

# 2023 WATER QUALITY REPORT



City of Tallahassee Your Own Utilities





CITY OF TALLAHASSEE



The City of Tallahassee is pleased to share with you its 2023 Water Quality Report, which informs customers on the quality of water delivered to you by the City. For more than 120 years, we have proudly supplied the community with a clean, dependable supply of water. That standard of excellence continues today as the City's water quality professionals use advanced technology and sound scientific practices to deliver customers the highest quality product possible.

Our commitment and passion run deep. Living on top of the most amazing underground water system in North America – the Floridan Aquifer – has a profound effect on how we look at our job. To ensure this pristine water reaches you, the City maintains a vast water distribution system and operates a state-of-the-art Water Quality Laboratory. This nationally accredited facility is certified to analyze nearly 300 chemical components for drinking water, non-potable (e.g., wastewater and stormwater) and solid samples.

The lab also provides public service throughout Leon County for water quality testing of customer household plumbing systems and private well water quality testing to make sure customers are informed about their drinking water quality. It also supports neighboring communities with their laboratory services for compliance during both daily operations and in times of emergencies. In total, the laboratory processes 8,000 to 10,000 samples annually.

The Water Utility team is also passionate about eliminating possible cross contamination in the system and making sure that surface water from rain and run-off is properly managed. This is accomplished through continual monitoring, measurement and testing.

The data you will find in this report will help you understand all that we do to protect our water supply and ensure the water delivered to your home or business is the best it can possibly be. Thank you for being a City of Tallahassee Utilities customer.

This report presents important information and water quality compliance data from January 1 to December 31, 2023 (unless noted otherwise). Should you want to know more, please contact us directly or visit *Talgov.com/WaterQuality*.







#### SOURCE & TREATMENT

FOR MORE THAN 120 YEARS, THE CITY OF TALLAHASSEE HAS PROVIDED OUR COMMUNITY WITH SAFE, RELIABLE, HIGH-QUALITY DRINKING WATER.

Currently, the City of Tallahassee operates 27 deep wells drilled directly into the Floridan aquifer. Because of the excellent quality of our water source, only limited treatment is required. Each of the well sources is treated with chlorine for disinfection purposes and fluoride to improve dental health.

> Six of the 27 wells use carbon filtration to remove certain chemicals found in the aquifer in those locations. One well (offline for 2023) provides Greensand filtration to remove naturally occurring iron and manganese from the source water, and another well provides treatment to sequester iron and manganese in the distribution system.

#### SOURCE WATER ASSESSMENT & PROTECTION

In 2023, the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are 46 potential sources of contamination with low to high susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at prodapps.dep.state.fl.us/swapp, or they can be obtained by contacting the City's Water Quality Laboratory at 850-891-1200.

#### IN THE FUTURE

It may be necessary to make improvements to our water system, which will benefit all our customers. The costs of these improvements may be reflected in the rates. Rate adjustments may be necessary to address these improvements.

### UNDERSTANDING SOURCE WATER QUALITY

#### ACCORDING TO FEDERAL AND STATE LAWS, RULES, AND REGULATIONS, THE CITY OF TALLAHASSEE ROUTINELY MONITORS FOR MORE THAN 80 CONTAMINANTS IN OUR DRINKING WATER. ONLY THOSE THAT ARE DETECTED ARE SHOWN IN THIS REPORT.

Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**(C)** Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) 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.

(E) Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the Environmental Protection Agency (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 1-800-426-4791.

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.

#### **UNDERSTANDING OUR WATER QUALITY DATA TABLE**

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms, we've provided the following definitions:

- 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.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- 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.
- Not Detected (ND): Indicates that the substance was not found by laboratory analysis.
- 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.
- 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.
- Picocurie per liter (pCi/L): measure of the radioactivity in water.
- Secondary Maximum Contaminant Level (SMCL): EPA established, non-mandatory water quality standards. These contaminants are not considered to present a risk to human health at the SMCL.



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/Center for Disease Control (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 at 1-800-426-4791.

The contaminants listed in the following tables are the only contaminants detected in our drinking water. The City of Tallahassee routinely monitors for contaminants in your drinking water according to federal and state laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2023. Data obtained before January 1, 2023, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

Contaminant and Unit of Measurement	Dates of Sampling (Month/Year)	MCL Violation (Y or N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination	
RADIOACTIVE CONTAMINANTS								
Alpha emitters (pCi/L)	01/23 – 09/23	N	4.82	ND - 4.82	0	15	Erosion of natural deposits	
Radium 226 + 228 or combined Radium (pCi/L)	01/23 – 09/23	N	0.58	ND - 0.58	0	5	Erosion of natural deposits	
Uranium (µg/L)	01/20 – 09/20	N	0.5	NA	0	30	Erosion of natural deposits	

Contaminant and Unit of Measurement	Dates of Sampling (Month/Year)	MCL Violation (Y or N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
INORGANIC CONTAMINAN							
Arsenic (ppb)	01/23 – 09/23	N	1.3	ND – 1.3	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	01/23 – 09/23	N	0.025	0.0081 – 0.025	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	01/23 – 09/23	N	1.6	ND – 1.6	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	01/23 – 09/23	N	5.2	ND - 5.2	200	200	Discharge from steel/ metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	01/23 – 09/23	N	0.85	0.34 - 0.85	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm

Contaminant and Unit of Measurement	Dates of Sampling (Month/Year)	MCL Violation (Y or N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
INORGANIC CONTAMINAN	TS						
Lead (point of entry) (ppb)	01/23 – 09/23	N	0.6	ND – 0.6	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Mercury (ppb)	01/23 – 09/23	N	0.1	ND – 0.1	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nitrate (as Nitrogen) (ppm)	01/23 – 12/23	N	0.67	0.05 - 0.67	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	01/23 – 12/23	N	4.21	2.46 - 4.21	N/A	160	Saltwater intrusion, leaching from soil

Contaminant and Unit of Measurement	Dates of Sampling (Month/Year)	MCL Violation (Y or N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination		
VOLATILE ORGANIC CONTA	VOLATILE ORGANIC CONTAMINANTS								
Tetrachloroethylene (ppb)	01/23 – 11/23	N	1.9	ND - 2.13	0	3	Discharge from factories and dry cleaners		

Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (Month/Year)	MCL or MRDL Violation (Y or N)	Level Detected (average)	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination		
STAGE 1 DISINFECTANTS/ST	STAGE 1 DISINFECTANTS/STAGE 2 DISINFECTION BY-PRODUCTS (D/DBP)								
Chlorine (ppm)	01/23 – 12/23	N	0.82	0.71 – 0.95	MRDLG = 4.0	MRDL = 4.0	Water additive used to control microbes		
Haloacetic Acids (HAA5) (ppb)	02/23 – 11/23	N	7.54	ND - 15.23	N/A	60	By-product of drinking water disinfection		
Total Trihalomethanes (TTHM) (ppb)	02/23 – 11/23	N	17.01	ND - 23.8	N/A	30	By-product of drinking water disinfection		

Contaminant and Unit of Measurement	Dates of Sampling (Month/Year)	AL Exceeded (Y or N)	90 <sup>th</sup> Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	<b>AL</b> (Action Level)	Likely Source of Contamination
LEAD AND COPPER (TAP W	ATER) FROM RESI	DENTIAL SOL	JRCES				
Copper (tap water) (ppm)	07/23 – 09/23	N	0.52	0 out of 53	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	07/30 – 09/23	N	1.4	1 out of 53	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Contaminant and Unit of Measurement	Dates of Sampling (Month/Year)	Secondary MCL Violation (Y or N)	Highest Result	Range of Results	Secondary MCLG	MCL	, Likely Source of Contamination
OTHER WATER QUALITY RES	SULTS						
Odor (Threshold Odor Number)	01/23 – 09/23	Y	16*	0 – 16	0	3	Disinfection treatment

\*Note: The odor exceedance was due to chlorine odor at one of 27 locations only. A follow-up recollect sample was below the threshold odor number (3).

EPA has established National Secondary Drinking Water Regulations that set non-mandatory water quality standards for 15 contaminants. EPA does not enforce these "secondary maximum contaminant levels" (SMCLs). They are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.

#### HAVE YOUR PLUMBING CHECKED FOR 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. City of Tallahassee Utilities are 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 two 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 1-800-426-4791 or at www.epa.gov/safewater/lead.

If test results indicate elevated levels of lead within your home or business, consider using a point-of-use water filter that is certified to remove lead, and be sure to replace filters according to the manufacturer's recommendations. For more permanent water quality improvements, consider replacing old plumbing pipes, fixtures, and appliances made with modern lead-free materials. These updates can improve your in-home water quality and also increase the value of your home.

#### TANKS



#### **BUSINESSES**

Businesses are regulated by City ordinances and are regularly inspected to ensure that cross-connections are protected.



## BACKFLOW ASSEMBLIES

Backflow assemblies prevent impurities from entering the City's water mains.

#### WATER MAINS

Water mains are the arteries that carry water throughout the distribution system.



#### FIRE HYDRANTS

The 4,700+ fire hydrants in our system provide the water needed to fight fires.



#### **SERVICE LINES**

Service lines transport the water from the water mains in the street to your home.

#### HOMES

WELL HOUSES

houses are connected to the water distribution

system, and draw

the aquifer through

A typical home uses seven gallons of water every time a toilet is flushed and up to 50 gallons of water for a five-minute shower.

#### WATER METERS

Water meters measure the amount of water you use.



# FLORIDAN AQUIFER

The Floridan Aquifer is the underground source of fresh water delivered to you for consumption.

# WE ARE COMMITTED TO ENSURING THE QUALITY OF YOUR WATER

The City of Tallahassee is the largest single provider of municipal services in the region. To learn more about services provided, visit Talgov.com. If you have questions about the 2023 Water Quality Report or would like additional copies, please call 850-891-1200 or email *WaterQualityReporting@Talgov.com*.





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