



## **UTILITIES DEPARTMENT**

UTILITIES OPERATIONS  
WATER RESOURCE MANAGEMENT  
UTILITIES MAINTENANCE

# 2016

### **Annual Drinking Water Quality Report January 1, 2016 - December 31, 2016**

The City of Plant City (City) is pleased to present our 19<sup>th</sup> annual water quality report. This report contains information on drinking water delivered by the City, its constituents and health risks associated with any contaminants.

We want you to know the City is committed to providing safe drinking water. Your drinking water meets all state and federal standards and Federal Safe Drinking Water (SDWA) requirements for "Consumer Confidence Reports"

Our constant goal is to provide a safe and dependable supply of drinking water. To achieve this goal, the City is committed to rigorous monitoring, source water protection, water conservation, community education and service to the needs of all our customers.

**EN ESPAÑOL:** El reporte Anual de la Calidad de Agua 2016 contiene informacion importante sobre la calidad del agua en la comunidad. Si usted no entiende la informacion en este reporte, por favor consiga a alguien que le explique o interprete lo contenido. Si desea mas información, por favor de llamar al (813) 757-9191, o escriba a la siguiente direccion: City of Plant City Utilities Operations, 1500 W. Victoria Street., Plant City, FL 33563.

Our **WATER SOURCE** is groundwater pumped out of the multi-layered Floridan Aquifer beneath the City. The water is withdrawn through the use of four deep wells located within City limits. Well depths vary from 746 to 1,200 feet.

Plant City is also inter-connected with the City of Lakeland's water supply, which is also pumped out of the Floridan Aquifer. Available water through this connection is used when needed to supplement either City's supply. During 2016, an average of 3,178 gallons of water per day of the total supply was obtained from Lakeland.

**To obtain a copy of the City of Lakeland's Water Quality Report, please call their Department of Water Utilities, (863) 834-6568.**

**THE CITY'S UTILITIES OPERATIONS DIVISION** maintains four water production plants 24 hours a day, 365 days a year. In 2016, an average of 5.669 million gallons of water was produced each day.

Our water production program is committed to providing ample supplies of safe and dependable drinking water to meet the needs of Plant City citizens.

Highly trained professionals collect and test samples throughout the water distribution system on a daily basis. Our water is obtained from the ground water source and is chlorinated for disinfection purposes. Polyphosphate is added to keep naturally occurring iron from settling in the water system and reduce lead and copper corrosion in the plumbing system. Hydrofluosilicic Acid is also added for dental health purposes.

The City was recognized as the 2013 Medium Public Water System of the Year by the Florida Rural Water Association for dedicated and outstanding service. In 2014, the City received the Plant Operations Excellence Award from the FDEP for outstanding operation through dedicated professionalism.

The City continually makes efforts to improve the water treatment process and protect our water resources.

**SOURCE WATER ASSESSMENT.** In 2016, the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on our system. The assessment was conducted to provide information on any potential sources of contaminants. There are eight unique potential contaminant sources identified for this system.

Five rated as low. Three rated as moderate. Results are available on the FDEP web site at, [https://fldep.dep.state.fl.us/swapp/DisplayPWS.asp?pws\\_id=6290323&odate=01-OCT-16](https://fldep.dep.state.fl.us/swapp/DisplayPWS.asp?pws_id=6290323&odate=01-OCT-16)

or from the City's Utilities Operations Division, 1500 W. Victoria Street, Plant City, Florida 33563, (813) 757-9191.

**COMMUNITY INVOLVEMENT.** Take part in decisions affecting your drinking water by attending City Commission meetings held on the second and fourth Mondays of each month at 7:30 PM. Scheduled City Commission meetings are at City Hall, 302 W. Reynolds Street, Plant City, Florida 33564. Meeting agendas are published on the City's web site, [plantcitygov.com](http://plantcitygov.com), or call (813) 659-4200, City Clerk's office.



**CONTACT INFORMATION REGARDING YOUR WATER SERVICE UTILITIES OPERATIONS DIVISION, (813) 757-9191.**

Questions regarding **water quality or information in this report**, should be directed to the City's Utilities Operations Division, located at 1500 W. Victoria Street, Plant City, Florida 33563. **Wastewater service questions and after hours utility emergencies** can also be addressed by Utilities Operations personnel.

**UTILITY BILLING CUSTOMER SERVICE: (813) 659-4222.** Utility bill and water usage questions.  
**UTILITIES MAINTENANCE DIVISION: (813) 757-9288.**

Report a **water leak** during regular business hours.

**WATER CONSERVATION** measures and using our water resources efficiently are important first steps in protecting and preserving our drinking water resources.



**TURN OFF** the water when brushing teeth or hand-washing dishes.

**REPLACE** the toilet flapper. A leaking toilet can waste up to **100 gallons a day**.



**INSTALL** low-flow faucet aerators and showerheads. Some low-flow showerheads use less than **3 gallons per minute**.

**FLORIDA LAW REQUIRES** any person who purchases and installs an automatic irrigation system must install, maintain and operate technology which inhibits or interrupts operation of the system during periods of sufficient moisture.

**An example is a rain shutoff sensor.**



**USE** an automatic shutoff nozzle. An unattended garden hose can waste up to **500 gallons of water an hour**. An automatic shutoff nozzle can use less than **4 gallons per minute**.



For information on **Water Conservation, Florida-Friendly landscaping and FREE Garden Hose and Indoor water saving devices**, contact the Water Resource Management Division, **Water Conservation Section**, (813) 659-4298, 705 N. Alexander St., Plant City, FL 33563, [plantcitygov.com](http://plantcitygov.com). Learn about rain barrels and other environmentally responsible water saving concepts, please contact, **UF | University of Florida, IFAS Extension, Hillsborough County, Florida Yards and Neighborhoods Program**, 5339 County Rd 579, Seffner, FL 33584, (813) 744-5519, [hillsborough.extension.ufl.edu](http://hillsborough.extension.ufl.edu)

**CONTAMINATION FROM CROSS-CONNECTIONS.** Cross-connections within the drinking water distribution system are a concern. A cross-connection is formed at any point where a drinking water line inter-connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems, swimming pools) or water sources of questionable quality (private wells). Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking waterline (backpressure). Contamination may also occur on rare occasions when drinking water line pressure drops due to certain occurrences (water main breaks, abnormally heavy water demand) causing contaminants to be siphoned back into the drinking water line (backsiphonage).

The City of Plant City has a comprehensive **Cross-Connection Control program**.

Potential cross-connections are identified and eliminated or protected by a backflow preventer.

The City inspects and tests each primary backflow prevention assembly to make sure it is providing required protection. For more information, you may contact the **City's Cross-Connection Control Program, (813) 659-4298, [plantcitygov.com](http://plantcitygov.com), or the Safe Drinking Water Hotline at 1-800-426-4791**

### **PEOPLE WHO ARE AT HIGHER RISK**

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)***.

### **IMPORTANT HEALTH INFORMATION**

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (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 ***EPA's Safe Drinking Water Hotline at 1-800-426-4791***.

**CONTAMINANT SOURCES.** 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, agriculture 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.

### **LEAD CONTAMINANTS**

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's Utilities Operations Division 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>***.

### **TOTAL TRIHALOMETHANES (TTHM) CONTAMINANTS**

Two samples during 2016 had a TTHM result which exceeded the MCL of 80 ppb.

However, the system did not incur an MCL violation because all annual average results at all sites were at or below the MCL. 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.

**CONTINUAL TESTING FOR POTENTIAL CONTAMINANTS**

The City of Plant City routinely monitors for contaminants in your drinking water according to federal and state laws, rules and regulations. Except where indicated otherwise, this report shows results of our monitoring for the period of **January 1 to December 31, 2016**. Data obtained before January 1, 2016, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

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

**INORGANIC**

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Sources
Arsenic (ppb)	1/14	N	1.4	0.99 To 1.4	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	1/14	N	0.017	0.008 To 0.017	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	1/14	N	8.7	4.8 To 8.7	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	1/14	N	0.62	0.55 To 0.62	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level of 0.7 ppm
Nickel (ppb)	1/14	N	2.1	1.6 To 2.1	N/A	00	Pollution from mining and refining operations. Natural occurrence in soil.
Nitrate (as Nitrogen) (ppm)	6/16	N	.01	ND To .01	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion from natural deposits
Sodium (ppm)	1/14	N	20.00	16.00 To 20.00	N/A	160	Saltwater intrusion, leaching from soil

**STAGE 1 DISINFECTANTS AND DISINFECTION BY-PRODUCTS (D/DBP)**

For bromate, chloramines, or chlorine, the level detected is the highest running annual average (RAA), computed quarterly, or monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.

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 Sources
Chlorine and Chloramines (ppm)	1/16-12/16 (Monthly)	N	1.39	0.50 To 2.40	MRDLG=4	MRDL=4.0	Water additive used to control microbes

**STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS (D/DBP)**

For bromate, chloramines, or chlorine, the level detected is the highest running annual average (RAA), computed quarterly, or monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.

For Haloacetic Acids (HAA5) or TTHM, the level detected is the highest LRAA, computed quarterly and the range of results is the range of individual sample results.

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL or MRDL Violation (Y/N)	Level Detected (RAA/LRAA)	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Sources
Haloacetic Acids (FIVE) (HAA5) (ppb)	1/16-12/16 (Quarterly)	N	41.45	20.78 To 44.60	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	1/16-12/16 (Quarterly)	N	75.01	43.02 To 94.40	N/A	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)	90 <sup>th</sup> Percentile Result	Number of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Sources
Copper (tap water) (ppm)	6/14	N	0.63	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	6/14	N	2.7	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

**SYNTHETIC ORGANIC**

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Sources
Dalapon (ppb)	10/16	N	1.90	N/A	200	200	Runoff from herbicide used on rights of way

**RADIOACTIVE**

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Sources
Alpha Emitters (pCi/L)	1/14	N	3.7	ND To 3.7	0	15	Erosion of natural deposits
Radium 226+228 or Combined Radium (pCi/L)	1/14	N	1.3	ND To 1.3	0	5	Erosion of natural deposits
Uranium (ppb)	1/14	N	0.87	ND To 0.087	0	30	Erosion of natural deposits

- AL** Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- FDEP** Florida Department of Environmental Protection.
- EPA** United States Environmental Protection Agency.
- HAA (5)** Haloacetic Acids (Five): Acid compounds including: monochloroacetic, dichloroacetic, trichloroacetic, monobromoacetic, and dibromoacetic acids.
- LRAA** Locational Running Annual Average. The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.
- MCL** Maximum Contaminant Level: 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.
- MCLG** Maximum Contaminant Level Goal: 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.
- MRDL** Maximum Residual Disinfectant Level: 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.
- MRDLG** Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfection 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** Not Detected. Indicates the substance was not found by laboratory analysis.
- pCi/L** Picocurie Per Liter: Measure of the radioactivity in water.
- ppb** Parts Per Billion or Micrograms Per Liter ( $\mu\text{g}/\text{l}$ ): One part by weight of analyte to 1 billion parts by weight of the water sample.
- ppm** Parts Per Million or Milligrams Per Liter ( $\text{mg}/\text{l}$ ): One part by weight of analyte to 1 million parts by weight of the water sample.
- RANGE** The lowest to highest amount of contaminant detected during report period.
- TTHMs** Total Trihalomethanes: A group of several trihalomethane (chemical) compounds including: chloroform, bromoform, bromodichloromethane and Dibromochloromethane.