CASSELBERRY

2018
Consumer Confidence Report

The Water We Drink

Water Source and Treatment

The City of Casselberry is very pleased to provide you with this year's drinking water Consumer Confidence Report. It is the City's goal to keep you informed about the excellent water and services delivered to you over the past year. The City is pleased to report that its drinking water meets all federal and state requirements!

The mission of the City is, and always has been, to provide consumers with a safe and dependable supply of drinking water. The Water Production Division has three water treatment facilities: North Plant, South Plant, and Howell Park. Water is drawn from wells in the Floridan Aquifer. The water is aerated to eliminate sulfur odor and disinfected to inactivate microbial organisms. The South Water Treatment Plant also uses granular activated carbon filtration to remove disinfection by-product precursors. Orthopolyphosphate is also added to the water system for corrosion control which helps extend the life of water mains and residential plumbing, reducing lead and copper residuals.

In 2018, the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on the City's system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of the City's drinking water wells. There were eleven potential sources of contamination identified for this system, with a low to moderate susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or by contacting the Casselberry Public Works Department at (407) 262-7725.

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).

Contact Information

If you have any questions about this report or concerning your water utility, please contact the Public Works Department at (407) 262-7725. Being informed about your water is highly encouraged. For opportunities to participate in decisions about drinking water, please attend any of the City's regularly scheduled City Commission meetings which are held on the 2nd and 4th Monday of each month at 5:00 pm.

Period Covered by Report

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

Terms and Abbreviations

In the Water Quality Test Results table, you may find unfamiliar terms and abbreviations. To help you better understand these terms, the following definitions are provided:

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.

Locational Running Annual Average (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

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

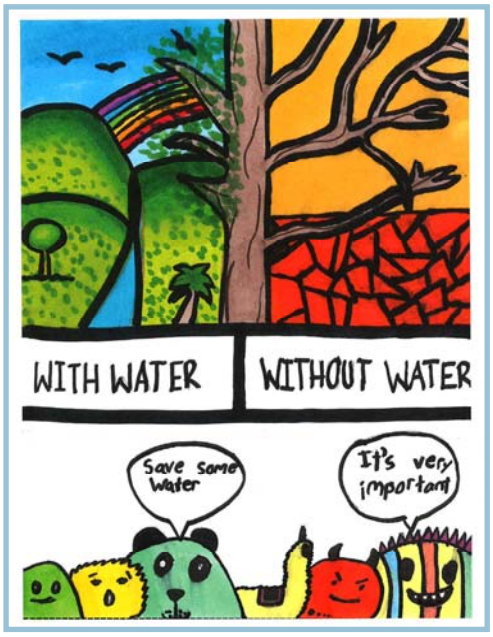
Parts per billion (ppb) or Micrograms per liter (µg/l): one part by weight of analyte to 1 billion parts by weight of the water sample.

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.

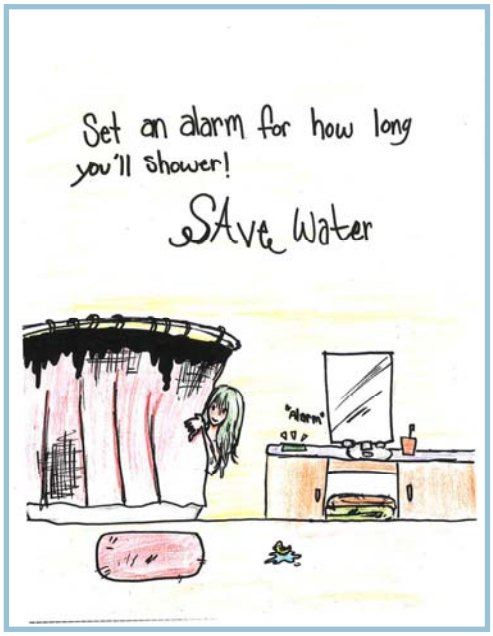
Picocurie per liter (pCi/L): measure of the radioactivity in water.

2019 Drop Savers Poster Contest Winners

Tommy Ginyard, 1st Grade,
Sterling Park Elementary



Mia Artreche, 2nd Grade,
Casselberry Elementary



Wade Kirk, 4th Grade,
English Estates Elementary

McKenzie Davis, 6th Grade,
South Seminole Middle

Division 1
(Grades K-1):
Tommy Ginyard
1st Grade
Sterling Park Elementary School

Division 2
(Grades 2-3):
Mia Artreche
2nd Grade
Casselberry Elementary School

Division 3
(Grades 4-5):
Wade Kirk
4th Grade
English Estates Elementary School

Division 4
(Grades 6-8):
McKenzie Davis
6th Grade
South Seminole Middle School

Water Quality Test Results

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)	May 2014	No	2.5	1.0-2.5	0	15	Erosion of natural deposits
Radium 226 + 228 (pCi/L)	May 2014	No	2.5	0.6-2.5	0	5	Erosion of natural deposits

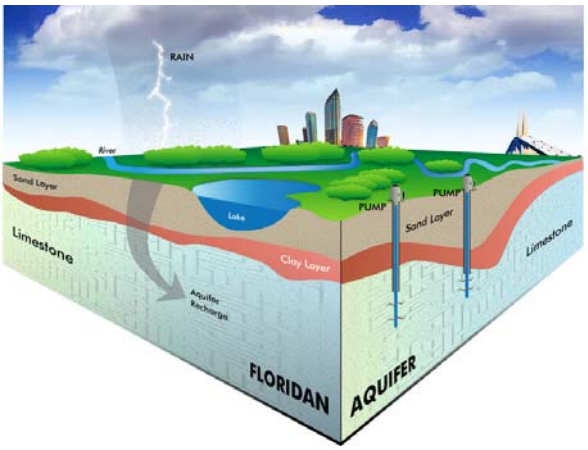
Inorganic Contaminants							
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	May 2017	No	0.017	0.009-0.017	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	May 2017	No	0.29	0.27-0.29	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories.
Sodium (ppm)	May 2017	No	13	8.9-13	N/A	160	Salt water intrusion, leaching from soil
Nitrate (ppm)	Jan 2018	No	0.26	ND-0.26	10	10	Runoff from fertilizer use, leeching from septic tanks, sewage; and erosion of natural deposits.

Stage 2 Disinfectants and Disinfection By-Products							
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	Jan 2018-Dec 2018	No	1.40	0.47-2.10	MRDLG= 4	MRDL= 4.0	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	Feb 2018– Nov 2018	No	29.78	19.08-32.94	N/A	MCL= 60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	Feb 2018– Nov 2018	No	63.44	25.12--67.77	N/A	MCL= 80	By-product of drinking water disinfection

Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Violation Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	July 2017	No	0.23	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead* (tap water) (ppb)	July 2017	No	1.5	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

*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 Casselberry 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 .

Water's Natural Composition



The sources of drinking water (both tap 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 results from urban storm water 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 storm water 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 storm water 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 the 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.

Casselberry Utility Employees

The City of Casselberry's Utilities Section of Public Works is comprised of four main divisions:

- **Water Production:** responsible for producing safe drinking water with the City's three water treatment plants
- **Distribution and Collection:** maintains and repairs the City's extensive network of water distribution and wastewater collection pipes
- **Lift Station Division:** manages and repairs the 72 lift ("pump") stations that convey the City's wastewater
- **Water Reclamation Division:** treats wastewater through the City's Water Reclamation Facility and produces high quality reclaimed water for irrigation purposes

Alert Seminole!
Emergency Notification System

It is hard to take immediate action unless notified the instant an emergency situation occurs.

Get notified! Alert Seminole sends out notifications of boil water notices and imminent threats to health and safety. Optional notifications include: severe weather, flooding, gas leaks, police activity, disruptive road closures, evacuations, shelter information and more.

To create an account, visit: **www.alertseminole.org** and select **SIGN UP HERE**.

Alert Seminole offers an opt-in system to receive notifications via phone call, text messaging, or e-mail based on desired locations.

Infrastructure Improvements

The City has been focusing on replacing and rehabilitating aging infrastructure both at its plants and within its distribution and collection system. The North Water Treatment Plant High Service Pump Replacement and Forest Brook Force Main Replacement projects are nearing completion. At the North Water Treatment Plant, the three high service pumps delivering finished water to customers and the associated piping, valves, and motors were replaced. For the Forest Brook Force Main Replacement project, 1,200 feet of force main piping was replaced along with the associated fittings and valves, six manholes were lined, and one lift station was rehabilitated. Additionally, the City lined over 32,000 feet of gravity sewer mains and 30 manholes in 2018.

Pictured: Two of the new North Water Treatment Plant High Service Pumps

Lead and Copper Sampling Plan

In accordance with recent federal legislation, the City of Casselberry will be updating its Lead and Copper Rule Sampling Plan. The Lead and Copper Rule is part of federal regulation that requires water systems to collect samples from water taps in homes that may be at an elevated risk of lead or copper contamination.

The purpose of the Lead and Copper Rule is to protect public health by minimizing lead and copper levels in drinking water, which are primarily introduced through corrosion of plumbing materials. This includes not only pipes and fixtures, but also lead in pipe solder used to connect copper pipes as this was a common practice in homes built from 1983 to 1988.

The City will be conducting a survey in the upcoming months to ascertain the age and composition of local home plumbing in order to identify locations that may pose a risk to public health. The City will select target sampling sites, based on the results. Selecting monitoring sites based on eligible conditions has proven to be a more effective method of target sampling, as opposed to using geographic distribution across a water system's service area as a criteria.

City of Casselberry

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CASSELBERRY