/kids/health.html
A great site for kids and teachers

Why are there contaminants in drinking water?

Drinking water sources include streams, lakes, rivers, reservoirs and wells, which are subject to potential "contamination" by a wide variety of substances that occur naturally or are man-made. As water travels over the surface of the land or through the ground, it dissolves natural minerals, and, in some cases, radioactive material, and can pick up substances resulting from human activity or the presence of animals.

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. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

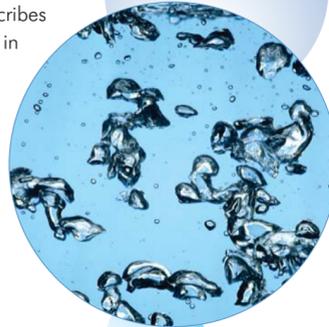
Contaminants that may be present in source water before it is treated:

- 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 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 stormwater runoff, and septic systems
- 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 stormwater runoff, and septic systems
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities

Tritium and Our Drinking Water

Tritium is present in our water source, the Savannah River, as a result of natural processes in the atmosphere, as well as from fallout from past atmospheric nuclear weapons tests and the operation of the Savannah River Site (SRS). The SRS produced materials for nuclear weapons during the cold war. Since the SRS stopped making nuclear materials and is now only stabilizing nuclear waste, tritium levels in the Savannah River have been declining.

The EPA regulates tritium with a maximum contamination level of 20,000 picocuries per liter (pCi/L) of water. For the year 2005, the average level of tritium in the Savannah River raw water was 547 pCi/L — less than 3% of the EPA's drinking water standard. We will continue our extensive monitoring program for tritium and report to you its occurrence in our water.



Water Test Results

BJWSA is responsible for making certain that the water you drink does not contain contaminants at levels higher than the amounts mandated as safe by federal and state regulations. The following charts show the findings of our water testing throughout 2005 and how it compares to national standards.

Distribution System

The samples taken for testing of these substances came from various points in BJWSA's raw and treated water distribution systems.

Better than EPA Standard	Substance	Typical Source	EPA Ideal Goal (MCLG)	Highest EPA Allowed Level (MCL) Highest Detected Level (what we found)
✓	Copper*	Corrosion of household plumbing	1.3 ppm	AL 1.3 0.081 ppm (90th percentile)
✓	Nitrate	Runoff from fertilizer use	10.0 ppm	10.0 ppm <0.02 ppm (ann. avg.)
✓	Total Trihalomethanes (TTHMS)	By-product of drinking water disinfection	0 ppb	80.0 ppb 30.21 ppb (ann. avg.) Actual Range 15.4 – 54.9 ppb
✓	Total Coliform	Naturally present in the environment	0	● Present in no more than 5% of samples taken ● Present in 3% of all samples taken (2 samples were positive)
✓	Fecal coliform or E.coli bacteria	Human or animal fecal waste	0	● Present in no more than 5% of samples taken ● None detected

*the federal mandate requires sampling/testing of copper every three years; our last sample/testing was performed in 2003

Better than EPA Standard	Substance	Typical Source	EPA Ideal Goal (MRDLG)	Highest EPA Allowed Level (MRDL) Highest Detected Level (what we found)
✓	Chloramine	Water additive used to control microbes	4.0 ppm	4.0 ppm 1.77 ppm (highest qty. avg.) Actual Range 1.44 - 1.77 ppm

Better than EPA Standard	Substance	Typical Source	EPA Ideal Goal (MCLG)	Highest EPA Allowed Level (MCL)	Range of Removal	Annual Average Removal
✓	Total Organic Carbons	Naturally present in the environment	N/A	TT => 35% removal required	43.2-60.6%	48.89%

Chelsea Water Treatment Plant

Samples were taken at the plant for testing of the substances below.

Better than EPA Standard	Substance	Typical Source	EPA Ideal Goal (MCLG)	Highest EPA Allowed Level (MCL) Highest Detected Level (what we found)
✓	Fluoride	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	4.0 ppm	4.0 ppm 1.44 ppm
✓	Haloacetic Acids (HAA)	By-product of drinking water disinfection	N/A	60.0 ppb 26.10 ppb (ann. avg.) Actual Range ND - 67.0 ppb
✓	Turbidity	Soil runoff	0	TT = 5 NTU 0.15 NTU TT = % of samples < 0.3 NTU: 100%

Purysburg Water Treatment Plant

Samples were taken at the plant for testing of the substances below.

Better than EPA Standard	Substance	Typical Source	EPA Ideal Goal (MCLG)	Highest EPA Allowed Level (MCL) Highest Detected Level (what we found)
✓	Fluoride	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	4.0 ppm	4.0 ppm 1.15 ppm
✓	Haloacetic Acids (HAA)	By-product of drinking water disinfection	N/A	60.0 ppb 56 ppb (ann. avg.) Actual Range ND - 67.0 ppb
✓	Turbidity	Soil runoff	0	TT = 5 NTU 0.11 NTU TT = % of samples < 0.3 NTU: 100%

TERMS TO KNOW IN READING THE WATER TEST RESULTS

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

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.

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 contamination.

ND (non-detected) No measurable level of a substance or contaminant detected.

ppm (parts per million) The equivalent of one drop of water in 42 gallons.

ppb (parts per billion) The equivalent of one drop of water in 14,000 gallons.

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

Turbidity A measure of the cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system. NTU is a measurement of the clarity of the water.

IMPORTANT INFORMATION FROM THE EPA



All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals, such as persons with cancer undergoing chemo-therapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. 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 Safe Drinking Water Hotline (1-800-426-4791).