ANNUAL WATER QUALITY REPORT 2016

Water Testing Performed in 2015

In 2015, the City of Gainesville Department of Water Resources conducted over 2,700 laboratory tests for more than 100 drinking water parameters. This report includes information about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Your public utilities department is committed to providing the community with clean, safe, and reliable drinking water. The tables below list all the drinking water contaminants that we detected during the 2015 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2015. **EPD** requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may be more than one year old.

Microbiological Contaminants Table

Parameter	MCL	MCLG	Gainesville Water System	Violation	Typical Source of Contaminant
Total Coliform Bacteria	No more than 5% of monthly samples can test positive for coliform bacteria	0	1.8% (Highest Monthly Positives)	NO	Naturally present in the environment

Disinfectants Table

Parameter	MRDL	MRDLG	Gainesville Water System	Range of Detections	Violation	Typical Source of Contaminant
Chlorine (ppm)	4.0	4.0	1.42	0 – 2.0	NO	Water additive used to control microbes

Inorganic Contaminants Table

Parameter	MCL	MCLG	Gainesville Water System	Range of Detections	Violation	Typical Source of Contaminant
Fluoride (ppm)	4.0	4.0	.77	0.59 – 1.01	NO	Water additive which promotes strong teeth
Nitrate/Nitrite (ppm)	10	10	0.41	0.32 – 0.49	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Organic Contaminants Table

Parameter	MCL	MCLG	Gainesville Water System	Range of Detections	Violation	Typical Source of Contaminant
Total Trihalomethanes (TTHMS) (ppb)	80	n/a	0.038*	0.019 – 0.057	NO	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	60	n/a	0.020*	0.016 – 0.023	NO	By-product of drinking water disinfection
Chlorite (ppm)	1	0.8	0.204	0.047 – 0.360	NO	By-product of drinking water chlorination
Total Organic Carbon (TOC) (ppm)	TT	n/a	1.51	0.61 – 2.4	NO	Naturally present in the environment

* This number represents the highest locational running annual averages reported during 2015.

Lead and Copper Contaminant Table

Parameter	AL	MCLG	90th percentile value	# of sites above the AL	Typical Source of Contaminant
Copper (ppm)	1.3	1.3	0.028	No (0) sites above the AL out of 50 sites sampled.	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	15	0	0.0044	No (0) sites above the AL out of 50 sites sampled.	Corrosion of household plumbing systems; Erosion of natural deposits

2015 Data, Samples Collected in July 2015

Turbidity Table

Parameter	MCL	MCLG	Result	Range of Detections	Violation	Typical Source of Contaminant
Turbidity (NTU)	TT = <0.3	0	0.056	0.01 – 0.16	NO	Soil runoff and erosion
Turbidity (NTU)	TT = percentage of samples <0.3 NTU	n/a	100%	n/a	NO	

Turbidity is a measure of the cloudiness of water. We monitor turbidity to indicate the effectiveness of our filtration system.

Gainesville's Annual Average Hardness – 23.5 ppm
Gainesville's Annual Average Alkalinity – 15.5 ppm

Unregulated Contaminants Table

Parameter	MCL	MCLG	Gainesville Water System	Range of Detections	Violation	Typical Source of Contaminant
Chloroform (ppb)	n/a	n/a	4.9	2.5 – 7.3	NO	By-product of drinking water chlorination process
Dichlorobromo-methane (ppb)	n/a	n/a	2.0	1.9 – 2.1	NO	By-product of drinking water chlorination process
Chlorodibromo-methane (ppb)	n/a	n/a	.4	0 – .8	NO	By-product of drinking water chlorination process
Monochloroacetic Acid (ppb)	n/a	n/a	0	0 – 0	NO	By-product of drinking water chlorination process

Contaminants that may be present in source water-before "TREATMENT" include:

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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.

Microbial contaminants, 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 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 be the result of oil and gas production and mining activities.

Terms & Abbreviations used below:

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

Environmental Protection Agency (EPA): the United States Environmental Protection Agency.

Environmental Protection Division (EPD): the Georgia Department of Natural Resources Environmental Protection Division.

Maximum Contaminant Level (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 (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 (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 (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 contamination.

Treatment Technique (TT): a required process intended to reduce the level of a contaminant in drinking water. **n/a**: not applicable – **nd**: not detectable at testing limit - **ppb**: parts per billion or micrograms per liter - **ppm**: parts per million or milligrams per liter - **NTU**: nephelometric turbidity units, measurement of suspended material in water.

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 microbial contaminants are available from the Safe Drinking Water Hotline: (1-800- 426-4791).

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The City of Gainesville Department of Water Resources provides water to residential, commercial and industrial customers located within the Gainesville corporate limits, a large portion of unincorporated Hall County and within the corporate limits of the cities of Clermont, Buford, Oakwood, Braselton, Flowery Branch and Gillsville. The Gainesville service area covers approximately 500 square miles. The water system serves a customer base of approximately 50,630 accounts with an estimated 153,000+ users. We welcome your comments and participation on issues that concern our drinking water. Linda MacGregor, Department of Water Resources Director, may be reached at (770) 538-2400. Don Dye, Assistant Director of Department of Water Resources, may be reached at (770) 538-2462.

The information contained in this report summarizes your drinking water for calendar year 2015. This information is provided on or before June 1. If you are interested in getting more information about your water quality or this report, please call Horace Gee, Environmental Services Manager at (770) 532-7462.

The Department of Water Resources is actively involved in protection of our local water resources and works with various state, federal and local agencies on Watershed Protection issues. In 2003, our community completed a source water assessment. The overall point source susceptibility ratings for both of Gainesville's plants are low.

Working to Protect Our Water Resources Everyday

Tackling Litter in Our Streams

Over 80% of the pollution in the state of Georgia is non-point source pollution. This type of pollution does not have a known source and it is very difficult to determine exactly where it came from. Rain, otherwise known as stormwater, carries the pollution into our waterways.

Flat Creek, which runs through Gainesville and ends in Lake Lanier, has had a long history of pollution problems. However, the health of Flat Creek has steadily increased over the years through additional education, monitoring and restoration projects. A very visible pollution is trash/litter in the creek. In 2015, to combat this problem and keep the trash from entering Lake Lanier, Gainesville in conjunction with Hall County installed a Band-A-Long Trash Trap on Flat Creek. The trap was installed in the stream below Old Flowery Branch Road.

The trap is anchored to the banks and floating pontoons allow the trap to move up or down as the water level changes. As trash and debris float downstream, the pontoons direct items into the trap for containment. The trap is inspected at least weekly to determine if and when it needs to be cleaned out. The trap is typically cleaned out after every rain event. The trash can be removed by using equipment to dump the basket or manually. The trap has caught numerous items in the short period that is has been installed. Styrofoam, bottles, cans, balls, other roadside litter and natural debris are the types of items found most often in the trap.

Promoting Water Efficiency

Gainesville's Water Efficiency Program continues to promote the wise use of our water resources. The Water Efficiency program offers a variety of opportunities and incentives that any City of Gainesville water customer can take advantage of. A few of those resources are highlighted below.

1. Lola the Water Waster and Conservation Crusader visit elementary schools to teach students how to save water and why it is important.
2. Single family, multifamily and commercial toilet rebate programs offer a 75 dollar credit per toilet replaced for eligible homes and businesses. Please see applications, website or call for eligibility details.
3. Free home or commercial water use checkups will find personalized ways to save money on your water bill.
4. Education presentations are available in any water or environmental related topic for public and private schools or any community organization.
5. Rain barrel workshops are offered throughout the year to promote collecting rain water and distribute rain barrels.
6. Free water conservation kits are available to any water customer. It includes a water saving showerhead, kitchen aerator, bathroom aerators and dye tabs to check toilets for leaks. These may save water but still provide great pressure.

For more information, visit us at www.gainesville.org/water-resources or call 770-532-7462.

Like us. Find us on Facebook by searching: Gainesville Water Resources