



# Annual Water Quality Report

## A Publication of the City of Winter Garden Water Division

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of 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 groundwater produced by five (6) deep wells that draw water from the Floridan Aquifer. Our primary method of treatment for drinking water is aeration and disinfection with Sodium Hypochlorite.

The City of Winter Garden routinely monitors for contaminants in our 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, 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. 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.

The table on page 3 shows the results of our monitoring for **2016**. These test results are from our most recent sampling dates. 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. We have learned, through our monitoring and testing, that small amounts of certain contaminants have been detected. The USEPA has determined that your water is **SAFE** at these levels.

In 2016 the Florida Department of Environmental 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 15 potential sources of contamination identified for this system with a range of 0.03 to 111.11 susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp) or they can be obtained from The City of Winter Garden Water Treatment and Pumping Division at 407-656-4111 extension 2017 or email [mcotton@wintergarden-fl.gov](mailto:mcotton@wintergarden-fl.gov).

## TERMS:

**(PPM): Parts per Million or Milligram per Liter (mg/l)** – One part per million corresponds to one minute in two years, or a single penny in \$10,000.

**(PPB): Parts per Billion** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**(PCI/L): Picocuries per Liter** – Picocuries per Liter are a measurement of the radioactivity in water.

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

**(MCL): Maximum Containment Level** – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.

**(MCLG): Maximum Containment Level Goal** – The level of a containment in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**(Range):** Indicates the lowest and highest analysis result.

**(ND): Non-Detects** – Laboratory analysis indicates that the constituent is not present.

**(USEPA):** United States Environmental Protection Agency

## CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

**Microbial contaminant**, 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 storm water run-off, industrial or domestic wastewater discharges, oil and gas productions, mining or farming.

**Pesticides or Herbicides**, which may come from a variety of sources such as agriculture, urban storm water and residential use.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. They can also come from gas stations, urban storm water run-off and septic systems.

**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, 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.

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 Winter Garden 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>.

*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.

## WATER TESTING RESULTS

When our water is tested, the highest number found is used as the established **LEVEL** for Winter Garden. This is then compared to the **MCL**, which is the highest level of the contaminant allowed by FDEP.

City of WG's  
Highest  
Level  
Found  
↓

FDEP's  
Highest  
Level  
Allowed  
↓

CONTAMINANT & UNIT OF MEASUREMENT *	MC/AL VIOLATION?	LEVEL	RANGE	MCLG	MCL	SAMPLE DATE **	LIKELY SOURCE OF CONTAMINANT
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### Inorganic Contaminants

Antimony (ppb)	No	.003	ND-.003	6	6	2-26-14	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder
Arsenic (ppm)	No	.0023	ND-.0023	0	0.010	2-26-14	Erosion of natural deposits, run-off from orchards, run-off from glass and electronic production wastes
Barium (ppm)	No	0.0178	0.00114-0.0178	2	2	2-26-14	Discharge from drilling water, discharge from metal refineries, erosion from natural deposits
Beryllium (ppb)	No	1.1	ND-1.1	4	4	2-26-14	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Fluoride (ppm)	No	0.17	0.079-0.17	4	4	2-26-14	Erosion of natural deposits, water additives which promote strong teeth
Nitrate as Nitrogen (ppm)	No	0.74	0.02-0.74	10	10	8-10-16	Run-off from fertilizer use, leaching septic tanks, sewage, erosion of natural deposits
Sodium (ppm)	No	17.0	9.0-17.0	N/A	160	2-26-14	Salt water intrusion, leaching from soil
Lead (point of entry) (ppb)	No	0.2	0.1-0.2	N/A	15	2-26-14	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder.
Nickel (ppb)	No	3.90	1.11-3.90	N/A	100	2-26-14	Pollution from mining and refining operations. Natural occurrence in soil.
Thallium (ppb)	No	0.117	ND-0.117	0.5	2	2-26-14	Leaching from ore processing sites; discharge from electronics, glass, and drug factories.

### Trihalomethanes and Stage 2 Disinfectant/Disinfection By-Product (D/DBP) Parameters

Trihalomethanes (ppb)	No	23.07 Average	16.89-29.24	N/A	80	2016	By-product of drinking water disinfection
Haloacetic Acids (Five) HAA5 (ppb)	No	8.79 Average	7.26-10.31	N/A	60	2016	By-product of drinking water disinfection

### Radiological Contaminants

Gross Alpha (pCi/L)	No	3.0	1.9-3.0	0	5	3-30-11	Erosion of natural deposits
Radium 226	No	0.9	0.6-0.9	0	5	3-30-11	Erosion of natural deposits

### Copper and Lead (Tap Water)

Copper (tap water) (ppm)	No	0.1090	Zero sample sites above the action level	1.3	AL= 1.3	9-29-14	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives
Lead (tap water) (ppb)	No	0.9	Zero sample sites above the action level	0	AL= 1.5	9-29-14	Corrosion of household plumbing systems, erosion of natural deposits

\* Contaminant(s) listed in previous reports may not be listed above if the contaminant(s) tested indicate measurements that are below minimum detection limits.

\*\* The frequency of contaminants testing is determined by the FDEP. 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.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two (2) liters of water every day at the MCL level for a lifetime 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. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplant, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These persons should seek advice about drinking water from their health care providers.

EPA/CDC (Environmental Protection Agency/Center for Disease Control) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

**Violations:** The City of Winter Garden Water Treatment & Pumping Division had no monitoring or reporting violations in 2016.

**Awards:** April 2015 the City of Winter Garden won 1<sup>ST</sup> place at the FSAWWA Region III Best Tasting Drinking Water Contest for Central Florida.



If you have questions regarding this report or your water utility please contact **Michael Cotton Water Superintendent** at [mcotton@cwgd.com](mailto:mcotton@cwgd.com) or 407-656-4111 Extension 2017 between the hours of 8:00 a.m. and 4:00 p.m. For questions regarding the City of Winter Garden **Cross Connection Control (Backflow) Program** contact **Robert Marino** at [rmarino@cwgd.com](mailto:rmarino@cwgd.com) or 407-877-3029. Please direct **Conservation and recycling** questions to **Mary Taveras** at [mtaveras@cwgd.com](mailto:mtaveras@cwgd.com) or 407-656-4111 Extension 2296.

The City of Winter Garden encourages you to attend one of our regularly scheduled commission meetings. Meetings are held on the second and fourth Thursday of each month at 6:30 p.m. in the Commission Chambers at City Hall, 300 West Plant Street Winter Garden, FL 34787. You may contact the City Clerk's office at 407-656-4111 for meeting agenda.

To manage your water utility account and learn more about what is happening in your city, visit the City of Winter Garden's website at [www.cwgd.com](http://www.cwgd.com).