2018 Annual Drinking Water Quality Report
City of Apalachicola

We're pleased to present to you 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 source is ground water from three wells. The wells draw from the Floridan Aquifer. Because of the quality of our water, the only treatment required is chlorine for disinfection purposes.

In 2018 the Department of Environment 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 are no potential sources of contamination identified for this system. The assessment results are available on FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or can be obtained from Apalachicola City Hall at 850/653-9319.

If you have any questions about this report or concerning your water utility, please contact Lee Mathes, City Administrator or Janelle Paul, Utilities Clerk at 850/653-9319. 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 first Tuesday after the first Monday of each month at 6:00 PM at the Apalachicola Community Center, 1 Bay Avenue, Apalachicola, Florida.

The City of Apalachicola 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, 2018. Data obtained before January 1, 2018, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

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 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.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.
Not Detected (ND): Indicates that the substance was not found by laboratory analysis.
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.
Picocurie per liter (pCi/L): Measure of the radioactivity in water.

2018 CONTAMINANTS TABLE

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
Alpha emitters (pCi/L)	Oct 14	N	3.9	N/A	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	Oct 14	N	1.6	N/A	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)	Nov-17	N	0.013	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	Nov-17	N	2.9	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	Nov-17	N	0.46	N/A	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Sodium (ppm)	Nov-17	N	29	N/A	NA	160	Salt water intrusion, leaching from soil

Stage 2 Disinfectants and Disinfection By-Products

Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm) Stage 1	Jan-Dec 18	N	0.68	0.52-0.94	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	Jan-Dec 18	N	34.8	12.2-40.2	NA	MCL =60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	Jan–Dec 18	Y	105.03	61-108.4	N/A	MCL=80	By-product of drinking water disinfection
TTHM (Total trihalomethanes) (ppb) Highest @ Bay City Lodge	Jan-Dec 18	Y	105.03	63.6-108.4	NA	MCL = 80	By-product of drinking water disinfection
TTHM (Total trihalomethanes) (ppb) Market Street	Jan-Dec 18	Y	92.2	61-87.5	NA	MCL = 80	By-product of drinking water disinfection

Lead and Copper (Tap Water)

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	Jun-Sep 17	N	0.057	0 of 20	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	Jun-Sep 17	N	1.8	0 of 20	0	15	Corrosion of household plumbing systems, erosion of natural deposits

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements.

In 2018, we had MCL violations for Total Trihalomethanes (TTHM) for four quarters at Bay City Lodge and one quarter at Market Street. Additionally, due to an administrative oversight, our office failed to timely report first quarter 2018 required results for TTHM and HAA5. However, all remaining quarterly samples were reported to the DEP on time for 2018. We have established a report tracking file to ensure that all reporting requirements are met in the future. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. We have installed a Madora Aerator Mixer to release TTHM's in the ground storage tank at the Water Treatment Plant. Additional efforts have been implemented to resolve this issue to ensure compliance in the future.

The City has taken aggressive measures to correct the MCL violation. We have followed a sequence of corrective measures outlined with the guidance of the Florida Rural Water Association and the Florida Department of Environmental Protection. MCL violations for TTHMs are not an immediate risk, but public notice is given whenever a violation occurs. The City of Apalachicola will continue to monitor and take the necessary measures to ensure complete compliance of this disinfection by-product.

Due to the severity of Hurricane Michael and our laboratory being backed up, we experienced a reporting violation for our Nitrate and Nitrite. Although we sampled as required, we failed to receive the data on time and thus were late delivering it to DEP. This violation has no impact on the quality of the water our customers received, and it posed no risk to public health. We will continue to try to sample as required by rule and work with the Department as needed.

Although the City did not exceed the acceptable level, 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. City of Apalachicola is responsible for providing high quality drinking water but cannot control the variety of materials used in your 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.

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 at City of Apalachicola would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.