



Water Quality Report

GA Community Water System Name:

Suwanee Water System

GA Water System ID#:

1350010

Name of water system contact:

James H. Miller
Public Works Director
330 Town Center Avenue
Suwanee, GA 30024
770-945-8996

Time Period Covered:

This report details information on our water system for the calendar year 2016, unless otherwise noted. We are required to test and monitor for some water quality parameters daily. However, we are required to monitor for certain parameters less than once per year, because the concentration is not expected to vary significantly from one year to the next. Therefore, some of the data in this report may be more than one year old.

Water System Information Summary:

The purpose of this report is to raise your understanding of drinking water safety. Last year, our water system conducted numerous tests for various different parameters in our tap water. The results from these tests indicated that Suwanee's water complied with Clean Water Act standards.

Information on Where Does My Water Come From:

Your water comes from two groundwater wells and is then stored in a 150,000-gallon elevated water tank. The wells are approximately 235 feet and 600 feet deep. The water source has been identified as a crystalline rock aquifer and provides water for our

community. These locations are protected from activities that could potentially cause contamination of the water source. We treat the raw water with chlorine disinfectant, fluoride, and phosphate. The City currently has 352 connections on the water system, which consists primarily of 6-inch water mains, with some 2-inch and 8-inch lines. The City also has a connection to the Gwinnett County Water Resources Department main line for emergency backup use.

Community Participation Opportunities:

The City Council holds meetings on the fourth Tuesday of each month at 6:30 pm at City Hall unless otherwise scheduled. To verify the location, date and time of any City Council meeting please call 770-945-8996 or visit us at www.suwanee.com.

Questions or comments concerning the water system can be submitted to the attention of James H. Miller, Public Works Director in writing, by calling 770-945-8996, or by e-mail at jmiller@suwanee.com.

Availability of Source Water Assessments and Information on Potential Watershed Contaminants:

The Georgia Environmental Protection Division has written a Wellhead Protection Plan that details the City's course of action in the event of a chemical spill. The report is available to the public and includes information regarding potential sources of contamination in the watershed. To obtain a copy of the Wellhead Protection Plan, please call the City at 770-945-8996.

Important Health Information:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some

cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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/CDC 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)**.

Contaminants and Health Risks:

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)**.

Lead: 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 Suwanee Water System 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 or at <http://www.epa.gov/safewater/lead>.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which 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 stormwater 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 residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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.

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.

Definitions:

Maximum Contaminant Level (MCL): 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.

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbiological contaminants.

Maximum Residual Disinfection Level Goal (MRDLG): 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 contaminants.

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

ppm: Parts per million; means 1 part per 1,000,000 (same as milligram per liter) and corresponds to 1 minute in 2 years, or 1 penny in 10 thousand dollars.

ppb: Parts per billion; means 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 dollars.

pCi/l: Picocuries per Liter; a unit of concentration for radioactive contaminants.

ug/L: Micrograms per liter; same as ppb

n/a: Not applicable.

W a t e r Q u a l i t y D a t a

Inorganic Contaminants Table							
Parameter (units)	MCL	MCLG	Suwanee Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Fluoride (ppm)	4	4	0.78	0.3 to 1.5	Daily 2016	No	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate/Nitrite (ppm)	10	10	Not Detected to 0.3	Not Detected to 0.3	May 2016	No	Runoff from fertilizer use
Barium (ppm)	2	2	0.23	0.22 – 0.24	June & Oct. 2015	No	Discharge of metal refineries; erosion of natural deposits.

Disinfectants Monitoring Table							
Parameter (units)	MRDL	MRDLG	Suwanee Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Chlorine (ppm)	4	4	1.10	0.7 to 2.03	Daily 2016	No	Water additive used to control microbes

Radiological Monitoring Results						
Parameter (units)	MCL	Suwanee Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Uranium ug/L or ppb	30	Not Detected	Not Detected	May 2016	No	Erosion of natural deposits

Copper and Lead Monitoring Results

Parameter (units)	Action Level	Suwanee Water System Results	No. of Sites found above the Action Level	Sample Date	Violation No/Yes	Typical Source of Contaminant
Copper (ppm)	1.3	0.15	0	June 2016	No	Corrosion of household plumbing
Lead (ppb)	15	2	0	June 2016	No	Corrosion of household plumbing

Disinfectants By-Product Monitoring Results

Parameter (units)	MCL	Suwanee Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Total Trihalomethanes (ppb)	80	Not Detected	Not Detected	June 2016	No	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	35	Not Detected	Not Detected	June 2016	No	By-product of drinking water chlorination

Water Hardness Results

Parameter (units)	MCL	Suwanee Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Total Hardness as CaCO ₃ (mg/L)	N/A	126	126	October 2015	No	Calcium and Magnesium dissolves as water passes by limestone deposits and through dolomite and other magnesium bearing formations

City of Suwanee Water System:

The City of Suwanee water system was created in 1952 by action of the City Council, and line extensions occurred throughout the 1960's and 70's as new houses were built in Old Town and between Buford Highway and Suwanee Creek. Extension of lines occurred during 2004-2006 to and throughout the Stonecypher Subdivision development. During 2005, an existing water storage tank was replaced with a new 150,000 gallon elevated water storage tank.

In accordance with Georgia Environmental Protection Division regulations, during 2009 we completed baseline water quality testing for the implementation of Stage Two Disinfectant By-Product Rule. It was a series of tests to determine if our disinfectant, chlorine, produces Trihalomethanes (THM's) and Haloacetic Acids (HAA's) as by-products. The 2009 and each subsequent year's test results were consistent with other water quality tests we had previously conducted indicating the test results were below detection limits. This provides affirmation for our choice and use of our existing disinfectant type.

During 2009 we completed the comprehensive water system study via our Consultant on our source water supply, distribution system and operations creating a recommended short and long range master plan to better serve you with the highest quality of water. Implementation of initial recommended improvements began in 2009 and were completed in 2010 with 1) acquiring a G.E.F.A. loan with 40% forgiveness as part of the American Recovery and Reinvestment Act (ARRA) for water system improvements; 2) completing the water line replacement improvement projects on Martin Farm Road and Stonecypher Road along with the water line improvements at the intersection of King Street and Davis Street; and 3) completing an additional well, well house, water pump, chemical feed & monitoring equipment, and water

tie-in to our existing water main system. The final permitting of the new well was issued January 2011 through the Georgia Environmental Protection Division.

July 2010, the Suwanee Water System began utilizing the Metropolitan North Georgia Water Planning District to administer its toilet rebate program to replace older, inefficient toilets with high efficiency toilets. Additional information is available at www.northgeorgiawater.org or 404-463-8645.

Presence of iron and manganese minerals in water is not a health concern. Actually, they are vital to good health, but sometimes they are also a nuisance. Accordingly, after a series of public information meetings, we began a phosphate treatment process on May 11, 2011, to assist in reducing unanticipated, sporadic occurrences of water discoloration after instances of non-authorized fire hydrant use, etc. Also, this treatment process has assisted in reducing calcium (white) deposits on faucets, shower fixtures, etc.

The last water rate increase was effective for the bills that were due July 2015. Our water rates are competitive in the surrounding marketplace and are reviewed yearly.

The City continues to implement projects designed to protect water quality, evaluate our source of supply, and replace aging infrastructure. During 2013, we completed some improvements to our SCADA monitoring system that monitors certain components of our water system. In 2014, we replaced approximate 800 linear feet of 2 inch galvanized pipe on Eva Kennedy Road with 8 inch ductile iron pipe, and in early 2017 we replaced the well pump and controls at one of our water supply wells. Additionally during 2017, we are planning to be underway with relocating, replacing, and upgrading sections of water lines along Buford Highway as part of the planned Buford Highway Improvement Project.