# ANNUAL WATER OUALITY REPORTING VEAD 2020

**REPORTING YEAR 2020** 



Presented By City of Statesboro



Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. As in years past, we are committed to delivering the bestquality drinking water

possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, wellinformed customers are our best allies.

# **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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# 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.

# 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 highquality drinking water, but we 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 two 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 at (800) 426-4791 or at www.epa.gov/ safewater/lead.

# **Fixtures with Green Stains**

A green or blue-green stain on kitchen or bathroom fixtures is caused by tiny amounts of copper that dissolve in your home's copper plumbing system when the water sits unused overnight. Copper staining may

> be the result of a leaky faucet or a faulty toilet flush valve, so be sure your plumbing is in good working order.

> Copper stains may also be caused by overly hot tap water. Generally speaking, you should maintain your water temperature at a maximum of

120 degrees Fahrenheit. You should consult the owner's manual for your heater or check with your plumber to determine your current heat setting. Lowering your water temperature will reduce the staining problem and save you money on your energy bill.

Also keep in mind that a tap that is used often throughout the day usually will not produce copper stains, so if you flush the tap for a minute or so before using the water for cooking or drinking, copper levels will be reduced.

# 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 limestone Floridan aquifer system deep wells. Water treatment consists of chlorination (disinfection), fluoridation (to help prevent tooth decay in children), and phosphate (for iron and corrosion control). This treatment takes place at each well site, and water is sampled and monitored daily by certified operators to ensure that quality drinking water is delivered to our customers. 0

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### Water Stress

ater stress occurs when the demand for water exceeds the amount available during a certain period or when poor water quality restricts its use. Water stress

causes deterioration of freshwater resources in terms of quantity (aquifer overexploitation, dry rivers) and quality (eutrophication, organic matter pollution, saline intrusion).

> According to the World Resources Institute (WRI; www.wri.org), the Middle East and North Africa remain

the most water-stressed regions on Earth. However, several states in the western half of the U.S. are similarly experiencing extremely high levels of water stress from overuse. It is clear that even in countries with low overall water stress, individual communities within a country may still be experiencing extremely stressed conditions. For example, South Africa and the United States rank #48 and #71 on WRI's list, respectively, yet the Western Cape (home to Cape Town) and New Mexico experience extremely high stress levels.

There are undeniably worrying trends in water quality. But by taking action now and investing in better management, we can solve water issues before it is too late.

# **Tip Top Tap**

The most common signs that your faucet or sink is affecting the I 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**

Handwashing, 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 or black 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 showerheads 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!)

# **OUESTIONS?**

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

#### What type of container is best for storing water?

Consumer Reports has consistently advised that glass or BPA-free plastics such as polyethylene are the safest choices. To be on the safe side, don't use any container with markings on the recycle symbol showing "7 PC" (that's code for BPA). You could also consider using stainless steel or aluminum with BPA-free liners.

#### How much emergency water should I keep?

Typically, 1 gallon per person per day is recommended. For a family of four, that would be 12 gallons for 3 days. Humans can survive without food for 1 month, but can only survive 1 week without water.

#### How long can I store drinking water?

The disinfectant in drinking water will eventually dissipate, even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

## 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 by-products 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.

# **Test Results**

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring 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 fourth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water in order to determine if U.S. EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES										
SUBSTANCE (UNIT OF MEASURE)		YEAR SAMPLED		MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Chlorine (ppm)		20	20 [4]		[4]	0.91	ND-2.20	No	Water additive used to control microbes	
Fluoride (ppm)		2020		4	4	0.65	0.04–1.34	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Haloacetic Acids [HAAs] (ppb)		2020		60	NA	1.4	ND-1.4	No	By-product of drinking water disinfection	
TTHMs [Total Trihalomethanes] (ppb)		20	2020 80		NA	10.9	7.3–14.2	No	By-product of drinking water disinfection	
Tap water samples were collected for lead and copper analyses from sample sites throughout the community										
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)		SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE		
Copper (ppm)	2019	1.3	1.3	0.08	5	0/30	No	Corrosion	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead (ppb)	ead (ppb) 2019 15		0	0 1.5		0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits		
UNREGULATED CONTAMINANT MONITORING RULE - PART 4 (UCMR4)										
SUBSTANCE (UNIT OF MEASURE)			YEAR SAMPLED		AMOUNT DETECTED		RANGE LOW-HIGH	TYPICAL SOURCE		
Dibromoacetic Acid (ppb)			2020			0.38		ND-0.38	By-product of drinking water disinfection	
Dichloroacetic Acid (ppb)			2020			0.35		ND-0.43	By-product of drinking water disinfection	
Manganese (ppb)				2020		27.4	0.98–51.0		Leaching from natural deposits	

# Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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).