



2021 WATER QUALITY REPORT

CITY OF SAVANNAH

SAVANNAH I & D SYSTEM JANUARY 2021 - DECEMBER 2021

Important Information About the Safety of Your Drinking Water

(A message from Dr. Bryan T. Shaw DBA, Water Supply Director)

The City of Savannah Water Supply and Treatment Department is pleased to report to you that the drinking water supplied by the Savannah I & D System is safe. Water department staff pride themselves in their ability to provide you, our customer, with clean safe water. The table included in this report shows that water supplied by the Savannah I & D System gets an excellent report card when compared to health standards.

All sources of drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some substances. All water sources, including rivers, lakes, reservoirs and wells, are fed by water that passes over the surface of the land or through the ground. The water dissolves naturally occurring minerals and materials. It can also pick up substances resulting from the presence of animal or human activity.

Substances that may be present in source water:

- Biological - may come from human, agriculture, or wildlife sources.
- Inorganic - can be natural, from storm run-off, or from industrial or domestic wastewater discharges.
- Pesticides and herbicides - may come from agriculture, storm runoff or residential use.
- Organic chemicals - may come from industrial or domestic processes, storm run-off or septic systems.
- Radioactive materials - can be naturally occurring or the result of mining or other human activities.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amounts of certain substances in water provided by public water systems.

As new standards are established for drinking water, the City of Savannah will add new technology in order to be able to meet the new requirements. Please adhere to the state mandated water conservation restrictions as our water is a precious resource.

Source of Water

The Savannah I & D System gets its water from a surface water source, Abercorn Creek. Abercorn Creek is a tributary of the Savannah River. The Travis Field/Crossroads area is served by the I & D surface water system. Four groundwater wells pumping from the Floridan aquifer are maintained in a ready state as a backup source to the I&D system.

Treatment Process

The I & D Water Plant is a conventional surface water treatment plant. Alum and polymer are added to the water taken from Abercorn Creek to cause the finely divided mud particles to clump together so that the mud particles and other particles will settle to the bottom of the settling basins by gravity.

The clear water is then filtered and disinfected with chlorine to make the water biologically safe. The pH is adjusted by adding lime. Phosphate is added to make the water less corrosive. Ammonia is added to form chloramines for disinfection for a portion of the distribution system.

2016 Sanitary Survey

Each water system is required to participate in a Sanitary Survey conducted by EPD on a cycle not to exceed three years. In 2016, a sanitary survey of the I&D system was completed by EPD.

Additional Information: WEB sites with information about water quality

<http://www.epa.gov/ow> <http://www.dnr.state.ga.us> <http://www.awwa.org>
<http://www.ci.savannah.ga.us> <http://www.thempc.org/waterresources>

About City of Savannah Water Supply and Treatment

Savannah's city government works under the direction of a council/ manager form of government and has since 1954. The City Council meets every other Thursday at 2:00 p.m. in the Council Chambers on the second floor of City Hall, located at Two East Bay Street. These meetings are open to the public.

The City of Savannah has established a water conservation program. Information about this program or the state mandated water restrictions is available to anyone interested in conserving water, our most precious resource. The Water Conservation office is located at 6 Lower East Bay Street (Engineering) and can be reached by telephone at 912-651-2221.

Water Conservation has also established a Groundwater Guardian Team. If you are interested in learning more about this volunteer group, please call the Water Conservation office.

The City of Savannah Water Supply and Treatment Department business hours are from 8:00 a.m. until 5:00 p.m. Monday through Friday. The customer service and 24 hour a day emergency telephone number is 912-964-0698. If you did not receive a copy of this report and you would like to be added to our mailing list, please contact us at one of the telephone numbers above.

For additional information about the quality of your drinking water call - City of Savannah Water Supply and Treatment Department - 912-964-0698. Billing information call 912-651-6460.

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 Environmental Protection Agency'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 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 /Center for Disease Control 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).

City of Savannah Water Supply and Treatment Department
P.O. Box 4038
Pt. Wentworth, GA 31407

The City of Savannah Water Laboratory performed more than 176,000 tests and procedures during 2021 to ensure water quality. Tests have been made on more than 160 water quality parameters. The City has met all sampling and reporting requirements. The following table lists all detected substances that require monitoring.

DRINKING WATER ANALYSIS

I & D System

Regulated Substances

Substance Tested and Detected	Unit	Goal MCLG	MCL	Amount Detected	Range of Detection	Does It Meet Standards?	Probable Source
Chlorine	ppm	MRDLG=4	MRDL=4	2.18	0.01-2.18	Yes	Water additive used to control microbes
Chloramine	ppm	MRDLG=4	MRDL=4	1.45	0-1.45	Yes	Water additive used to control microbes
Turbidity	NTU	0	TT=1 NTU TT = 95% of samples < 0.3 NTU	97.02% of samples were below 0.3 NTU	NA	Yes	Soil runoff
Total Organic Carbon ²	ppm	NA	TT	35 - 50% Removal Required	43.75 -72.41% Removal	Yes ³	Naturally present in the environment
Copper ¹	ppb	1300	AL=1300	230 (90 th Percentile)	No sample > AL	Yes	Corrosion of household plumbing
Lead ¹	ppb	0	AL=15	9.6 (90 th Percentile)	No Sample > AL	Yes	Corrosion of household plumbing
TTHM's (Total Trihalomethanes)	ppb	0	80	90.5	16.4-90.5 ³	Yes	Byproduct of water chlorination
THAA's (Total Haloacetic Acids)	ppb	0	60	82	12.1 -82 ³	Yes	Byproduct of water chlorination

¹Copper and lead are the only two substances monitored at the customer's tap. Samples collected in 2020

² Total Organic Carbon removal compliance is based on an annual average

³ Numbers reported for Trhalomethanes and Haloacetic Acids are for individual samples. Compliance is determined by annual average

⁴We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards.

Unregulated Contaminant Monitoring

Substance Tested and Detected	Unit	Amount Detected	Range of Detection
Manganese	ppb	11	8-11
HAA5	ppb	47.4	24.73-47.4
HAA6Br	ppb	8.56	4.6-8.56
HAA9	ppb	55.96	30.01-55.96
Bromide	ppb	34.3	20.6-34.3
TOC	ppb	6400	3170-6400

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 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. I&D Water Supply 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>.

Symbol, Acronym, or Note	Definition
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 Disinfectant Residual 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 Disinfectant Residual Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health.
NA	Not applicable.
ND	Not Detected
NTU	Nephelometric turbidity units.
ppm	Parts Per Million: 1 part per 1,000,000 (same as milligrams per liter) and corresponds to 1 minute in 2 years or 1 penny in \$10 thousand.
ppb	Parts Per Billion: 1 part per 1,000,000,000 (same as microgram per liter) and corresponds to 1 minute in 2,000 years or 1 penny in \$10 million.
TT	Treatment Technique : A required treatment technique or process intended to reduce the level of a contaminant in drinking water.
90 th Percentile	Level used to determine compliance
>	Greater than
<	Less than

Additional Testing, Research and Partnerships

The City of Savannah Water Supply and Treatment Department performs thousands of water quality tests each year in addition to those required by the U.S. Environmental Protection Agency (EPA) and the State of Georgia's Environmental Protection Division (EPD). This pro-active approach ensures that our customers receive the highest quality drinking water.

Cryptosporidium is a protozoan parasite too small to be seen without a microscope. It is common in surface waters (lakes and rivers), especially when these waters contain a high amount of sewage or animal waste. Cryptosporidium can cause symptoms that include diarrhea, nausea, stomach cramps or all three. Because many other conditions can produce these same symptoms, a special laboratory test is needed to find out whether Cryptosporidium is the cause. Samples of untreated water from our system have been sent to outside laboratories set up for Cryptosporidium testing. There was no evidence of a Cryptosporidium problem in the samples tested.

Total organic carbon (TOC) has no adverse health effects. Total organic carbon may provide a medium for the formation of disinfection byproducts when water is disinfected. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAAs) which are also reported on in this report.

Water Supply and Treatment also benefits from millions of dollars of research and professional operations development through its memberships in national and state professional organizations such as the American Water Works Association, American Water Works Association Research Foundation, Georgia Association of Water Professionals, and Georgia Rural Water Association.