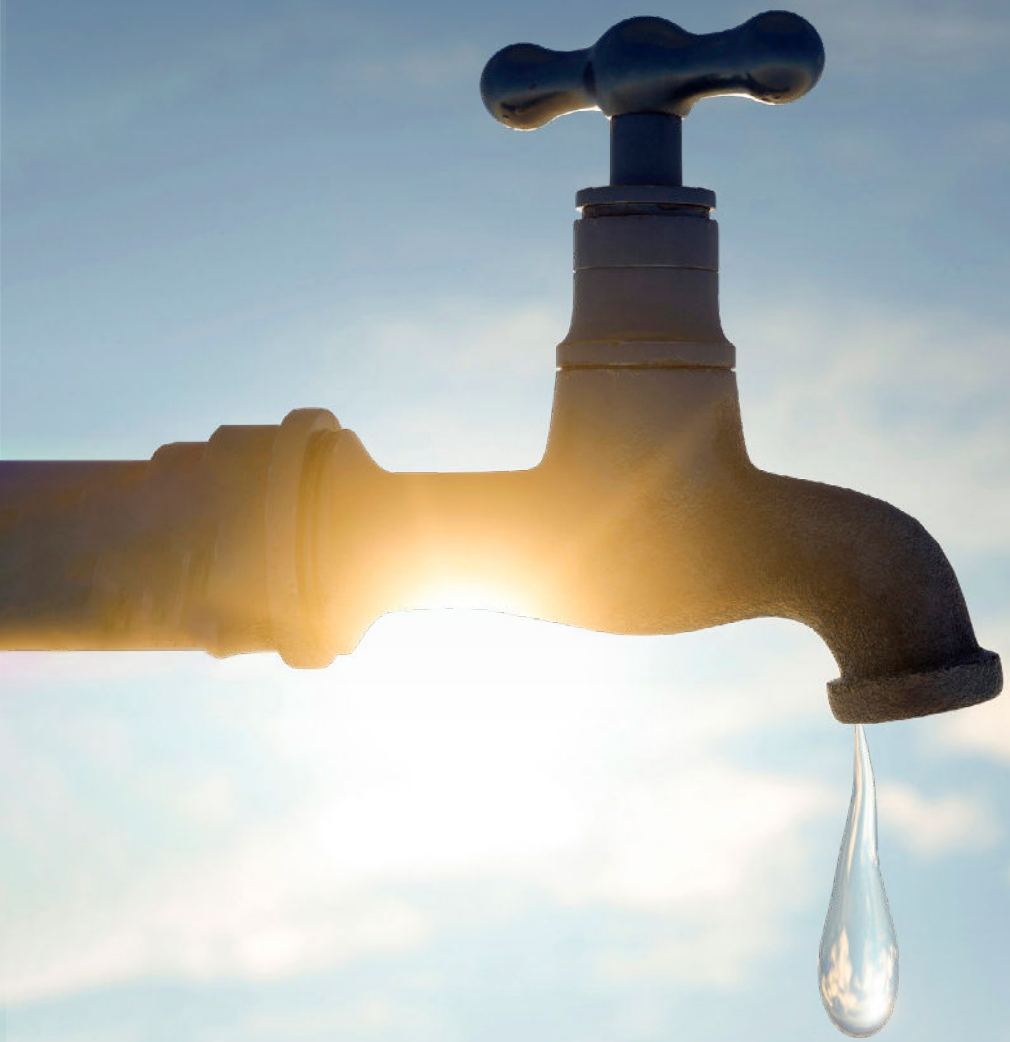
ANNUAL WATER QUALITY REPORT

Reporting Year 2025



Presented By

Georgetown Water Department

PWS ID#: MA3105000

Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2025. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Where Does My Drinking Water Come From?

Georgetown water comes from a blend of three groundwater wells. All three are shallow (40 to 60 feet deep), gravel-packed wells that draw water from the Parker River aquifer. Source water from Marshall's Well, Commissioner's Well, and Duffy's Landing Well is blended and treated with two chemical oxidants to enhance the removal of naturally occurring iron and manganese through greensand pressure filters, chlorinated for disinfection (bacteria and virus inactivation), and pH adjusted before being pumped into the distribution system. Georgetown is fortunate to have four interconnections with neighboring water utilities in case of an emergency.

Our New Water Treatment Plant

Georgetown Water has begun construction of a new pretreatment facility to the current Water Treatment Plant that will improve water quality system wide. The current WTP includes a filtration system that consists of two 10-foot diameter, 38-foot-long horizontal pressure vessels which provide treatment for iron and manganese through a dual media bed of anthracite above an oxide coated media, also referred to commonly as "greensand filtration". The WTP also maintains a chlorine residual that provides disinfection and adjusts the pH for corrosion control using potassium hydroxide.

The average raw water iron concentration after blending the three well sources has significantly increased since the current WTP design. As a result, the treatment plant experiences short filter run times and requires significantly more operator attention than originally expected. The typical flow rate has been reduced to approximately 900 gpm and backwashing of the filters is typically required every day and sometimes twice per day. The goal of these upgrades is to improve filter operations by improving the source water prior to filtration.

The key treatment process improvements will be to incorporate three pretreatment vessels, one unchlorinated backwash supply tank, and two chlorinated finished water storage tanks which will provide a hydraulic break between the WTP and the distribution system. The pretreatment vessels will serve to minimize the iron loading to the horizontal greensand vessels, reduce chlorine usage and improve runtime between backwash events. Chlorine reduction will ultimately reduce disinfection byproducts. The proposed backwash supply tanks will reduce the potential for flow reversal that can occur during peak demands.

Water Treatment Process

Georgetown Water Department uses a pressure filtration process at the West Street water treatment plant to remove naturally occurring iron and manganese. This process is enhanced by raising the pH level of the source water at each of our three wells using potassium hydroxide feed systems. The well water is blended at the plant, where two oxidants, sodium hypochlorite and potassium permanganate, are added to promote iron and manganese precipitation so their particulate form can be captured through pressure filtration. The finished water is chlorinated a second time for disinfection, and pH is adjusted to maintain pipe corrosion control before the water enters the distribution system. The elevated pH helps to control corrosion not only in the ductile iron and cast iron water mains but also in the copper water service and plumbing system in your home. Pressure filters are backwashed regularly to restore their filtering capacity. Filtered particulate iron and manganese are discharged in concentrated water to dewatering lagoons and drying beds. Following final processing, fully dried residuals are properly disposed of as mandated by DEP regulations.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. U.S Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available by emailing the U.S. EPA at safewater@epa.gov.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Tom Lannan, Georgetown Water Department Utility Director, at (978) 837-9191.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA and Massachusetts Department of Environmental Protection (DEP) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that 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. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 may also come from gas stations, urban stormwater runoff, and septic systems; and

Radioactive Contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by emailing the U.S. EPA at safewater@epa.gov.

Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far, the most common method of disinfection in North America is chlorination.

Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the U.S. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water and the use of chlorine are probably the most significant public health advancements in human history.

How chlorination works:

- Potent germicide reduction of many disease-causing microorganisms in drinking water to almost immeasurable levels.
- Taste and odor reduction of many disagreeable tastes and odors from foul-smelling algae secretions, sulfides, and decaying vegetation.
- Biological growth elimination of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.
- Chemical removal of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.

Public Meetings

Georgetown's Water Department is overseen by a Board of Water Commissioners that meets monthly. These meetings are open to the public. Information is posted at the front doors of the water office at One Moulton Street and at Town Hall at One Library Street, as well as online at georgetownma.gov and georgetown-water.org.

Lead in Home Plumbing

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. The Georgetown Water Department is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter certified by an American National Standards Institute accredited certifier to reduce lead is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure it is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling does not remove lead from water.

Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, or doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water, and wish to have it tested, contact the Georgetown Water Department at (978) 837-9191. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The lead service inventory may be found at georgetownwater.org. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

Source Water Assessment

Georgetown has a source water head protection program in place to ensure the preservation of our groundwater. Mapping of various zoning laws can be viewed at georgetown-ma.gov under Planning Department MIMAP-DEP wellhead protection.

An updated Source Water Assessment Plan (SWAP) has been completed for our system and will be added to the Georgetown Water website soon. The purpose of the assessment is to determine the susceptibility of each drinking water source to potential contaminant sources. The report includes background information and a relative susceptibility rating of lower, moderate, or higher. It is important to understand that a higher susceptibility rating does not imply poor water quality, only the system's potential to become contaminated within the assessment area.

A higher susceptibility rating was assessed to the town of Georgetown's water source. Our last SWAP full report may be found at mass.gov/lists/source-water-assessment-and-protection-swap-program-documents until DEP approves and updates our most recent plan. Georgetown's report can be found on pages 499 to 506. If you would like a copy of our assessment or have questions, please feel free to contact our office during regular business hours at (978) 352-5750.

Level 1 Assessment Update

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct an assessment to identify and correct any problems that were found during this assessment.

During the past year we were required to conduct one Level 1 assessment, which we completed. We were not required to take any corrective actions.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2024	2	2	0.01	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2025	[4]	[4]	0.60	0.02–2.10	No	Water additive used to control microbes
Haloacetic Acids [HAA5] (ppb)	2025	60	NA	68.5	ND–83.7	Yes	By-product of drinking water disinfection
HAA5 [12 Bailey Lane] (ppb)	2025	60	NA	68.5	45.0–83.7	Yes	By-product of drinking water disinfection
Nitrate (ppm)	2025	10	10	0.12	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perchlorate (ppb)	2025	2	NA	0.16	NA	No	Inorganic chemicals used as oxidizers in solid propellants for rockets, missiles, fireworks, and explosives
PFAS6 (ppt)	2025	20	NA	0.51	NA	No	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture- and oil-resistant coatings on fabrics and other materials; Use and disposal of products containing these PFAS, such as firefighting foams
Total Trihalomethanes [TTHMs] (ppb)	2025	80[1]	NA	76.6	51.5–96.0	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2025	1.3	1.3	0.67	0.07–0.83	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2025	15	0	9	ND–15	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2025	250	NA	41	NA	No	Runoff/leaching from natural deposits
Copper (ppm)	2025	1.0	NA	0.17	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits
Odor (TON)	2023	3	NA	2.00	NA	No	Naturally occurring organic materials
pH (units)	2025	6.5–8.5	NA	7.5	NA	No	Naturally occurring
Sulfate (ppm)	2025	250	NA	13	NA	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids [TDS] (ppm)	2025	500	NA	230	NA	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES [2]				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity (ppm)	2025	100	NA	NA
Calcium (ppm)	2025	23.2	NA	NA
Chlorodibromomethane (ppb)	2025	1.3	NA	NA
Hardness, Total [as CaCO3] (ppm)	2025	87.3	NA	NA
Magnesium (ppm)	2025	3.73	NA	NA
Perfluoroheptanoic Acid [PFHpA] (ppt)	2025	0.52	NA	NA
Perfluorohexanesulfonic Acid [PFHxS] (ppt)	2025	0.46	NA	NA
Perfluorohexanoic Acid [PFHxA] (ppt)	2025	0.8	NA	NA
Perfluorooctanesulfonic Acid [PFOS] (ppt)	2025	0.8	NA	NA
Perfluorooctanoic Acid [PFOA] (ppt)	2025	1.3	NA	NA
Potassium (ppm)	2025	41.3	NA	NA
Sodium (ppm)	2025	24	NA	NA

Definitions

90th %ile: Out of every 10 homes sampled, 9 were at or below this level. This number is compared to the Action Level to determine lead and copper compliance.

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

Herbicide: Any chemical(s) used to control undesirable vegetation.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.

MCL (Maximum Contaminant Level): 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): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

Pesticide: Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TON (Threshold Odor Number): A measure of odor in water.

[1] Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

[2] Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining their occurrence in drinking water and whether future regulation is warranted.

About Our Violation

In 2025 the Georgetown Water Department exceeded the maximum contaminant level (MCL) of 60 parts per billion (ppb) for haloacetic acids (HAA5) at sampling location 902 (12 Bailey Lane) for three consecutive quarters. The locational running annual average (LRAA) was 68 ppb in the second quarter (Q2), 66 ppb in Q3, and 64 ppb in Q4.

Haloacetic acids are disinfection by-products (DBPs) formed when chlorine reacts with naturally occurring organic material in source water. This was not an emergency. Georgetown is working with DEP under an approved compliance plan to reduce DBP formation, and customers were notified of each exceedance via Tier 2 public notice.

People who drink water containing HAA5 in excess of the MCL over many years may have an increased risk of getting cancer, and young children and pregnant women may be more susceptible.

About Our Monitoring Violation

During the third quarter of 2025, the Georgetown Water Department did not collect the required volatile organic compounds (VOCs) sample at the West Street water treatment plant. This was a monitoring violation only — it does not indicate VOCs were present in the drinking water. The department promptly resampled, submitted results to DEP under an approved compliance plan, and has taken steps to ensure future VOC monitoring is completed on schedule.