Cumming Utilities
Water Quality Report 2018

Source: ***Where does our water come from?***

The City of Cumming pumps raw lake water out of Lake Lanier and treats the water at the City's 24 Million Gallon Per Day (MGD) Potable Water Production Facility (PWPF) located at 935 Dahlonega Highway in Cumming.

Contaminants: ***What's in our water?***

Drinking water, including bottled water, may reasonably be expected to contain some small amounts of contaminants. The presence of the contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling EPA's SAFE DRINKING WATER HOTLINE at 1.800.426.4791. Food and drug Administration regulations establish limits for contaminants in bottled water, which must provide similar protection for public health.

Sources of drinking water in many communities (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 the following:

Microbial Contaminants, such as viruses and bacteria that may come from septic systems, sewage treatment plants, 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.

Lead - 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 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 in your home water lines, 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 by a private lab.

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 such as the Cumming Utilities Water System. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Precautions: ***What precautions should I take?***

Some individuals 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, persons 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. The EPA and Centers for Disease Control guidelines for the appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from EPA's SAFE DRINKING WATER HOTLINE at 1.800.426.4791.

Source Water Assessment Program The City completed a Source Water Assessment during 2003. The overall point source susceptibility for the Cumming Water System was determined to be "low." For more information, please contact the Georgia Mountains RDC at (770) 538-2626. Potential contaminant sources pinpointed by the study included septic tanks, poultry and swine farms, gas stations, boat and automotive repair shops, marinas, golf courses, etc.

En Espanõl - Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

Contact Information - If you have any questions or comments regarding this publication, please contact the Department of Utilities at (770) 781-2020 or log onto our website at www.cummingutilities.com

Public Involvement - The Mayor and City Council meet monthly in the Council Chambers on the 3rd floor of City Hall each third Tuesday of the month at 6:00 pm.

What local groups could I join to make a difference in Water Quality? Please consider joining or organizing an Adopt-A-Stream Program for your watershed. Typically, community groups such as Boy Scout and Girl Scout Troops, Kiwanis, Optimist, and other similar clubs are great candidates for creating an Adopt-A-Stream Program. *For more information log on to: www.riversalive.org or contact the City's Adopt – A-Stream Coordinator at (770)781-2020.*

Forsyth County's Endangered Species List: Bald Eagle, Amber Darter, Bluestripe Shiner, Cherokee darter, Etowah darter, Frecklebelly madtom, Do you part to protect these endangered species – don't overuse fertilizers, pesticides, and cover all soil in your yard with grass or mulch to prevent soil erosion and run-off. Also on the list are the following plants: White fringeless orchid, and Piedmont barren strawberry. Taken from the US Fish and Wildlife website www.fws.gov/endangered/counties/forsyth_county.html.

Useful Website Subjects at www.cummingutilities.com:

- Pay your water, sewer, and garbage bill on-line. The City accepts VISA and MASTER CARD and most DEBIT CARDS.
- Find current water, sewer, and garbage rates and schedules – learn about the City's tiered water rate structure. High water bills usually occur in the spring due to problems with lawn irrigation systems.
- Determine what the most current watering restrictions and bans are – download the current outdoor watering restrictions.
- Get water conservation ideas - Plumbing retrofit kits for houses constructed before 1992 – low-flow shower heads, low-flow bathroom and kitchen faucets, and toilet leak repair kits are available at City Hall for $10.00. Low Flow Toilet Rebates are available to qualified residences.
- Download Gardening and Xeriscape brochures – learn to conserve water via these new landscaping techniques.
- Download Do-it-Yourself Household Water Audit brochures – is your home a Water Hog?
- Download a Septic Tank Maintenance Guide – learn how to properly maintain your septic tank and prevent pollution of our streams and lakes – like the old saying goes "out of sight, out of mind". Watch for City sponsored septic tank maintenance workshops and other opportunities.
- Get stormwater runoff prevention ideas – wash your car while it is parked on your lawn –your lawn will be watered and will absorb the soap and cleaners (keeps the soap out of the storm drain).
- Dispose of household chemicals in a sanitary landfill

What Can I Do to Protect Our Drinking Water?

I live in Forsyth County, does the storm water that falls on my property drain to a Drinking Water Supply? Yes! It may not drain to the City of Cumming's Lake Lanier Intake, but it definitely drains into someone's water supply. For example, if you live in the Big Creek Basin, all storm water that drains to Big Creek from your property eventually flows to the City of Roswell's Water Intake in Fulton County. If you live in the Settingdown Creek Basin, all storm water that drains to Settingdown Creek from your property eventually flows to the Cherokee County Water Intake in Cherokee County.

What pollutants do I have at my home that could potentially jeopardize the Drinking Water Supply? Well, let's list a few: fertilizer, paint, gasoline, motor oil, cleaners, solvents, garbage, pet waste, metal waste, pesticides and herbicides. In addition, leaking and neglected septic tanks are a potential source of pollution.

What can I do? First of all, BE RESPONSIBLE! Don't over-fertilize your yard or golf course – follow the instructions on the fertilizer bag. Dispose of waste in a proper manner. Take used motor oil to a recycling facility and don't pour it on the ground. If you find a suspicious connection to a stream or storm sewer, or if you witness someone "dumping" waste into a stream or manhole, call the Department of Utilities at (770) 781-2020 and immediately report such illegal activities. In addition, you may want to get involved with the City of Cumming storm sewer decal installation program. For more information on storm sewer decals, call the City at (770) 781-2020.. For more information on the City's Storm Water Program, please visit the City's Web Site at www.cummingutilities.com.

What can I do as a restaurant owner to make a difference? Maintaining a clean environment is a priority for restaurants. The following are environmentally friendly practices both indoors and out.

- Pour wash water into a janitorial or mop sink, not a dish washing sink. Don't pour it out onto a parking lot, alley, sidewalk or street. Oil and grease can cause sewers to be clogged.
- Recycle grease and oil instead of dumping down the drain. Rendering services are available to sample grease for pesticides and other chemicals before it can be resold.
- Check your outdoor cleaning. If you use cleaning products or detergents, you should mop up wastewater or capture it with a portable pump or a wet vacuum. Pour the water into a janitor sink or a sanitary sewer if approved of by the local sanitary sewer authorities. Train outside cleaning contractors on company cleanup practices.
- Clean floor mats, filters, and garbage cans in a mop sink or floor drain. Don't wash them in a parking lot, alley, sidewalk, or street. The oils can travel into drains and pollute stormwater.
- Inspect dumpsters and grease traps for leaks.
- If strong chemicals are sprayed on roof-mounted equipment (vents, air conditioning coils, etc.), they will flow from the roof drains into the storm drain and end up in the nearest creek. Collect the wastewater and pour it into a mop sink or sanitary sewer clean out. **Did You Know?** It is illegal to discharge wastewater or water containing soaps, detergents, cleaning products, grease, etc. into streets or curb inlets. Curb inlets were designed to drain water from the streets to prevent flooding, but the same curb inlets carry pollution (detergents, disinfectants, grease, trash, grass clippings etc.) to the nearest neighborhood creek. They do not remove pollutants.

Definitions used in this report:

- **MCL – Maximum Contaminant Level** is 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** is 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.
- **(AL) - Action Level** is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
- **(TT) - Treatment Technique** is a required process intended to reduce the level of a contaminant in drinking water.
- **(MRDL) – Maximum Residual Disinfectant Level** is the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbiological contaminants.
- **(MRDLG) – Maximum Residual Disinfectant Level Goal** is 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.
- **(ppm) Parts Per Million** means one part per million part (same as milligrams per Liter) and corresponds to 1 minute in 2 years or 1 penny in $10,000.
- **(ppb) parts per billion** means one part per billion parts (same as micrograms per Liter) and corresponds to 1 minute in 2,000 years or 1 penny in $10 million.
- **N/A) Not Applicable** means does not apply.
- **ND –** Not Detected

Water Quality Data Report

Regulated Substances

Parameter Tested	MCLG	Max Allowed MCL	Amount Detected	Range of Detections	Test Date	Violation?	Typical Source of Contaminant
Fluoride (ppm)	4	4	1.20	0.71 – 1.20	2017	NO	Water additive that Promotes Stong Teeth
Sodium (ppm)	N/A	N/A	5.2	0 – 5.2	2017	NO	Erosion of natural deposits
Nitrate/Nitrite **ppm**	10.0	10.0	0.44	0 - 0.44	2017	NO	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Turbidity (NTU)	N/A	5	0.07	0.01 - 0.07	2017	N O	Soil runoff
Total Trihalo-methanes **ppm**	N/A	0.08	0.035	0.017 – 0.035	2017	NO	By-product of drinking water chlorination
Total Coliform Bacteria %	0	<5%	0%	0% - 0%	2017	NO	Bacteria naturally present in the environment, used as an indicator that other more harmful bacteria are present
Chlorine ppm	**MRDLG 4**	**MRDL 4**	Maximum **1.55**	Range **1.18 – 1.55**	**Test Date 2017**	Violation? **NO**	Water additive used to control microbes

Unregulated Substances

Substance Tested	MCLG	Max Allowed MCL	Amount Detected	Range of Detections	Test Date	Violation?	Typical Source of Contaminant
Total Organic Carbon **ppm**	N/A	N/A	1.30	0.09-1.30	2017	NO	Plant & animal material
Haloacetic Acid HAA5 ppm	N/A	0.06	0.023	0.015 - 0.023	2017	NO	By-product of drinking water chlorination

Regulated at the Customer's Tap

Substance Tested	MCLG	Max Allowed MCL	Amount Detected	# of Sites Above AL	Test Date	Violation?	Typical Source of Contaminant
Copper **ppb**	1300	1300	86.0	0	2017	NO	Corrosion of Plumbing Materials
Lead **ppb**	ND	15	1.3	0	2017	NO	Corrosion of Plumbing Materials

National Primary Regulated Contaminants - Chlorination Byproducts

Substance Tested	MCLG	Max Allowed MCL	Amount Detected	# of Sites Above AL	Test Date	Violation?	Typical Source of Contaminant
Chloroform **(ppb)**			18	0	2017	NO	Byproduct of Chlorination
Bromodichloromethane (ppb)			5.1	0	2017	NO	Byproduct of Chlorination
Chlorodibrumethane (ppb)			0.83	0	2017	NO	Byproduct of Chlorination

The city conducted hundreds of water tests during calendar year 2017. The table above lists all of the drinking water contaminants that we detected during calendar year 2017. The presence of 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 performed during 2017. The EPA or the Georgia EPD requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. The bottom line of this report is – ***Your water is safe to drink and the City met all federal EPA and state EPD requirements during the year 2017.***

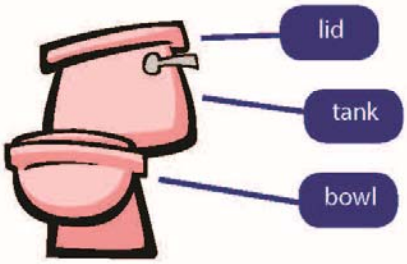
Lesson 2: Be a Leak Detective

Some leaks are harder to find than others. They can be sneaky and silent, and you have to be a sleuth to detect them. Here is an experiment to help you track them down.

Activity: Check for Toilet Leaks

For this activity you will need:

- Food coloring or dye tablets
- A clock or watch
- A helpful grown-up
- A toilet



Instructions:

1. Remove the lid off the toilet tank. (Ask an adult for help—the lid can be heavy and hard to move.)
2. Add a few drops of food coloring or a dye tablet into the tank. Do not flush the toilet.
3. Wait 10 minutes. If color appears in the toilet bowl without flushing, it has a leak.
4. Flush the toilet immediately after the experiment ends to avoid staining inside of the tank.

Do the Math:

A constantly running toilet can waste more than 200 gallons of water every day. How many gallons will the leaking toilet waste in a week (7 days)?

Show your work here:

Write your answer here: _____ **gallons**

Bonus: How many 8-ounce glasses of water could you fill with the amount of water saved from fixing the leaking toilet?

Conversion Equation
Fluid Ounces to Gallons
128 fluid ounces = 1 gallon

Write above answer here: _____ **gallons**

Multiply it by **x** **128 fluid ounces**

= _____ **fluid ounces**

Divide it by **÷** **8 fluid ounces**

= _____ **glasses of water**