City of St. Augustine 2016 Water Quality Report

We are proud to present once again our annual water quality report covering all testing performed between January 1st & December 31st 2016. We continue to manage our water system with a mission to deliver the best-quality drinking water. By striving to meet the requirements of the Safe Drinking Water Act, we are ensuring a future of healthy, clean drinking water for years to come.

Our water source is ground water from eight wells, one of which withdraws from Surficial Aquifer, & seven of which withdraw from the Floridan Aquifer.

Our water treatment process includes lime softening, settling, recarbonation, & chloramines disinfection. Beginning in July 2008, the City of St. Augustine began the operation of a low-pressure reverse osmosis/nanofiltration treatment plant. This plant is capable of treating 2 million gallons of water per day. The treated water from this operation is blended with the water from our lime softening plant.

In 2016, the Department of Environmental Protection performed a source water assessment on our system & a search of the data sources indicated one potential source of contamination near our wells. The assessment results are available on the F.D.E.P. Source Water Assessment & Protection Program website at www.dep.state.fl.us/swapp."

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

The City of St. Augustine routinely monitors for contaminants in your drinking water according to Federal & State laws, rules & regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1st to December 31st 2016. Data obtained before January 1st, 2016 & presented in this report are from the most recent testing done in accordance with the laws, rules, & regulations.

In the table below, you may find unfamiliar terms & 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.

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

NA: Not Applicable

"ND" means not detected and indicates that the substance was not found by laboratory analysis.
PPM : Part Per Million

PPB : Parts Per Billion

pCi/L : pico-Curie Per Liter

If present, elevated levels of lead can cause serious health problems, especially for pregnant women & 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 www.epa.gov/safewater/lead.

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

(C) Pesticides & herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, & residential uses.

(D) Organic chemical contaminants, including synthetic & 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.

In order 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 & 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)

The City of St. Augustine Water Treatment Plant Staff works 24/7 to provide top quality water to every home & business. We ask that all of 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.

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 the EPA needs to introduce new regulatory standards to improve drinking water quality.

CONTAMINANTS TABLE

Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of Sampling (Mo/Yr)	MCL Violation Y/N	Highest Monthly Percentage/ Number	MCLF	MCL	Likely Source of Contamination
Total Coliform Bacteria (% positive samples)	1/2016 - 12/2016	No	0.00%	0	Presence of coliform bacteria in >5% of monthly samples.	Naturally present in the environment

Radioactive Contaminants

Contaminant and Unit of Measurement	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)	5 & 8/2010	No	0.5	ND-0.5	0	5	Erosion of natural deposits

Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of sampling (Mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	2/2014	No	0.087	0.0080 - 0.0087	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Flouride (ppm)	2/2014	No	0.34	0.2-0.34	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)	2/2014	No	33	33-33	N/A	160	Salt water intrusion; leaching from soil

Stage 2 Disinfectants and Disinfection By-Products

Contaminant and Unit of Measurement	Dates of sampling (Mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	7 & 10/2016	No	8.3	6.3-8.3	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	7 & 10/2016	No	49.2	21.1-49.2	N/A	80	By-product of drinking water disinfection

Lead and Copper (Tap Water)

Contaminant and Unit of Measurement	Dates of sampling (Mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Copper (tap water) (ppm)	6 & 7/2016	No	3.4	1	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	6 & 7/2016	No	0.010	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

UCMR3

Contaminant and Unit of Measurement	Dates of sampling (Mo/Yr)	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Strontium	10/13/2014	No	2300	2300	Occurs commonly in nature