



# 2016 WATER QUALITY REPORT

[gru.com/waterreport](http://gru.com/waterreport)



## SAFE, CLEAN WATER

GRU's top priority is to make sure that every drop of water from your faucet is safe and clean. Our water continues to meet federal and state drinking water standards and is treated at our award-winning Murphree Water Treatment Plant through lime softening, recarbonation, filtration, fluoridation and disinfection. GRU provides high-quality drinking water to approximately 194,000 people who use a household average of 5,000 gallons each month.

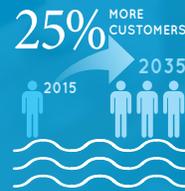
I ♥   
GRU  
WATER

*70% of the water  
withdrawn at GRU's  
Murphree Water  
Treatment Plant  
is returned to the  
Floridan aquifer.*



## WORKING FOR YOU

More than 60 GRU employees work hard daily to provide you with clean, high-quality tap water. Our treatment plant is staffed with professional operators who provide clean water every day. Our licensed service operators maintain more than 1,000 miles of water main lines. Our registered engineers are responsible for the design, construction and compliance of our system. These are just a few among the many who work tirelessly to ensure every drop of water is safe for your family and ours.



*GRU is projected to serve 25% more customers over the next 20 years without increasing its ground-water pumping permit.*

## A GROUNDWATER SOURCE

GRU's Murphree Water Treatment Plant draws groundwater from the Floridan aquifer. Pumped from wells over 500 feet deep, the treatment process begins with high-quality water due to natural protection from the environment. Our wellfield also resides on 7,100 acres of conservation land for additional protection and is protected by ordinances to preserve our water quality for future generations.



*The Murphree Water Treatment Plant began operations in 1976.*

## WHAT'S IN YOUR WATER?

We test for over 100 different constituents, including seven hormones, perfluorooctanoic acid, lead and copper. GRU licensed operators, laboratory technicians, and professional engineers are continuously monitoring and testing our water to ensure high-quality drinking water is delivered to our homes 24 hours a day, 365 days a year.



*GRU has met all lead and copper standards for 25 years.*



### CONTACT US

Service & Billing Questions: (352) 334-3434

Water/Wastewater Repairs: (352) 334-2711

Water Testing Requests: (352) 393-6501

### CUSTOMER FAQs:

QUESTION	POTENTIAL CAUSE	RESPONSE
Why does my water smell like rotten eggs?	Household plumbing.	Please visit <a href="http://gru.com/waterFAQs">gru.com/waterFAQs</a> for general household plumbing information.
Why does my water look cloudy?	Trapped air bubbles.	Run the water in the tub for five minutes, repeat if needed.
Why does my water look rusty?	Neighborhood fire hydrants may have been tested to ensure reliability in case of a fire.	Run the water in the tub for five minutes to flush rusty water. Remember not to wash clothes until water clears. If water does not clear up, please call GRU at (352) 334-2711.
What is GRU's water hardness?	Our groundwater is harder due to dissolved minerals (about 140 mg/L as CaCO <sub>3</sub> or 8 grains).	Home brewers or aquarium owners can visit <a href="http://gru.com/waterquality">gru.com/waterquality</a> for water chemistry information.
Are there pharmaceuticals in my water?	Improper disposal of medications and excretion.	GRU tests for pharmaceuticals. All results are at or below the detection limits. For this year's water quality test results, visit <a href="http://gru.com/waterreport">gru.com/waterreport</a> .

*GRU has reduced printing costs for this pamphlet by moving the full report online. GRU is required by the EPA to provide this report to its customers. To request a hard copy, please call (352) 393-1600.*



## WE ARE PLEASED TO REPORT THAT OUR DRINKING WATER CONTINUES TO MEET ALL FEDERAL AND STATE REQUIREMENTS!

GRU routinely monitors for contaminants in your drinking water in accordance with federal and state laws, rules and regulations.

### THE TREATMENT PROCESS

GRU treats water pumped from the Floridan aquifer. The treatment process includes lime softening, recarbonation, filtration, fluoridation and disinfection. This water quality report is submitted to customers as required by the United States Environmental Protection Agency and the Florida Department of Environmental Protection in accordance with the Safe Drinking Water Act.

Except where indicated otherwise, this report is based on the results of GRU's monitoring for the period of January 1 through December 31, 2015. Data obtained before January 1, 2015, and presented in this report, are from the most recent testing done in accordance with the laws, rules and regulations. The state allows GRU to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some data, though representative, may be more than one year old.

GRU is a municipally-owned utility, governed by the Gainesville City Commission. The commission meets at City Hall, 200 East University Avenue, Gainesville, Florida, on the first and third Thursday of every month.

### SOURCE WATER ASSESSMENT

The Florida Department of Environmental Protection performed Source Water Assessments on GRU's system in 2015. The assessments were conducted to provide information about any potential sources of contamination within a 5-year ground water travel time around each well. No potential sources of contamination were identified. The assessment results are available on the FDEP Source Water Assessment and Protection Program Web site at [dep.state.fl.us/swapp](http://dep.state.fl.us/swapp).

### WATER QUALITY TEST RESULTS

Listed below are 8 parameters detected in GRU's water during the reporting period. All are below maximum contaminant levels allowed. Not listed are many others we test for, but that were not detected. A list of measured parameters is provided in Appendix A. **As you can see by the tables, our system had no violations.** We're proud that your drinking water meets or exceeds all Federal, State and local requirements.

#### 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)	6/14	N	0.0091		2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	1/15–12/15	N	0.70	0.28–0.77	4	4.0	Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Sodium (ppm)	6/14	N	11.1		N/A	160	Salt water intrusion, leaching from soil

#### DISINFECTANTS AND DISINFECTION BY-PRODUCTS

For chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of 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 or TTHM, the level detected is the highest LRAA, computed quarterly, of quarterly averages of all samples collected from a location if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations.

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)	1/15–12/15	N	0.73	0.40–1.17	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	1/15–10/15	N	9.52	2.30–11.50	NA	MCL = 60	By-product of drinking water disinfection
TTHM (Total trihalomethanes) (ppb)	1/15–10/15	N	55.99	35.75–63.50	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 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)	9/13	N	0.028	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	9/13	N	3.2	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

If present, elevated levels of lead can cause serious problems, especially in pregnant women and young children. Lead in drinking water is primarily from materials and components associated with home plumbing. Gainesville Regional Utilities is responsible for providing high-quality drinking water but cannot control the variety of materials used in customer plumbing installations. 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 **800-426-4791** or at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

## GLOSSARY

**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 arithmetic average of analytic results for samples taken at a specific monitoring location during the previous four calendar quarters.

**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.

**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.

**No Detection (ND):** Indicates 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 1 million parts by weight of the water sample.

**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.

## ADDITIONAL INFORMATION ABOUT YOUR WATER

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:

- Microbial contaminants, such as viruses and bacteria, which may come from wastewater treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- 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.
- Radioactive contaminants, which can be naturally occurring or 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 that 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 **800-426-4791**.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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** or at [epa.gov/safewater](http://epa.gov/safewater).



**APPENDIX A**

None of the following potential contaminants were detected in your water supply: Total coliform and *E. coli*, Beta/photon emitters, Alpha emitters, Radium 226+228 or combined radium, Uranium, Antimony, Arsenic, Asbestos, Beryllium, Cadmium, Chromium, Cyanide, Lead (Leaving our treatment plant), Mercury, Nickel, Selenium, Thallium, 2,4-D, 2,4,5-TP (Silvex), Alachlor, Atrazine, Benzo(a)pyrene (PAH), Carbofuran, Chlordane, Dalapon, Di (2-ethylhexyl) adipate, Di (2-ethylhexyl) phthalate, Dibromochloropropane (DBCP), Dinoseb, Dioxin [2,3,7,8-TCDD], Diquat, Endothall, Endrin, Ethylene dibromide, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxamyl [Vydate], PCBs [Polychlorinated biphenyls], Pentachlorophenol, Picloram, Simazine, Toxaphene, Benzene, Carbon Tetrachloride, Chlorobenzene, o-Dichlorobenzene, p-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1,2-Dichloroethylene, trans -1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Styrene, Tetrachloroethylene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Toluene, Vinyl Chloride, Xylenes, Chlorite, Total organic carbon, Aluminum, Color, Iron, Manganese, Odor, Silver, Zinc, Dimethoate, Terbufos sulfone, BDE-47, BDE-99, 2,4,5-HBB, BDE-153, BDE-100, 1,3-Dinitrobenzene, TNT, RDX, Acetochlor, Metolachlor, Acetochlor ESA, Acetochlor OA, Alachlor ESA, Alachlor OA, Metolachlor ESA, Metolachlor OA, NDBA, NDEA, NDMA, NDPA, NMEA, NPYR.

**UNREGULATED CONTAMINANTS (UC)**

CHEMICAL	DATE OF SAMPLING (MO/YR)	LEVEL DETECTED	RANGE	LIKELY SOURCE OF CONTAMINATION
Chlorate (ppb)	4/2013, 10/2013	12.35	0.0–29.0	Unknown
Chromium (ppb)	4/2013, 10/2013	0.215	ND–0.32	Unknown
Chromium-6 (ppb)	4/2013, 10/2013	0.1425	0.12–0.17	Unknown
Strontium (ppb)	4/2013, 10/2013	495.75	420–554	Unknown
Vanadium (ppb)	4/2013, 10/2013	0.395	0.31–0.48	Unknown

GRU monitored for Unregulated Contaminants (UCs) in 2013 as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) or likely sources have been established for UCs. However, GRU is required to publish the detected analytical results of the UC monitoring in our annual water quality report. If you would like more information on the EPA’s Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

**UNREGULATED CONTAMINANTS NOT DETECTED AT ANY OF THE SAMPLING LOCATIONS:**

Perfluorobutanesulfonic acid, Perfluoroheptanoic acid, Perfluorohexanesulfonic acid, Perfluorononanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), 4-Andronstene-3,17-dione, Equiline, 17β-Estradiol, Estrone, 17α-Ethynylestradiol, 16α-Hydroxyestradiol (Estriol), Testosterone, Cobalt, 1,4-Dioxane (p-Dioxane), Bromochloromethane, Bromomethane, 1,3-Butadiene, Chlorodifluoromethane, Chloromethane, 1,2,3-Trichloropropane, Molybdenum, 1,1-Dichloroethane.