# ANNUALWATER QUALITY REPORT

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Water Testing Performed in 2014



*Presented By* City of Statesboro

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

### **Our Mission Continues**

We are proud to present once again our annual water quality report covering all testing performed between January 1 and December 31, 2014. Most notably, last year marked the 40th anniversary of the Safe Drinking Water Act (SDWA). This rule was created to protect public health by regulating the nation's drinking water supply. We celebrate this milestone as we continue to manage our water system with a mission to deliver the best quality drinking water. By striving to meet the requirements of SDWA, we are ensuring a future of healthy, clean drinking water for years to come.

Please let us know if you ever have any questions or concerns about your water.

### Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

### Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may 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 by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

**Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

### Source Water Assessment

A Source Water Assessment was completed for the City of Statesboro Water System. This report lists potential contaminants that could be detected within the system. If you are interested in a copy of this report, contact the City of Statesboro, P.O. Box 348, Statesboro, GA 30459.

### Where Does Statesboro's Water Come From?

The raw water supply of Statesboro's drinking water is the Floridan Aquifer, which is a limestone formation running under the entire county and extending south. Raw water from this aquifer is of a very high quality. Water is withdrawn from the Floridan Aquifer utilizing six active deep wells. Water treatment consists of chlorination (disinfection), fluoridation (to help prevent tooth decay in children's teeth), and phosphate (for iron and corrosion control). This treatment takes place at each well site and is sampled and monitored daily by certified operators to ensure that quality drinking water is delivered to our customers.

### Water Restrictions

If you have any questions about water uses and current water restrictions, please contact the Statesboro Water Department at (912) 764-0693.



### Water Disinfection

Any water supply can naturally be exposed to disease causing microbes. Statesboro follows state and federal regulations to prevent disease by disinfection with chlorine. Regulations require a detectable amount of chlorine throughout the water distribution system to ensure public safety. Certain byproducts are formed during disinfection as a result of chemical reactions between chlorine and naturally occurring organic matter in the water. The addition of chlorine is carefully controlled so the levels of by-products are kept low, while disinfection remains effective.

### Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/ CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa. gov/drink/hotline.

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## **QUESTIONS?**

If you are interested in learning more about the water department or have any questions about the quality of water in Statesboro, please call Danny Lively at (912) 764-0693, or Matt Aycock or Van Collins at (912) 681-1161. If you have any questions about public participation and policy decisions, please call (912) 764-0693.

### Тір Тор Тар

The most common signs that your faucet or sink is affecting the quality of your drinking water are discolored water, sink or faucet stains, a buildup of particles, unusual odors or tastes, and a reduced flow of water. The solutions to these problems may be in your hands.

### Kitchen Sink and Drain

Hand washing, soap scum buildup, and the handling of raw meats and vegetables can contaminate your sink. Clogged drains can lead to unclean sinks and backed up water in which bacteria (i.e., pink and black colored slime growth) can grow and contaminate the sink area and faucet, causing a rotten egg odor. Disinfect and

clean the sink and drain area regularly. Also, flush regularly with hot water.

### Faucets, Screens, and Aerators

Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets, and can collect particles like sediment and minerals resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis.

Check with your plumber if you find particles in the faucet screen as they could be pieces of plastic from the hot water heater dip tube. Faucet gaskets can break down and cause black, oily slime. If you find this slime, replace the faucet gasket with a higher-quality product. White scaling or hard deposits on faucets and shower heads may be caused by hard water or water with high levels of calcium carbonate. Clean these fixtures with vinegar or use water softening to reduce the calcium carbonate levels for the hot water system.

### Water Filtration/Treatment Devices

A smell of rotten eggs can be a sign of bacteria on the filters or in the treatment system. The system can also become clogged over time so regular filter replacement is important. (Remember to replace your refrigerator filter!)



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### Naturally Occurring Bacteria

The simple fact is, bacteria and other microorganisms inhabit our world. They can be found all around us: in our food; on our skin; in our bodies; and in the air, soil, and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern because it indicates that the water may be contaminated with other organisms that can cause disease. Throughout the year, we tested 480 samples (40 samples every month) for coliform bacteria. In that time, none of the samples came back positive for the bacteria.

Federal regulations require that public water that tests positive for coliform bacteria must be further analyzed for fecal coliform bacteria. Fecal coliform are present only in human and animal waste. Because these bacteria can cause illness, it is unacceptable for fecal coliform to be present in water at any concentration. Our tests indicate no fecal coliform is present in our water.

### Lead in Home Plumbing

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. We are 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 www.epa.gov/safewater/lead.

### Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic or synthetic organic the contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Regulation (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality.

REGULATED SUBSTANCES													
SUBSTANCE (UNIT OF MEASURE)				YE SAMI	AR PLED	MCL [MRDL]	MCLG [MRDLG]	AMOUN <sup>®</sup> DETECTE	T RANG	GE IIGH	VIOLATION	TYPICAL SOURCE	
Chlorine (ppm)					14	[4]	[4]	0.70	ND-2	2.20	No	Water additive used to control microbes	
Fluoride (ppm)					14	4	4	0.73	0.08–	2.88	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
TTHMs [Total Trihalomethanes]-Stage 2 (ppb)				ob) 20	14	80	NA	NA 8.9		-16	No	By-product of drinking water disinfection	
Tap water samples were collected for lead and copper analyses from sample sites throughout the community													
UBSTANCE YEAR AMOU UNIT OF MEASURE) SAMPLED AL MCLG (§			AMOUNT DE (90TH%)	JNT DETECTED SITES ABOVE AL/ 30TH%TILE) TOTAL SITES VIOLATION TYPICAL SOURCE									
Copper (ppm)	2013	1.3	1.3	0.11	)	0/	30	No	Corrosion of household plumbing systems; Erosion of natural deposits				
Lead (ppb)	2013	15	0	2.5	1/		30	No	Corrosion	of hou	sehold plum	hold plumbing systems; Erosion of natural deposits	
SECONDARY SUBSTANCES													
SUBSTANCE (UNIT OF MEASURE)		YEAR SAMPLED		SMCL	MCLG		AMOUNT DETECTED		ANGE W-HIGH	VIO	LATION 1	TYPICAL SOURCE	
Iron (ppb)			)14	300	N	A	24	NI	D–120		No	Leaching from natural deposits; Industrial wastes	
Manganese (ppb)		2014		50	NA		11.6	.6 ND-			No	Leaching from natural deposits	

### Definitions

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 contaminants.

### **NA:** Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**SMCL (Secondary Maximum Contaminant Level):** SMCLs are established to regulate the aesthetics of drinking water like taste and odor.