

CITY OF ST. MARYS
2017 WATER QUALITY REPORT
Georgia Water System ID No.: GA0390001

Name of Water System Contact:
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Dispatcher 911

Summary of Water Quality Information

The **City of St. Marys** drinking water system is owned and operated by the **City of St. Marys**. The facility office is located at 418 Osborne Street in St. Marys, Georgia. If there are ever any comments or inquiries to be made, please feel free to contact Wayne Broxton at the number listed above, Monday through Friday, 7:00 AM to 3:30 PM. The **City of St. Marys** is committed to providing your community with clean, safe, and reliable drinking water. This report contains information about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. It is submitted to the Georgia Department of Natural Resources Environmental Protection Division and is available to you upon request at **City Hall**. This report may also be accessed at the City's web site: http://www.stmarysga.gov/department/public_works/document_center.php For more information about your water or this report please call Wayne Broxton.

Your water comes from three (3) community *groundwater* wells (Well 102, 103, and 106) which have a combined service capacity of approximately 3.5 million gallons per day. The water source for all wells is 800 to 1100 feet deep into what is commonly called the *Upper Floridan Aquifer*. This water source provides ample volumes of water for your community. These wells are distributed throughout the **City of St. Marys**. Any necessary treatment of the water, such as the addition of disinfectant and/or removal of contaminants, is performed at the well sites. Well properties are protected from activities which could potentially cause contamination of this water source through the implementation of a *Wellhead Protection Plan*.

A *Wellhead Protection Plan (WHPP)* is a report in which the Georgia Department of Natural Resources Environmental Protection Division identifies any types of pollution to which your water supply could be vulnerable and includes information regarding potential sources of contamination in your watershed. The current *WHPP* indicates no potential pollution sources in the fifteen (15) foot control zones. Potential pollution sources within the wells' 100 foot management zones include access and secondary roads, electrical transformers, utility poles, and underground/above ground storage tanks. Copies of the most updated *Wellhead Protection Plan* are available upon request at the **St. Marys City Hall**.

The **City of St. Marys** water system is tested for more than eighty (80) drinking water parameters a periodic basis determined by the Georgia Department of Natural Resources Environmental Protection Division Drinking Water Program and/or the United States Environmental Protection Agency. Sample/testing schedules are based on initial contaminant level assessments and can be changed by EPD if deemed necessary. Generally, samples are collected from within the water system for analysis of lead, copper, inorganic compounds, synthetic organic and volatile organic compounds once in a three (3) year cycle.

Nitrate-nitrite levels are analyzed yearly, trihalomethanes and haloacetic acids are monitored quarterly, and bacteriological content is checked monthly. The water system is also sampled and analyzed for radionuclides every six (6) to nine (9) years, depending on the well's initial assessment results. EPD may issue waivers for the analysis of any of the mentioned compounds if analytical data shows that the distributed drinking water in this area is not vulnerable to contamination from these chemicals.

During 2017, the City of St. Marys water system was sampled and analyzed for bacteriological content, nitrates and nitrites, total trihalomethanes, haloacetic acids, radionuclides, volatile organic, synthetic organic, and inorganic compounds. **All detected contaminants are delineated in the accompanying chart. Any contaminants not listed were not detected or were below reportable limits. We are proud to report that the City of St. Marys did not have any violations of water quality parameters during 2017.** Although the City of St. Marys did not perform lead and copper analysis during 2017, it is important for you to know about the lead and copper levels in your water system. During the last sampling event, thirty (30) representative locations were selected throughout your community and analyzed for lead and copper levels. Sampling locations may include single-family residences, multi-family residences, municipal buildings, and/or commercial locations. While sample results showed detectable levels of lead and copper. No sample sites exceeded the action level limit for lead and copper. Lead and copper are metals naturally found throughout the environment in soil and water. These metals can also be found in lead, copper, or brass household plumbing pipes and fixtures. Even consumer products such as paints, pottery, and pewter can contain lead and/or copper. Corrosion or deterioration of lead or copper-based materials, as well as erosion of natural deposits can release these metals into the 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 and home plumbing. The City of St. Marys 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 following measures may also be taken to minimize exposure to lead and/or copper:

- Use cold water for drinking or cooking.
- Do not cook with or consume water from the hot water faucet.
- Do not use hot water for making baby formula.
- Use only "lead-free" solder, fluxes and materials in new household plumbing and repairs.

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 water poses a health risk.

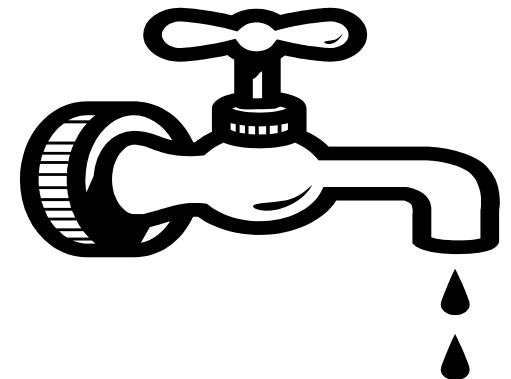
More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

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 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 microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.**

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 the following:

- **Microbial contaminants**, such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants** such as salts and metals, which can be naturally occurring or result from urban storm 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 storm water runoff, and residential uses.
- **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 storm water runoff, agricultural application, and septic systems.
- **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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The City of St. Marys strives to maintain the highest standards of performance and quality possible. In order to maintain a safe and dependable water supply, improvements that benefit the community must be made. Please help keep these costs as low as possible by utilizing good water conservation practices.

DEFINITION OF TERMS AND ABBREVIATIONS USED IN THIS REPORT

- **Maximum Contaminant Level (MCL):** “The highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG as feasible using the best available treatment technology.”
- **Maximum Contaminant Level Goal (MCLG):** “The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.”
- **Action Level (AL):** “The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.”
- **Secondary Maximum Contaminant Level (SMCL):** reasonable goals for drinking water quality. Exceeding SMCL’s may adversely affect odor or appearance, but there is no known risk to human health.
- **Treatment Technique (TT):** “A required process intended to reduce the level of a contaminant in drinking water.”
- **Maximum Residual Disinfectant Level (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 microbiological contaminants.”
- **Maximum Residual Disinfectant Level Goal (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.”
- **Not Detected (ND):** By regulation, this substance or group of substances was tested for in our finished tap water; however, none was detected at the testing limit.
- **TTHMs (Total Trihalomethanes):** One or more of the organic compounds Chloroform, Bromodichloromethane, Chlorodibromomethane, and/or Bromoform.
- **HAA5s (Haloacetic Acids):** One or more of the organic compounds Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, and Dibromoacetic Acid.
- **NA:** Not applicable to this contaminant
- **ppb or ug/l:** parts per billion or micrograms per liter
- **ppm or mg/l:** parts per million or milligrams per liter
- **pCi/l:** picocuries per liter, a measurement of radiation

CITY OF ST. MARYS WATER SYSTEM

2017 WATER QUALITY DATA

WSID: GA0390001

The table below lists all the drinking water contaminants that have been detected in your drinking water. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The data presented in this table is from testing done during the year noted. The Federal Environmental Protection Agency (EPA) and the Georgia Department of Natural Resources Environmental Protection Division (EPD) require monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

DETECTED INORGANIC CONTAMINANTS TABLE								
PARAMETER	UNITS	MCL [SMCL]	MCLG	St. Marys Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Chlorine	ppm	4	**	2	1.0 to 2.0	2017	No	Water additive used for the control of microbes
Fluoride	ppm	4 [2]	4	0.54	0.52 to 0.54	2017	No	Erosion of natural deposits; promotes strong teeth
Iron	ppb	[300]	**	86.00	NA	2017	No	Erosion of natural deposits
Nitrogen	ppm	10	10	0.24	0 to 0.24	2017	No	Erosion of natural deposits; Run off from fertilizer use

DETECTED ORGANIC CONTAMINANTS TABLE								
PARAMETER	UNITS	MCL	MCLG	St. Marys Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Haloacetic Acids	ug/l	80	**	12.0	3.2 to 15	2017	No	By product of drinking water disinfection
Total Trihalomethanes	ug/l	80	**	58.0	34.4 to 67.8	2017	No	By product of drinking water disinfection

OTHER DETECTED UNREGULATED CONTAMINANTS TABLE								
PARAMETER	UNITS	MCL [SMCL]	MCLG	St. Marys Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Sodium	ppm	**	**	27.5	26 to 29	2017	No	Erosion of natural deposits

LEAD AND COPPER MONITORING RESULTS								
PARAMETER	UNITS	Action Level	MCLG	St. Marys 90th Percentile	# of sample sites above Action Level	Sample Date	Violation No/Yes	Typical Source of Contaminant
Lead	ppb	15	0	1.4	0	2016	No	Corrosion of household plumbing
Copper	ppm	1.3	1.3	0.04	0	2016	No	Corrosion of household plumbing

MICROBIOLOGICAL MONITORING RESULTS								
PARAMETERS	UNITS	MCL	MCLG	St. Marys Number of Positive Samples	Positive Sample Date (Month/Year)	Sample Year	Violation No/Yes	Typical Source of Contaminant
Total Coliform	Present/ Absent	1*	0	2	7/17	2017	No	Naturally present in the environment
E.Coli		1*	0	1	7/17	2017	No	Human and animal fecal waste

RADIONUCLIDES MONITORING RESULTS								
PARAMETER	UNITS	MCL	MCLG	St. Marys Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Alpha emitters	pCi/L	15	0	<3	NA	2017	No	Erosion of natural deposits
Radium 226	pCi/L	5	0	<1	NA	2017	No	Erosion of natural deposits
Radium 228	pCi/L	5	0	<1	NA	2017	No	Erosion of natural deposits

Parameters, values and/or sources may vary

*Total Coliform Rule MCL= 1 positive sample for systems that collect < 40 samples a month

** No established MCL, SMCL or MCLG