# More than Energy

# OURI WATER RUNS DEEP

water quality report



# DEDICATION TO THE HIGHEST LEVEL

Our water not only runs deep, but so does our dedication to public health and safety.

GRU's drinking water is surrounded by layers of protection—from the original source to your home. Engineers and geologists designed the Murphree wellfield to be both geographically and geologically protected. Activities that could endanger the wellfield are prohibited by local ordinances that are stricter than the state requirements. Our safety measures don't stop there.

The water treatment plant has top-notch security measures, and we test our water throughout the treatment process and the water distribution

system. These measures help ensure safe, high quality drinking water is delivered to you and your family.



# IT'S ALL IN THE NUMBERS

3,055
hours of training
in 2018

Over 725 years of combined employee experience

111,280 hours of staff employed year round

Over 190,000 customers served GRU water every day



## MEET A GRU OPERATOR

Leandro Tapulado, an operator at Murphree Water Treatment Plant, values the importance of keeping our community safe one water sample at a time. His role as an operator is challenging, yet rewarding, and he loves having the opportunity to interact with customers. Leandro knows the water we deliver requires a collective effort from the many hardworking individuals whose commitment to excellence runs deeper than our pipes.



We are pleased to announce that

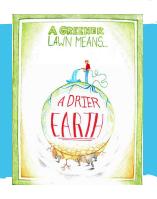


continues to meet all federal and state requirements.

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

### DROP SAVER POSTER WINNER

**Sophia D.** 12th Grade Ms. Paxson's class Gainesville High School



Additional information is available at www.gru.com/waterquality.

Service & Billing Questions: 352-334-3434 Water/Wastewater Repairs: 352-334-2711 Water Testing Requests: 352-393-6501



Have you ever seen a "no hazardous material transport" sign on 53rd Street? If so, that's because you are driving through the protected wellfield zones we have in place to keep your water safe.

### THE TREATMENT PROCESS

GRU treats water pumped from the Floridan aquifer. The treatment process includes oxidation, 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, 2018. Data obtained before January 1, 2018, 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, Fla., 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 2018. The assessments were conducted to provide information about any potential sources of contamination within a 5-year

ground water travel time around each well. The ground water system is considered to be at low risk. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at

www.dep.state.fl.us/swapp.

# WATER QUALITY TEST RESULTS

Listed below are nine 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 listed 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 and state requirements.



#### MICROBIOLOGICAL CONTAMINANTS

Contaminant and Unit of Measurement	Dates of Sampling (Mo/Yr)	MCL Violation Y/N	Highest Monthly Percentage	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (positive samples)	1/18 – 12/18	N	0.76	0	Presence of coliform bacteria in > 5% of monthly samples	Naturally present in the environment

#### **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)	5/17	Z	0.0084		2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	1/18-12/18	Z	0.42	0.20 - 0.84	4	4.0	Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Sodium (ppm)	5/17	N	11.8		N/A	160	Salt water intrusion, leaching from soil

"Partnerships are key to protecting our water resources.

GRU continues to be an innovative partner, producing positive results in water conservation, water supply and water quality for our community."

Ann B. Shortelle, Ph.D. Executive Director of the St. Johns River Water Management District, GRU Water Customer



#### ZERO BOTTLES,

ZERO WASTE

one year of GRU tap water costs\* = 45¢
one year of bottled water costs\* = \$202.58

\*based\_on 8 -8 oz glasses/day

#### 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)	1/18 – 10/18	N	0.80	0.34 – 1.21	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	1/18 – 10/18	N	11.35	4.9 - 13.7	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	1/18 – 10/18	N	47.83	31.6 – 61.9	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)	6/16 – 8/16	N	0.016	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	6/16 – 8/16	N	1.40	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: www.epa.gov/safewater/lead.

"GRU's crystal-clear source water makes it easy for the lifeguards to keep the pool water perfectly balanced, making for a **safe and refreshing** swim for our citizens."

Jeff Moffitt Gainesville.

Recreation Supervisor Citizen centered
City of Gainesville People empowered

#### **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 DRINKING 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 **www.epa.gov/safewater**.

#### APPENDIX A

None of the following potential contaminants were detected in your water supply: Fecal 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-Dichloroethylene, Cis-1,2-Dichloroethylene, Trichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Styrene, Tetrachloroethylene, 1,2,4-Trichlorobenzene, 1,1,1-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, N