



We are pleased to present this year's Annual Water Quality Report.

This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

The City of St. Augustine routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2019. Data obtained before January 1, 2019 and presented in this report is from the most recent testing done in accordance with the laws, rules, and regulations.

In 2019, we participated in the 4th stage of EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 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 the EPA needs to introduce new regulatory standards to improve drinking water quality.

City of St. Augustine Drinking Water Source

Our water source is ground water from eight wells, one of which draws from Surficial Aquifer, and seven of which draw from the Floridan Aquifer.

Our water treatment process includes a low-pressure Reverse Osmosis / Nanofiltration Treatment Plant, followed by aeration and chloramines disinfection. This plant is capable of treating 6.5 million gallons of water per day.

Source Water Assessment

In 2019 the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There is one potential source of contamination identified for this system with a low susceptibility level. The assessment results are available on the FDEP SWAPP website at <https://fdep.dep.state.fl.us/swapp/>.

Contact Us

If you have any questions about this report or concerning your water quality, please contact Patrick Timoney, Water Treatment Plant Supervisor, at (904) 825-1044. We encourage our valued customers to be informed about their water utility. If you want to learn more or attend any of our regularly scheduled meetings, please contact us for dates and times.

Terms and Abbreviations

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

Maximum Contaminant Level Goal or 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 Contaminant Level or MCL: The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

"ND" means not detected and indicates that the substance was not found by laboratory analysis.

Parts per million (ppm) or Milligrams per liter (mg/l): one part by weight of analyte to 1 million parts by weight of the water sample.

Parts per billion (ppb) or Micrograms per liter (µg/l): one part by weight of analyte to 1 billion parts by weight of the water sample.

Picocurie per liter (pCi/L): measure of the radioactivity in water.

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

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

N/A means not applicable.

CONTAMINANTS TABLE

Radioactive Contaminants

Contaminant and Unit of Measure	Dates of Sampling (Mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radium 226 + 228 or combined radium (pCi/L)	12/2017	No	0.7	N/A	0	5	Erosion of natural deposits

Inorganic Contaminants

Contaminant and Unit of Measure	Dates of Sampling (Mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	12/2017	No	0.0132	0.00 - 0.0132	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	12/2017	No	0.88	0.00 - 0.88	4	4	Erosion of natural deposits; Discharge from fertilizer and aluminum factories; Water additive that promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Sodium (ppm)	12/2017	No	42.2	0.00 - 42.2	N/A	160	Salt water intrusion; leaching from soil
Antimony (ppb)	12/2017	No	0.1	0.1 - 0.1	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Chromium (ppb)	12/2017	No	2	ND - 2	100	100	Discharge from steel and pulp mills; erosion of natural deposits

Stage 2 Disinfectants and Disinfection Byproducts

Contaminant and Unit of Measure	Dates of Sampling (Mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	02/2019, 06/2019, 10/2019	No	6.7	5.0 – 6.7	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	06 & 10 2019	No	17.9	16.8 – 17.9	N/A	80	By-product of drinking water disinfection

Lead and Copper (Tap Water)

Contaminant and Unit of Measure	Dates of Sampling (Mo/Yr)	AL Exceeded (Y/N)	90th Percentile Result	No. of Sampling Sites exceeded the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	06/2019	No	0.26	0	1.3	1.3	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water) (ppb)	06/2019	No	1.4	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Unregulated Contaminants

Contaminant and Unit of Measure	Dates of Sampling (Mo/Yr)	MCL Violation (Y/N)	Level Detected	Range of Results	Likely Source of Contamination
Germanium (ppb)	2/2019	No	0.15	0.15	Naturally-occurring element and commonly used as germanium dioxide in phosphors, transistors and diodes, and in electroplating.

Important Information

The sources of drinking water (both tap water & 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.

Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses & bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts & metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, & residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial process and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil & gas production and mining activities.

To ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) 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 contaminants does not necessarily indicate that the 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 at 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 partially 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Lead in Drinking Water

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 & home plumbing. We are responsible for providing high quality 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 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, & steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Coliform Bacteria

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that another potentially harmful waterborne pathogen may be present, or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct one Level 1 assessment, which was completed. In addition, we were required to take corrective action, which has also been completed.

Notice

During the 2nd quarter of 2019, we conducted Stage 2 Disinfection Byproducts monitoring as required. However, the report was submitted 15 days late to the Florida Department of Environmental Protection, which is considered a technical violation. Although this is not an emergency, as our customers, you have a right to know what happened. The City has implemented additional checks and balances to ensure future monitoring reports are submitted on time.

The City of St. Augustine Water Treatment Plant Staff work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our drinking water sources, which are the heart of our community, our way of life and our children's future.