

# 2020 Water Quality Report

Water Quality Reports → 2020 → Savannah Main System

# Savannah Main System

The City of Savannah Water Supply and Treatment department is pleased to report that your drinking water, supplied by the Savannah Main System, is safe. To learn more about safety regulations and testing, see the table included in this report.

#### Source



Drinking water for the Savannah Main System comes from two sources. Even though 97% of water supplied is still from the Floridan Aquifer, 3% was drawn from Abercorn Creek. Abercorn Creek is a tributary of the Savannah River located in Effingham County. The blending of Abercorn Creek water with Floridan Aquifer water was necessary due to the state-mandated reductions in the City's withdrawal permit for the Floridan. The mandated reductions are intended to curb demand and slow salt water from intruding into the Aguifer. In 2019, the Savannah Main System produced 6,189 million gallons of groundwater and 154 million gallons of surface water for a population of 149,837. Savannah will continue to rely more on Abercorn Creek in the future to supplement water supplies.

#### Treatment



Water pumped from the Floridan Aquifer is very pure. For treatment, we add a disinfectant during distribution and fluoride to promote dental health.

In the surface water treatment process, alum and polymer are added to the water to cause fine mud particles to clump together and settle out of the water. The clear water is then filtered, disinfected with chlorine and ammonia, and balanced for pH and corrosiveness with lime and phosphate.

## **Testing**



In order to ensure that tap water is safe to drink, the Environmental Protection Agency regulates the amounts of certain substances allowed in public drinking water. The City of Savannah performed over 123,000 tests and procedures, on over 160 water quality parameters in 2019 to ensure that you receive safe, high quality drinking water.



This clean, safe, drinking water is then distributed to your home. The City of Savannah provides some of the highest quality, most affordable drinking water in the Southeast.

## Protecting the Source

Source Water Assessment Plan: In 2002, The City of Savannah completed a Source Water Assessment Plan (SWAP) for Abercorn Creek, a tributary of the Savannah River. In 2019, an update was completed. The purpose of updating the SWAP was to identify new potential contamination sources throughout the watershed and to determine the risks these sources pose to the water supply. The overall contaminant susceptibility for Abercorn Creek is MEDIUM. This is an increase from the 2002 report rating of LOW. Some Potential Pollution Sources (PPS) include: the number of pipe and road stream crossings, sewer lift stations and pipelines, commercial and industrial areas, residential septic systems, and golf courses. Savannah employs two real-time detection systems to ensure these potential sources do not enter our water supply. A complete list of all PPS, their substances of concern and the assessment methods are in the SWAP.

In order to protect our drinking water supplies, the City has joined a collaboration of people interested in protecting the quality of the Savannah River for future generations and keeping drinking water affordable. The collaboration includes representatives from five water utilities in Georgia and South Carolina. It also includes representatives from the US Endowment for Forestry and Communities, The Nature Conservancy, and Savannah Riverkeeper. For more information please contact Laura Walker, Water Resources Environmental Manager at (912) 651-2221 or via email.

### Tap Water Vs. Bottled Water

All sources of drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some substances. All water sources are fed by water that passes over the land or through the ground, dissolving naturally occurring minerals and materials, or picking up substances along the way. These substances may include:

- Biological substances from humans, agriculture, or wildlife sources
- Inorganic substances from stormwater runoff, industrial sources, or wastewater discharges
- Insecticides and herbicides from agriculture, stormwater runoff or residential use
- Organic chemicals from industrial or domestic processes, stormwater runoff, or septic systems
- Radioactive materials that can be naturally occurring or the result of mining or other human activities

The difference is in how they are regulated. Your tap water is much more stringently regulated – it is tested hundreds of times a month for over 100 different contaminants. Bottled water, on the other hand, is only required to be tested once a week for some substances. Higher levels of at least 13 contaminants are allowed in bottled water than tap water. And tap water providers are required to share their quality in reports such as this one, and to notify the public if a potentially dangerous contaminant is found. Bottled water providers are not required to provide the public with this information.

If you drink the recommended 8 cups of water a day of tap water it will cost you \$0.40 a year. The same amount of bottled water will cost \$1,400 a year. That's 3000x the price for a less safe product!

# **Drinking Water Analysis**

The City of Savannah Water Laboratory performed more than 123,000 tests and procedures, on over 160 water quality parameters, during 2019 to ensure water quality. The City has met all sampling and reporting requirements.

Substance tested and detected	Chlorine	Fluoride	Total Triahlomethanes (TTHMs)	Total Haloacetic Acids (THAAs)	Total Coliform Bacteria	Lead	Copper
Probable Source	Water additive used to control microbes	Erosion of natural deposits, water additive to promote strong teeth	Byproduct of water chlorination	Byproduct of water chlorination	Naturally present in the environment	Corrosion of household plumbing	Corrosion of household plumbing
Amount Detected	2.20 ppm	1.4 ppm	68.2 ppb	51 ppb	2.5% of monthly samples	2.0 ppb (90th Percentile)	0.046 ppm (90th Percentile)
Meets Drinking Water Standards	~	~	~	~	~	~	~
Maximum Disinfectant Residual Level Goal	4 ppm						
Maximum Disinfectant Residual Level Allowed	4 ppm						
Maximum Contaminant Level Goal		4 ppm	O ppb	O ppb	0% of monthly samples	O ppb	1.3 ppm
Maximum Contaminant Level Allowed		4 ppm	80 ppb	60 ppb	5% of monthly samples		
Action Level						15 ppb	1.3 ppm
Range of Detection	0.03-2.20 ppm	0.34-1.4 ppm	Not detected - 68.2 ppb	Not detected - 51 ppb	Not applicable	No sample greater than action level	No sample greater than action level

Units: ppm = part per million or 1 in 1,000,000. ppb = parts per billion or 1 in 1,000,000,000. Copper and lead are the only two substances monitored at the customer's tap. They were last sampled in 2018.

**Maximum Disinfectant Residual Level Goal**: The level of a drinking water disinfectant below which there is no known or expected risk to health.

Maximum Disinfectant Residual Level Allowed: 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.

Maximum Contaminant Level Goal: The level of contaminant in drinking water below which there is no known or expected risk to health, allowing for a margin of safety.

Maximum Contaminant Level Allowed: The highest level of a contaminant that is allowed in drinking water. This level is set as close to the goal as feasible using the best available treatment technology.

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

# **Unregulated Contaminant Monitoring**

	Manganese	Bromide	Total Organic Carbon	HAA6	HAA9
Amount Detected	0.67 ppb	74.2 ppb	1,240 ppb	8.26 ppb	10.76 ppb
Range of Detection	Not detected - 0.67 ppb	Not detected - 74.2 ppb	Not detected - 1,240 ppb	Not detected - 8.26 ppb	Not detected - 10.76 ppb

The U.S. Environmental Protection Agency (EPA) selected the City of Savannah to participate in the Unregulated Contaminant Monitoring Regulation 3 (UCMR 3) program. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

If you have any questions regarding safe drinking water regulations or these test results, you may contact the City of Savannah Water Supply and Treatment Department at (912) 964-0698

#### Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 healthcare providers.

EPA/Center for Disease control guidelines on appropriate means to lessen the risks of infection by Cryptosporidium and other microbial contaminants are available from the **Safe Drinking Water**Hotline at 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. The City of Savannah is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing fixtures. 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 have concerns 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 at 1-800-426-4791 or at www.epa.gov/safewater/lead.

### **Important Contact Information**

Water Supply & Treatment Department

(912) 964-0698

24-Hour Emergency Line

(912) 351-3434

**Billing Information** 

(912) 651-6460

**Public Information, Education & Programs** 

(912) 651-2221

**Environmental Protection Agency Safe Drinking Water Hotline** 

#### 1-800-426-4791

#### epa.gov/ow

## City Council Meetings

The City of Savannah government works under the direction of City Council and the City Manager.

The City Council meets every other Thrusday at City Hall, 2 East Bay Street. These meetings are open to the public.

#### Water Conservation

The City of Savannah encourages residents to conserve water to help protect this precious natural resource. To learn more about water conservation programs such as free water saving toilets and water conservation kits for residents, visit the **City of Savannah website**.

All customers must follow the outdoor watering schedule: No watering between 10am and 4pm. Even numbered residences water Monday, Wednesday, and Saturday. Odd numbered residences water Tuesday, Thursday, and Sunday. To report violations, call **311**.







City of Savannah, GA © 2020 All Rights Reserved