

CITY OF PATTERSON
2023 WATER QUALITY REPORT
Georgia Water System ID #: GA2290001

<u>Name of Water System Contact:</u>	<u>Contact Phone Number:</u>
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Summary of Water Quality Information

The **City of Patterson** drinking water system is owned by the **City of Patterson** and operated by **Tindall Enterprises, Inc.** The facility office is located at 3507 Williams Street in Patterson, Georgia. If there are ever any comments or inquiries to be made, please feel free to visit or call City Hall 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 Patterson** is committed to providing your community with clean, safe, and reliable drinking water. For more information about your water or this report please call City Hall or Tindall Enterprises, Inc. at the 912-449-0999. **This report will not be mailed to individual consumers but is available at City Hall upon request.**

Your water comes from two (2) community *groundwater* wells, 101 and 102. Both wells are located on Highway 84 in Patterson, Georgia and derive water from the *Coastal Plain Aquifer* to provide ample volumes for your community. Treatment is performed at the wells to include removal of contaminants and addition of chlorine disinfection. These properties are protected from activities which could potentially cause contamination of the water source.

A **Wellhead Protection Plan (WHPP)** has been completed for the **City of Patterson**. This is a report in which the Georgia Department of Natural Resources Environmental Protection Division (GA DNR EPD) identifies any types of pollution to which the community water supply could be vulnerable and includes information regarding potential sources of contamination in the watershed. This system is considered to be in the higher susceptibility range for pollution, however, there are no potential pollution sources within the fifteen (15) foot radius control zone. Cited potential pollution sources within the management zone include electrical transformers, utility poles, sewer lines, access and secondary roads, and underground storage tanks of gas and/or diesel. Please note that this is a partial list of potential sources. **The complete report is available upon request at City Hall.**

The **City of Patterson** water system is tested for more than eighty (80) drinking water parameters on a periodic basis determined by the GA DNR EPD Drinking Water Program and/or the United States Environmental Protection Agency. Sampling/testing schedules are based on initial contaminant level assessments and may be changed if deemed necessary. Generally, the water system submits samples for the analyses of volatile organic compounds, inorganic compounds, lead, and copper at least once in a three (3) year cycle. Nitrate-nitrite, total trihalomethane, and haloacetic acid levels are tested annually, and bacteriological content is tested on a monthly basis. Radionuclide testing is performed every six (6) years for well 102 and every nine (9) years for well 101. Analyses of synthetic organic compounds have also been added to this water system's testing schedule.

During 2023, the **City of Patterson** water system submitted samples for the analyses of bacteriological content, nitrate-nitrites, Fluoride, Lead & Copper, and inorganic compounds. We are pleased to inform you that the **City of Patterson had no violations of drinking water standards during 2023. All detected contaminants are delineated in the accompanying chart. Any constituents not listed in the accompanying charts had results less than the detection limits and/or maximum contaminant levels.**

For the 2023 lead and copper monitoring event, ten (10) representative locations from throughout your community were sampled for analyses. Detectable levels of copper were found in one or more samples, indicating the presence of some service lines that contain this contaminant. **NO** site exceeded the action level limit for lead 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.

*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 Patterson** 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>.*

Additionally, 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily a cause for health concerns. 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 and may reasonably be expected to contain at least small amounts of some contaminants. 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. The presence of contaminants does not necessarily indicate that water poses a health risk. 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. **More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline.**

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 Patterson 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 PATTERSON WATER SYSTEM
2023 WATER QUALITY DATA
WSID: GA2290001**

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/or sources may vary.

DETECTED INORGANIC CONTAMINANTS TABLE								
Parameter	Units	MCL [SMCL]	MCLG	City of Patterson Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Barium	ppm	2	2	0.057	0.057 to 0.057	2023	No	Discharge of oil drilling wastes and from metal refineries; Erosion of natural deposits
Chlorine	ppm	4	4	0.90	0.88 to 0.90	2022	No	Water additive used for control of microbes
Fluoride	ppm	4 [2]	4	0.53	0.53 to 0.53	2023	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Iron	ppb	[300]	**	210	210 to 210	2023	No	Erosion of natural deposits

DETECTED ORGANIC CONTAMINANTS TABLE								
Parameter	Units	MCL	MCLG	City of Patterson Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
HAA5	ppb	60	**	1.1	1.1 to 1.1	2023	No	By product of drinking water disinfection
TTHMs	ppb	80	**	14.1	14.1 to 14.1	2023	No	By product of drinking water disinfection

OTHER DETECTED UNREGULATED CONTAMINANTS TABLE								
Parameter	Units	MCL [SMCL]	MCLG	City of Patterson Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Sodium	ppm	**	**	30.0	30.0 to 30.0	2023	No	Erosion of natural deposits

LEAD AND COPPER MONITORING RESULTS								
Parameter	Units	Action Level	MCLG	City of Patterson 90th Percentile	# of sample sites above AL	Sample Date	Violation No/Yes	Typical Source of Contaminant
Copper	ppm	1.3	1.3	0	0 of 10	2023	No	Corrosion of household plumbing
Lead	ppb	15	0	0.01	0 of 10	2023	No	Corrosion of household plumbing

MICROBIOLOGICAL MONITORING RESULTS								
Parameter	Units	MCL	MCLG	City of Patterson Number of Positive Samples	Positive Sample Date (Month)	Sample Year	Violation No/Yes	Typical Source of Contaminant
Total Coliform	Present/	1*	0	0	N/A	2023	No	Naturally present in the environment
E. coli	Absent	0	0	0	N/A	2023	No	Human and animal fecal waste

RADIONUCLIDES TABLE								
Parameter	Units	MCL	MCLG	City of Patterson Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant
Alpha emitters	pCi/L	15	0	ND	N/A	2021	No	Erosion of natural deposits
Combined Radium 226/228	pCi/L	5	0	1.30	1.16 to 1.30	2021	No	Erosion of natural deposits

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

ND: Not Detected; by regulation, this substance or group of substances was tested for in our finished tap water; however, none was detected at the testing limit.

N/A: Not applicable to this contaminant Action Level (AL): "The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow."

ppb (ug/L): parts per billion or micrograms per liter

ppm (mg/L): parts per million or milligrams per liter

pCi/l: picocuries per liter, a measurement of radiation