

**2019 Water Quality Report
For the City of Ocala, Florida
(PWS-ID # 342-0922)**



Quality Water to Every Tap

We are very pleased to provide you with this year's Water Quality Report. The City would like to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

Our water is obtained from ground water from 6 source wells which draw from the Floridan Aquifer. Our water is softened and chlorinated for disinfecting purposes and fluoridated for dental health purposes. This report shows our water quality results and what they mean. Ocala's water treatment facilities have won numerous Department of Environmental Protection awards for excellence in operations, distribution, and maintenance.

In 2019, the Florida Department of Environmental Protection (FDEP) 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 38 unique potential sources of contamination identified for this system with low to high susceptibility levels. The assessment results are available on the FDEP Source Water Assessment & Protection Program (SWAPP) website at: <http://www.dep.state.fl.us/swapp/>.

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 can 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.

Maximum Contaminant Levels (as seen in the chart) 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 for a lifetime at the MCL to have a one-in-a-million chance of having the described health effect.

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).

Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	TT Violation Y/N	Result	MCLG	TT	Likely Source of Contamination
Total Coliform Bacteria	01/19 – 12/19	Y	Positive	N/A	TT	Naturally present in the environment
Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	MCL Violation Y/N	Total Number of Positive Samples for the Year	MCLG	MCL	Likely Source of Contamination
E. coli	01/19 – 12/19	N	1	0	Routine and repeat samples are total coliform positive and either is <i>E. coli</i> positive or system fails to take repeat samples following <i>E. coli</i> positive routine sample or system fails to analyze total coliform positive repeat sample for <i>E. coli</i>	Human and animal fecal waste
Total Coliform Bacteria: Treatment Technique (TT) triggers a Level 1 Assessment when the PWS exceeds 5.0 percent total coliform positive (TC+) samples for the month; <i>E. coli</i> was detected but was not a violation of the <i>E. coli</i> MCL.						

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that another potentially harmful waterborne pathogen may be present, or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

During the past year we were required to conduct one Level 1 assessment. We completed one Level 1 assessment. In addition, we were required to take one corrective action and we completed all of these actions.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter (*a more stringent*) limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If present, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter (stringent) regulation, we have increased the average amount of chlorine in the distribution system.

Inorganic Contaminants							
Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	MCL or MRDL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	05/17	N	0.73	ND – 0.73	10	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Chromium (ppb)	05/17	N	2.6	ND – 2.6	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	01/19-12/19	N	0.81	0.60 -0.81	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth
Selenium (ppb)	05/17	N	0.65	0.5 – 0.65	50	50	Erosion of natural deposits; discharge from petroleum and metal refineries; discharge from mines
Barium (ppm)	05/17	N	0.0052	ND – 0.0052	2	2	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
Nitrate (as Nitrogen) (ppm)	03/19 & 05/19	N	1.5	0.62 – 1.5	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	03/19 & 05/19	N	0.061	ND – 0.061	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	05/17	N	10.8	7.3 - 10.8	N/A	160	Salt water intrusion, leaching from soil

The City of Ocala 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 for the period January 1, 2019 through December 31, 2019. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. Data obtained before January 1, 2019, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

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)	01/19 – 12/19	N	1.16	0.45 – 1.59	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
TTHM [Total Trihalomethanes] (ppb)	05/19 – 08/19	N	20.2	19.8 – 20.2	N/A	MCL = 80	By-product of drinking water disinfection
Haloacetic acids (five) (HAA5) (ppb)	05/19 - 08/19	N	2.9	2.6 – 2.9	N/A	MCL = 60	By-product of drinking water disinfection

For chlorine, the level detected is the the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids or TTHM, the level detected is the highest result of samples taken on May 9, or August 6, 2019. Range of Results is the range of individual samples collected during the past year.

Lead and Copper (Tap Water)

Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	AL Exceeded Y/N	90 th Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (Tap water) (ppb)	06/17	N	0.0073	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (Tap Water) (ppb)	06/17	N	0.5	0	0	15	Corrosion of household plumbing systems

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. We are 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/>.

To help you understand the terms and abbreviations in the accompanying tables, we have 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.

Initial Distribution System Evaluation (IDSE): An important part of the Stage 2 disinfection Byproducts rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with the highest concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

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.

Not Detected (ND): 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 one million parts by weight of water sample.

Parts per billion (ppb) or Micrograms per liter (µg/L): One part by weight of analyte to one billion parts by weight of water sample.

Picocurie per Liter (pCi/L): Measure of the radioactivity in water.

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

We at the City of Ocala 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. Water conservation tips are available at www.ocalafl.org under city departments/water & sewer. If you have any questions or concerns about the information provided, please feel free to call our office directly at 352-351-6772.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

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>

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.

Availability of Monitoring Data for Unregulated Contaminants for City of Ocala

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact Benjamin Moose at 352-351-6772 or BMoose@ocalafl.org.