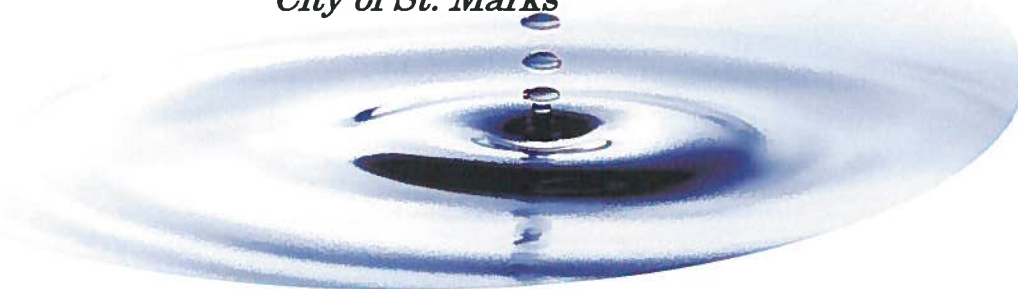


2016 Annual Drinking Water Quality Report City of St. Marks



We're very pleased to provide you with 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. Our water is supplied by the City of Tallahassee public water system. Tallahassee's water source is ground water from twenty-seven (27) deep wells that draw from the Floridan Aquifer.

Because of the excellent quality of our water, only limited treatment is required. All water well sources are treated with chlorine for disinfection purposes and fluoride for dental health purposes. Six (6) wells provide carbon filtration and one (1) well provides Green sand filtration as additional treatment.

In 2016, the Department of Environmental Protection performed a Source Water Assessment on the City of Tallahassee and their wells. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of their wells. There are forty-two (42) potential sources of contamination identified for Tallahassee, including eight (8) in the High susceptibility level and thirty-four (34) in the Low to Moderate susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp, or they can be obtained by contacting the Water Quality Division at 891-1220.

If you have any questions about this report or concerning your water utility, please contact Zoe Mansfield, St. Marks City Manager at (850) 925-6224. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Thursday of each month, 7:00 p.m. at City Hall.

The City of St. Marks 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 monitoring for the period of January 1 to December 31, 2016. Data obtained before January 1, 2016, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

The data table contains the names of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, and a key to units of measurements. Maximum contaminant levels (MCL) are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a million chance of having the described

health effects. Primary standards are those, which directly affect human health. Secondary standards concern the aesthetics of water (color, taste, odor).

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

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

Maximum Contaminant Level or 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 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 residual disinfectant level or 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 microbial contaminants.

Maximum residual disinfectant level goal or 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.

"ND" or Non-detect: 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.

2016 CONTAMINANTS TABLE

Monitoring Results – The City of Tallahassee

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
Radioactive Contaminants							
Alpha emitters (pCi/L)	Jan-Dec 2014	N	6.6	ND-6.6	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	Jan-Dec 2014	N	3.4	0.3-3.4	0	5	Erosion of natural deposits
Inorganic Contaminants							
Arsenic (ppm)	Jan-Sep 2014	N	2	ND - 2	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	Jan-Sep 2014	N	0.0162	0.0057-0.0162	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	Jan-Sep 2014	N	2.5	ND - 2.5	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	Jan-Sep 2014	N	3.4	ND - 3.4	200	200	Discharge from steel metal factories; discharge from plastic and fertilizer factories

<i>Contaminant and Unit of Measurement</i>	<i>Dates of sampling (mo./yr.)</i>	<i>MCL Violation Y/N</i>	<i>Level Detected</i>	<i>Range of Results</i>	<i>MCLG</i>	<i>MCL</i>	<i>Likely Source of Contamination</i>
<i>Fluoride (ppm)</i>	<i>Jan-Sep 2014</i>	<i>N</i>	<i>1.31</i>	<i>0.17 - 1.31</i>	<i>4</i>	<i>4.0</i>	<i>Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7ppm</i>
<i>Nitrate (as Nitrogen) (ppm)</i>	<i>Jan-Nov 2016</i>	<i>N</i>	<i>0.65</i>	<i>0.037-0.65</i>	<i>10</i>	<i>10</i>	<i>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</i>
<i>Nitrite (as Nitrogen) (ppm)</i>	<i>Jan-Nov 2016</i>	<i>N</i>	<i>0.002</i>	<i>ND-0.002</i>	<i>10</i>	<i>10</i>	<i>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</i>
<i>Sodium (ppm)</i>	<i>Jan-Sep 2014</i>	<i>N</i>	<i>3.75</i>	<i>ND-3.75</i>	<i>N/A</i>	<i>160</i>	<i>Salt water intrusion, leaching from soil</i>
<i>Volatile Organic Contaminants</i>							
<i>Contaminant and Unit of Measurement</i>	<i>Dates of sampling (mo./yr.)</i>	<i>MCL Violation Y/N</i>	<i>Level Detected (Average)</i>	<i>Range of Results</i>	<i>MCLG</i>	<i>MCL</i>	<i>Likely Source of Contamination</i>
<i>Tetrachloroethylene (ppb)</i>	<i>Jan - Dec 2016</i>	<i>N</i>	<i>0.91</i>	<i>ND - 1.91</i>	<i>0</i>	<i>3</i>	<i>Discharge from factories and dry cleaners</i>

Monitoring Results – The City of St. Marks

Stage 1 & Stage 2 Disinfectants and Disinfection By-Products

<i>Disinfectant or Contaminant and Unit of Measurement</i>	<i>Dates of sampling (mo./yr.)</i>	<i>MCL or MRDL Violation Y/N</i>	<i>Level Detected</i>	<i>Range of Results</i>	<i>MCLG or MRDLG</i>	<i>MCL or MRDL</i>	<i>Likely Source of Contamination</i>
<i>Chlorine (ppm)</i>	<i>Jan-Dec 2016</i>	<i>N</i>	<i>0.68</i>	<i>0.4 - 1.0</i>	<i>MRDLG = 4</i>	<i>MRDL = 4.0</i>	<i>Water additive used to control microbes</i>
<i>Haloacetic Acids (HAA5) (ppb)</i>	<i>Aug 2016</i>	<i>N</i>	<i>2.96</i>	<i>N/A</i>	<i>N/A</i>	<i>60</i>	<i>By-product of drinking water disinfection</i>
<i>Total Trihalomethanes (TTHM) (ppb)</i>	<i>Aug 2016</i>	<i>N</i>	<i>19.7</i>	<i>N/A</i>	<i>N/A</i>	<i>80</i>	<i>By-product of drinking water disinfection</i>

Lead and Copper (Tap Water)

<i>Contaminant and Unit of Measurement</i>	<i>Dates of sampling (mo./yr.)</i>	<i>AL Exceeded Y/N</i>	<i>90th Percentile Result</i>	<i>No. of sampling sites exceeding the AL</i>	<i>MCLG</i>	<i>AL (Action Level)</i>	<i>Likely Source of Contamination</i>
<i>Copper (tap water) (ppm)</i>	<i>Jun-Sep 2014</i>	<i>N</i>	<i>0.042</i>	<i>0 out of 5</i>	<i>1.3</i>	<i>1.3</i>	<i>Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives</i>
<i>Lead (tap water) (ppb)</i>	<i>Jun-Sep 2014</i>	<i>N</i>	<i>1.1</i>	<i>0 out of 5</i>	<i>0</i>	<i>15</i>	<i>Corrosion of household plumbing systems, erosion of natural deposits</i>

Recent testing does not indicate a problem with lead in our 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 and home plumbing. The City of St. Marks 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>.

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.

Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.*
- (B) 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.*
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.*
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.*
- (E) 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, 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.

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

We work to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Please DO NOT FLUSH your unused/unwanted medications down toilets or sink drains. More information is available at: <http://www.dep.state.fl.us/waste/categories/medications/pages/disposal.htm>.