

ANNUAL WATER QUALITY REPORT

Reporting Year 2024



Presented By
Plainville Water Department

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, 2024. 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.

How Is My Water Treated?

To maintain compliance with federal and state drinking water standards, Plainville well water must be treated before it reaches consumers' taps. The Turnpike Lake Treatment Plant treats water from Wells 1A, 2, 2B, and 5 at 171 East Bacon Street. Water from these wells is filtered for iron and manganese removal, pH is adjusted for corrosion control, and it is disinfected with chlorine and ultraviolet light. The wells at Lake Mirimichi Treatment Plant are currently offline for normal supply.

We regularly receive water from the Town of North Attleboro. The water we receive from North Attleboro is groundwater treated with chlorine, adjusted for pH, and fluoridated. Iron and manganese are removed by pressure filtration. This treated water is in exchange for the same volume of raw, untreated groundwater we pump from our well at the rear of the Highway Department off West Bacon Street, which is treated at the Joint Drinking Water Treatment Plant located on Whiting Street in North Attleboro.

Community Participation

You are invited to participate in the town's monthly Select Board meetings to voice your questions or concerns about your drinking water. Scheduling information for these meetings can be found on the town website or at Town Hall, 190 South Street.

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 from the Safe Drinking Water Hotline (800-426-4791) or epa.gov/safewater.



Where Does My Water Come From?

Plainville's water is provided by four groundwater wells near Turnpike Lake. The source water is treated at the Turnpike Lake Water Treatment Facility. Groundwater from wells at our Highway Department location are sent to North Attleboro for treatment, and the water is returned to us through two pump stations interconnected with North Attleboro.

Source Water Assessment

DEP prepared a Source Water Assessment Program (SWAP) Report for the water supply serving our water system. The purpose of the report was to assess the susceptibility of our drinking water sources to contamination. The results of the assessment are available at the Plainville Water Department office and <https://www.mass.gov/files/documents/2016/08/my/4238000.pdf>.

Some of the land uses that exist within groundwater recharge areas include gas stations, auto repair shops, electrical manufacturers, and underground storage tanks. The Plainville water system was assigned a high susceptibility ranking in the

SWAP Report. We have established protective land use restrictions to reduce exposure to certain contaminants, including bylaws to protect Zone II drinking water well recharge areas. For more information, call Stephen Wight, Superintendent, at (508) 695-6871.

Residents can help protect sources by:

- Practicing good septic system maintenance.
- Taking hazardous household chemicals to hazardous materials collection days.
- Limiting pesticide and fertilizer use.

QUESTIONS?

For more information, including a copy of the North Attleboro Source Water Assessment, call Stephen Wight, Superintendent, at (508) 695-6871.

Substances That Could Be in Water

To ensure that tap water is safe to drink, 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 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 which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be 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 calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

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 which a water system must follow.

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.

pCi/L (picocuries per liter): A measure of radioactivity.

What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants



Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit bit.ly/3Z5AMm8.

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.

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

Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water.
- Monitoring and inspecting machinery, meters, gauges, and operating conditions.
- Conducting tests and inspections on water and evaluating the results.
- Maintaining optimal water chemistry.
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels.
- Documenting and reporting test results and system operations to regulatory agencies.
- Serving our community through customer support, education, and outreach.

So the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

What's a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air-conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.



Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection. For more information on backflow prevention, contact the Safe Drinking Water Hotline at (800) 426-4791.

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. Plainville 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 or galvanized service line requiring replacement, you may need to flush your pipes for a longer period. If you are concerned about lead and wish to have your water tested, contact Plainville Water Department at (508) 695-6871. 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 acquired at the Plainville Water Department, located on 171 East Bacon Street. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

Test Results

We are pleased to report that your drinking water meets or exceeds all federal and state requirements. 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 U.S. EPA 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 ¹																
				Lake Mirimichi Finished 4238000-06G through 08G		Turnpike Lake Treatment Plant Finished 4238000- 01G, 02G, 05G		South St. Market 004		Heather Hills Clubhouse 10025		Sharlene Lane Storage Tank				
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Violation	Typical Source	
Alpha Emitters (pCi/L)	2024	15	0	–	–	1.32 ²	ND–1.32 ²	–	–	–	–	–	–	No	Erosion of natural deposits	
Combined Radium (pCi/L)	2024	5	0	–	–	0.690 ³	ND–0.690 ³	–	–	–	–	–	–	No	Erosion of natural deposits	
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	–	–	–	–	19	15–21	25	15–33	–	–	No	By-product of drinking water disinfection	
Nitrate (ppm)	2024	10	10	0.743	NA	0.52	NA	–	–	–	–	–	–	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Perchlorate (ppb)	2024	2	NA	0.14	NA	0.19	NA	–	–	–	–	–	–	No	Inorganic chemicals used as oxidizers in solid propellants for rockets, missiles, fireworks, and explosives	
PFAS6 (ppt)	2024	20	NA	ND	–	17.5	NA	–	–	–	–	–	–	No	Discharges and emissions from industrial and manufacturing sources associated with the production or use of moisture- and oil-resistant coatings on fabrics and other materials; Use and disposal of firefighting foams	
Total Coliform Bacteria (positive samples)	2024	TT	NA	–	–	ND	–	–	–	–	–	1	NA	No	Naturally present in the environment	
TTHMs [total trihalomethanes] (ppb)	2024	80 ⁴	NA	–	–	–	–	72	53–109	63	33–114	–	–	No	By-product of drinking water disinfection	

REGULATED SUBSTANCES - DISTRIBUTION SYSTEM

Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation	Typical Source			
Chlorine (ppm)	2024	[4]	[4]	0.55	0.38–0.55	No	Water additive used to control microbes			
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)	2024	1.3	1.3	0.20	NA	0/21	No	Corrosion of household plumbing systems; Erosion of natural deposits		
Lead (ppb)	2024	15	0	3	NA	0/21	No	Corrosion of household plumbing systems; Erosion of natural deposits		
SECONDARY SUBSTANCES										
				Lake Mirimichi Finished 4238000-06G through 08G		Turnpike Lake Treatment Plant Finished 4238000-01G, 02G, 05G				
Substance (Unit of Measure)	Year Sampled	SMCL	MCLG	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Violation	Typical Source	
Chloride (ppm)	2024	250	NA	–	–	124	NA	No	Runoff/leaching from natural deposits	
Manganese (ppb)	2024	50	NA	16	10–16	–	–	No	Leaching from natural deposits	
pH (units)	2024	6.5-8.5	NA	–	–	8.4	NA	No	NA	
Sulfate (ppm)	2024	250	NA	–	–	10.3	NA	No	Runoff/leaching from natural deposits; Industrial wastes	
Total Dissolved Solids [TDS] (ppm)	2024	500	NA	–	–	308	NA	No	Runoff/leaching from natural deposits	
UNREGULATED SUBSTANCES ⁵										
			Lake Mirimichi Finished 4238000-06G through 08G		Turnpike Lake Treatment Plant Finished 4238000-01G, 02G, 05G		Multiple Wells 1A-2-5 10005		Everett Street Booster Station	
Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Typical Source
Bromodichloromethane (ppb)	2024	ND	–	10.4	NA	–	–	7.7	NA	By-product of drinking water disinfection
Chloroform (ppb)	2024	ND	–	12.9	NA	–	–	18.2	NA	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2024	ND	–	3.7	NA	–	–	1.4	NA	By-product of drinking water disinfection
Perfluorobutanesulfonic Acid [PFBS] (ppt)	2023	17.6	11.3–17.6	–	–	4.7	3–4.7	–	–	NA
Perfluorobutanoic Acid [PFBA] (ppt)	2023	5	ND–5	–	–	ND	–	–	–	NA
Perfluorooctanesulfonate Acid [PFOS] (ppt)	2023	ND	–	–	–	5.9	4.6–5.9	–	–	NA
Perfluorooctanoic Acid [PFOA] (ppt)	2023	ND	–	–	–	4.3	ND–4.3	–	–	NA

¹A dash (“–”) under Amount Detected indicates this substance was not tested for in 2024 at this source location.

²Gross alpha particle activity.

³Radium 226 and 228.

⁴Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

⁵Unregulated 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.

