CITY OF LYONS
2020 WATER QUALITY REPORT

Georgia Water System ID #: GA2790000

Water System Contact:	**Phone Number:**
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Summary of Water Quality Information

The **City of Lyons** drinking water system is owned and operated by the **City of Lyons**. The facility office is located at 161 Northeast Broad Street in Lyons, Georgia. If there are ever any comments or inquiries to be made, please feel free to visit City Hall or contact Jason Hall, City Manager, by phone during regular working hours.

Included in this report is information about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The **City of Lyons** is committed to providing your community with clean, safe, and reliable drinking water for everyone. For more information about your water or this report please contact Jason Hall. **A copy of this report is available upon request at City Hall or may be viewed at www.lyonsga.org.**

Your water comes from four (4) community *groundwater* wells. These wells derive water from the *confined Coastal Plain aquifer* to provide ample volumes of water for your community. **Well 101** is located at the intersection of Northwest Broad Street and Nellie Rose Street, **Well 103** is located on Jefferson Street, **Well 104** is located on Lyons Center Road, and **Well 105** is located at Industrial Park, northwest of the intersection of US 1 and State Road 130 in Lyons, Georgia. Treatment is performed at the wells to include removal of contaminants, the addition of chlorine disinfection, and the addition of fluoride. These properties are protected from activities which could potentially cause contamination of this water source.

A ***Wellhead Protection Plan*** **(WHPP)** has been completed for this system by the Georgia Department of Natural Resources Environmental Protection Division. The ***WHPP*** is a report which identifies sources of pollution that could potentially contaminate the water supply. There are no cited potential pollution sources for any of the wells within the control zone, a radius of fifteen (15) feet. Cited potential pollution sources for in the management zone (100-foot sector) include utility poles, electrical transformers, vehicle parking, fuel storage, access and secondary roads, storage yard for the **City of Lyons**, and storm water run-off potentially containing volatile organic compounds from parking areas and/or pesticides and herbicides from lawns. **The complete report is available upon request at the facility office.**

The **City of Lyons** water system is tested for more than eighty (80) drinking water parameters on a periodic basis determined by the Georgia Department of Natural Resources Environmental Protection Division (EPD) Drinking Water Program. Sample/ testing schedules are based on initial contaminant level assessments and can be changed by EPD if deemed necessary. Generally, samples are collected in **City of Lyons** for analysis of volatile organic, synthetic organic, and inorganic compounds, lead, and copper once in a three (3) year cycle; for nitrate-nitrites, TTHMs, and HAA5s yearly; and for the presence of bacteriological content monthly.

During 2020, the **City of Lyons** water system was sampled for the analyses of bacteriological content, nitrate-nitrite, TTHMs, and HAA5s. **All detected contaminants are delineated in the accompanying charts. Any constituents not listed in the accompanying charts had results less than the detection limits and/or maximum contaminant levels.** In 2019 the City of Lyons was issued a failure to monitor violation because only fifteen (15) of the twenty (20) required samples were submitted for the scheduled lead and copper monitoring event. As a result, we cannot be sure of the quality of the drinking water during this period and health effects are unknown. The City successfully completed the required testing in 2020, and the violation was lifted in September 2020.

For the lead and copper monitoring event, twenty (20) representative samples were taken from throughout your community. While **NO** sample site exceeded the action level for lead or copper, detectable levels of these contaminants were found in one or more samples. This indicates the presence of some service lines containing lead and/or copper.

Lead and copper are metals naturally found throughout the environment in air, soil, water, and household dust. These metals can also be found in lead, copper, or brass household plumbing pipes and fixtures. Even consumer products such as paints, pottery, and pewter can contain lead and/or copper. Corrosion or deterioration of lead or copper-based materials, as well as erosion of natural deposits can release these metals into the drinking water.

Infants and children who drink water containing lead in the excess of the action level could experience delays in their physical or mental development. Children could show slight defects in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Copper is an essential nutrient, but some people who drink water containing copper exceeding the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper greater than the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

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 Lyons** *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.*

The following measures may also be taken to minimize exposure to lead and/or copper:

- Use cold water for drinking or cooking.
- Do not cook with or consume water from the hot water faucet.
- Do not use hot water for making baby formula.
- Use only "lead-free" solder, fluxes and materials in new household plumbing and repairs.

Drinking water, including bottled water, may be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. **More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline.**

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 at 800-426-4791.**

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 the following:

- ***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 storm water 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 storm water runoff, agricultural application, and septic systems.
- ***Radioactive contaminants*** 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The **City of Lyons** *strives to maintain the highest standards of performance and quality possible. In order to maintain a safe and dependable water supply, improvements that benefit the community must be made. Please help keep these costs as low as possible by utilizing good water conservation practices.*

DEFINITION OF TERMS AND ABBREVIATIONS USED IN THIS REPORT

Maximum Contaminant Level (MCL): *"The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG 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. MCLG's allow for a margin of safety."*

Secondary Maximum Contaminant Level (SMCL): *Reasonable goals for drinking water quality. Exceeding SMCL's may adversely affect odor or appearance, but there is no known risk to human health.*

Treatment Technique (TT): "*A required process intended to reduce the level of a contaminant in drinking water."*

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 microbiological 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 contaminants.*

TTHMs (Total Trihalomethanes): One or more of the organic compounds chloroform, bromodichloromethane, chlorodibromomethane, and/or bromoform.

HAA5s (Haloacetic Acids): One or more of the organic compounds monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

CITY OF LYONS WATER SYSTEM
2020 WATER QUALITY DATA
WSID: GA2790000

The table below lists all the drinking water contaminants that have been detected in your drinking water. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The data presented in this table is from testing done during the year noted. The Federal Environmental Protection Agency (EPA) and the Georgia Department of Natural Resources Environmental Protection Division (EPD) require monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Parameters, values, and sources may vary.

DETECTED INORGANIC CONTAMINANTS TABLE

Parameter	Units	MCL [SMCL]	MCLG	City of Lyons Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Barium	ppm	2	2	0.20	0.11 to 0.20	2019	No	Erosion of natural deposits
Chlorine	ppm	4	4	0.63	0.63 to 0.63	2020	No	Water additive used for control of microbes
Fluoride	ppm	4 [2]	4	0.79	0.69 to 0.79	2019	No	Erosion of natural deposits; water additive which promotes strong teeth
Iron	ppm	[0.3]	**	0.082	0.061 to 0.082	2019	No	Erosion of natural deposits
Manganese	ppm	[0.05]	**	0.038	NA	2019	No	Erosion of natural deposits

DETECTED ORGANIC CONTAMINANTS TABLE

Parameter	Units	MCL	MCLG	City of Lyons Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Haloacetic Acids	ppb	60	**	ND	NA	2020	No	By product of drinking water disinfection
TTHMs	ppb	80	**	2.5	2.5 to 2.5	2020	No	By product of drinking water disinfection

DETECTED UNREGULATED CONTAMINANTS TABLE

Parameter	Units	MCL [SMCL]	MCLG	City of Lyons Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Sodium	ppm	**	**	11	9.8 to 11	2019	No	Erosion of natural deposits

LEAD AND COPPER MONITORING RESULTS

Parameter	Units	Action Level	MCLG	City of Lyons 90th Percentile	# of sample sites above A.L.	Sample Date	Violation No/Yes	Typical Source of Contaminant
Lead	ppb	15	0	2.3	0	2020	No[1]	Corrosion of household plumbing
Copper	ppm	1.3	1.3	0.11	0	2020	No[1]	Corrosion of household plumbing

MICROBIOLOGICAL MONITORING RESULTS

Parameter	Units	MCL	MCLG	City of Lyons # of Positive Samples	PositiveSample Date (Month)	Sample Year	Violation No/Yes	Typical Source of Contaminant
Total Coliform	Present/ Absent	1*	0	1	October	2020	No	Naturally present in the environment
E. coli		0	0	0	NA	2020	No	Human and animal fecal waste

RADIONUCLIDES TABLE

Parameter	Units	MCL	MCLG	City of Lyons Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Alpha emitters	pCi/L	15	0	ND	NA	2016	No	Erosion of natural deposits
Combined Radium 226/228	pCi/L	5	0	ND	NA	2016	No	Erosion of natural deposits

Not Detected (ND): By regulation, this substance or group of substances was tested for in our finished tap water; however, none was detected at the testing limit. **NA:** Not applicable to this contaminant

ppm or mg/l: parts per million or milligrams per liter **ppb or ug/l:** parts per billion or micrograms per liter **pCi/l:** picocuries per liter, a measurement of radiation

Total Coliform Rule MCL= 1 postive sample for systems that collect < 40 samples a month** * No established MCL, SMCL or MCLG**

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

[1]**Failure to monitor violation, see Water Quality Report Summary**