

For More Information

If you have any questions about this report or concerning your water utility, please contact Utilities Supervisor Clay Lott at (727) 893-1000 or by writing to City of Gulfport, Utilities Dept., 2401 53rd Street South, Gulfport, FL 33707. We want our valued customers to be informed about their water utility.

City of Gulfport
Utilities Dept.
2401 53rd Street South
Gulfport, FL 33707

2017 ANNUAL DRINKING WATER QUALITY REPORT



City of
Gulfport
Water System

PWS ID #6520705

Our Drinking Water Is Regulated

The City of Gulfport is pleased to share this report with you. This report is a summary of the quality of the water we provide our customers. The analysis covers January 1 through December 31, 2017, and was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Source of Drinking Water

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:

- 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 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Where Do We Get Our Drinking Water?

In 2017 our water department distributed 352,505,200 gallons of water to our customers. Our water source is purchased water from the City of St. Petersburg. The City of St. Petersburg is one of six member governments who formed Tampa Bay Water, the regional water utility, which supplies all of our drinking water. The water is a dynamic blend of groundwater, surface water and desalinated water. Groundwater is primarily supplied by eleven different well fields pumping water from the Floridan Aquifer. Surface water is drawn from the Alafia River, the Hillsborough River, and the Tampa Bypass Canal. Hillsborough Bay is the primary supply for the Tampa Bay Seawater Desalination facility, which uses reverse osmosis to separate drinking water from seawater.

Your water is treated by disinfection and filtration to remove or reduce harmful contaminants that may come from the source water. In addition, fluoride is added to promote healthy teeth.

All Drinking Water May Contain Contaminants

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. 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Required Additional Health Information for Lead

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 Gulfport 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 www.epa.gov/safewater/lead.

Source Water Assessment Program

The Florida Department of Environmental Protection (FDEP) performs source water assessments to provide information about potential sources of contamination to water systems. In 2017, the FDEP performed an assessment on Tampa Bay Water Regional Surface Water Plant and found the source water to be considered at high risk because of the many potential sources of contaminants present in the assessment area. Results of the assessments, along with information about the source water assessment program can be found on the Internet at www.dep.state.fl.us/swapp or can be obtained from the City of Gulfport by calling (727) 893-1000.

Important Health Information

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 (1-800-426-4791).

Some Interesting Water Facts

- Mirror Lake was the sole source of the City's water until 1905. At that time, 8 wells were drilled locally to keep up with the demands of the increasing population.
- Dr. John Snow found that the cholera was spread through contaminated water and introduced the use of chlorine for disinfection of community water supplies in the mid 1850's.
- A typical garden hose can deliver 50 gallons of water in just 5 minutes.
- If you choose to drink your daily recommended 8 glasses of water per day from commercially bottled water, it can cost you more than \$1,400 per year. If your household uses 8000 gallons monthly, your water costs 1.064 cents per gallon at current St. Petersburg utility rates. Drinking the recommended 8 glasses of water per day from the tap will cost you less than \$2 per year.



We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2017.

Results of Monitoring of City of St. Petersburg Distribution System

Microbiological Contaminants (Testing completed by the City of St. Petersburg)

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation	Highest Monthly Amount	Range	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (<i>St. Petersburg</i>)	Monthly 2017	N	1.78% (Jan. 2017)	ND-1.78%	0	Presence of coliform bacteria in >5% of monthly samples	Naturally present in the environment
Total Coliform Bacteria (<i>Gulfport</i>)	Monthly 2017	N	1.0%	1.20-3.40% (Jan, Jun, Oct)	0	Presence of coliform bacteria in >5% of monthly samples	Naturally present in the environment

Inorganic Contaminants (Testing completed by the City of St. Petersburg)

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	05/2017	N	0.29	NA	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	05/2017	N	0.0107	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	05/2017	N	0.86	NA	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm.
Nitrate (as Nitrogen) (ppm)	10/2017	N	0.18	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	05/2017	N	16.6	NA	NA	160	Salt water intrusion; leaching from soil

Stage 1 Disinfectants and Disinfection By-products

Contaminant and Unit of Measurement	Dates of Sampling	MRDL Violation	Level Detected (Highest RAA)	Range	MRDLG	MRDL	Likely Source of Contamination
Chloramines (ppm) (<i>St. Petersburg</i>)	Monthly 2017	N	3.79	0.17-5.90	4.0	4.0	Water additive used to control microbes
Chloramines (ppm) (<i>Gulfport</i>)	Monthly 2017	N	2.55	1.20-3.40	4.0	4.0	

Stage 2 Disinfectants and Disinfection By-products

Contaminant and Unit of Measurement	Dates of Sampling	MRDL Violation	Level Detected (Highest RAA)	Range	MRDLG	MRDL	Likely Source of Contamination
HAA5 [haloacetic acids] (ppb) (<i>St. Petersburg</i>)	2017	N	26.4	14-35	NA	60	By-product of drinking water disinfection
TTHM [total trihalomethanes] (ppb) (<i>St. Petersburg</i>)	Quarterly		18.0	13.2-19.1		80	
HAA5 [haloacetic acids] (ppb) (<i>Gulfport</i>)	2017		11.49	0.71-25.20		60	
TTHM [total trihalomethanes] (ppb) (<i>Gulfport</i>)	Quarterly		18.27	12.50-32.00		80	

Lead and Copper (Tap Water)

Contaminant and Unit of Measurement	Dates of Sampling ¹	AL Exceeded	90th Percentile Result	No. of Sites Exceeding AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (Tap Water) (ppm) (<i>St. Petersburg</i>)	2014	N	0.6	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (Tap water)* (ppb) (<i>St. Petersburg</i>)	2014	N	1.9	1	0	15	Corrosion of household plumbing systems; erosion of natural deposits
Copper (Tap Water) (ppm) (<i>Gulfport</i>)	2014	N	0.52	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (Tap water) (ppb) (<i>Gulfport</i>)	2014	N	2.9	1	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Unregulated Contaminants

Contaminant and Unit of Measurement	Dates of Sampling	Level Detected	Range	Likely Source of Contamination
Vanadium (ppb)	06/16	0.49	0.43 - 0.55	Erosion of natural deposits; corrosion product of iron piping used for drinking water.
Strontium (ppb)	06/16	229	224 - 234	Erosion of natural deposits; possible contaminant in quicklime, a water softening additive.
Total Chromium (ppb)	06/16	0.14	ND - 0.49	Erosion of natural deposits; discharges from industrial uses.
Chromium-6 (ppb)	06/16	0.082	0.071 - 0.090	Erosion of natural deposits; discharges from industrial uses.
Chlorate (ppb)	06/16	241	223 - 259	By-product of drinking water disinfection with chlorine dioxide, possible contaminant in hypochlorite solutions (another drinking water disinfectant)

Results of Monitoring of Tampa Bay Water System

Contaminant (Units)	Location and Dates of Sampling	MCL or TT Violation (Y/N)	Highest Level Detected	Lowest % of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	Surface WTP Monthly 2017	N	0.139	100%	NA	TT	Soil runoff
Contaminant (Units)	Dates of Sampling	MCL or TT Violation (Y/N)	Highest Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	04/2017	N	4.4	1.7-4.4	0	15	Erosion of natural deposits
Radium 226+228 (pCi/L)	04/2017	N	3.2	0.7-3.2	0	5	Erosion of natural deposits
Uranium (ppb)	04/2017	N	1.5	NA	0	30	Erosion of natural deposits
Contaminant (Units)	Dates of Sampling	MCL or TT Violation (Y/N)	Highest RAA	Range	MCLG	MCL	Likely Source of Contamination
Bromate (ppb)	01/17 - 12/17	N	2.93	0.71-6.98	0	10	By-product of drinking water disinfection
Contaminant (Units)	Dates of Sampling	Acute Violations (Y/N)	Non-Acute Violations (Y/N)	Level Detected	MRDLG	MRDL	Likely Source of Contamination
Chlorine Dioxide (ppb)	05/2017	N	N	0.361	800	800	Water additive used to control microbes
Contaminant (Units)	Dates of Sampling	MCL Violation (Y/N)	Highest Monthly Average	Highest Average Following an MCL Exceedance at the ETDS	MCLG	MCL	Likely Source of Contamination
Chlorite (ppm)	01/17 - 12/17	N	0.00675	NA	0.8	1	By-product of drinking water disinfection
Contaminant (Units)	Dates of Sampling	TT Violation (Y/N)	LRAAMRR	Range of MRR	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (ppm)	01/17 - 06/17, 11/17 - 12/17	N	3.7	1.63 - 3.8	NA	TT	Naturally present in the environment

Definitions

To help you better understand the terms used in these tables, we have provided the following definitions:

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

ETDS – entrance to the water distribution system

LAAMRR – lowest annual average monthly removal ratio

Maximum Contaminant Level (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 (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 (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 (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.

MRR – monthly removal ratios

NA – not applicable

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

Nephelometric Turbidity Unit (NTU) – measurement for the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocurie per Liter) – measure of the radioactivity in water.

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.

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.

Treatment Technique (TT) – a required process intended to reduce the level of a contaminant in drinking water.

WTP – water treatment plant