



# Braintree Water & Sewer 2023 Water Quality Report

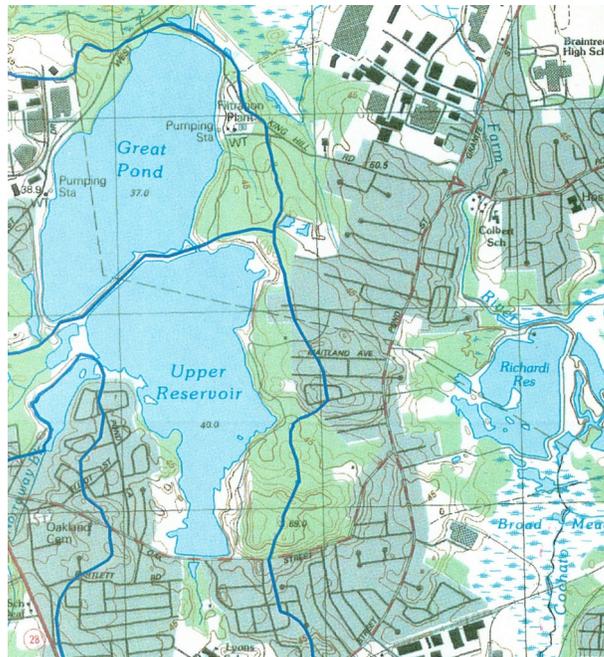
Released July 1, 2024



## Overview

This report explains how drinking water provided by the Braintree Water and Sewer Department is of the highest quality. Included is a listing of results from water quality tests that were performed as well as an explanation of where our water comes from and information on how to interpret the data. We have also included a page dedicated to our Sewer Division to give you some information regarding the hazards of grease and the importance of redirecting sump pumps. This “Consumer Confidence Report” is required by law. We’re proud to share our results with you. Please read them carefully.

## Water Source



Braintree Water and Sewer drinking water is supplied by the Great Pond Reservoir System which is a surface water source. Water enters the Upper Reservoir via the Narrowway Brook and feeds the Lower reservoir by gravity where it then enters the Treatment Plant. Richardi Reservoir is a supplemental Reservoir which is fed by the Farm River. When levels at the main reservoir start to drop, water is transferred from the Richardi by pumping it through a 24” dedicated pipeline that runs to back end of the Upper Reservoir.

## Emergency Connections

In the event of an emergency the Town of Braintree has the capability of receive water from Quincy, Weymouth, Randolph, Holbrook, and the MWRA. We are a registered Public Water System and our ID# is 4040000.

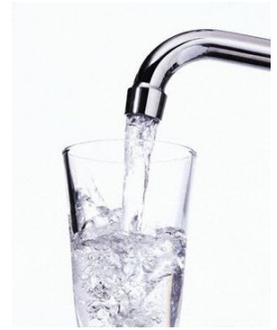
Want to Save \$\$\$\$\$?



Braintree water bills paid before the due date get a \$5.00 Discount!

*“before is before”*

Braintree water quality is better than supermarket bottled water!



Periodically check your toilet for leaks using a dye test. We have these at our Main Office and are free to our customers. Don't let a small leak in your toilet turn into a huge water bill!



### **Braintree Water and Sewer's Drinking Water meets or surpasses all Federal and State Drinking Water Standards**

*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 Town of Braintree 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 the 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>*

#### **How Do I Read This Chart?**

This report is based upon tests conducted in the previous calendar year by Braintree Water & Sewer. Terms used in the Water-Quality Table and in other parts of this report are defined here.

**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.

**Secondary Maximum Contaminant Level:** The level of a contaminant in drinking water that is recommended however is not enforceable.

**Office of Research & Standards Drinking Water Guidelines or ORSGs:** This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

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

**Unit:** Unit of measurement used to analyze a given sample.

**Detected Level:** The highest result recorded for the year.

**Range:** The range of results recorded from lowest to highest for the year.

**Major Sources:** Sources from which listed contaminants originate from.

**Violation:** Lets the consumer know if the Water system is in compliance of State and Federal Drinking Water Regulations.

**Don't let this happen to your  
Sewer Line!**



## SUMP PUMPS

*Never pump surface water into the public sewer!*

*Always pump outside or into the storm drain.*



### **Here is the Solution:**

*Sump pump hoses must be directed away from the public sewer. If you think that you might have a sump pump that discharges into the sewer, call the Braintree Water and Sewer Department at 781-843-8097 for a free inspection. For now, there is an amnesty period where sump pump drains will be rerouted at no charge and no legal penalty to the business or homeowner.*

# SEWER NOTICES

**Please.....DO NOT flush dental floss down the toilet. It clogs our wastewater pumps!**



## Here are Some Ways That You Can Help Prevent Sewer Backups:

1. **Never Pour grease down sink drains, toilets or garbage disposals.**



2. **Pour grease and oil into a covered disposable container and put it in the trash.**



3. **Soak up any remaining fats with paper towels and dispose with your trash.**
4. **Before you wash your dishes scrape any meats and greasy / fatty foods into the trash.**
5. **Put strainers in sink drains to catch food scraps and other solids and empty into the trash.**
6. **Use the garbage disposal for fruits, vegetables, and organic wastes.**

There is a good time and there is a better time to do your laundry. When there is a heavy rain the wastewater system gets near capacity. If you avoid this during times of heavy rain and a few hours afterwards, you are helping Braintree's wastewater system to deal with excess flow. Thank you for NOT adding to the problem and for being selective as to when you do your laundry

# 2023 Water Quality Results

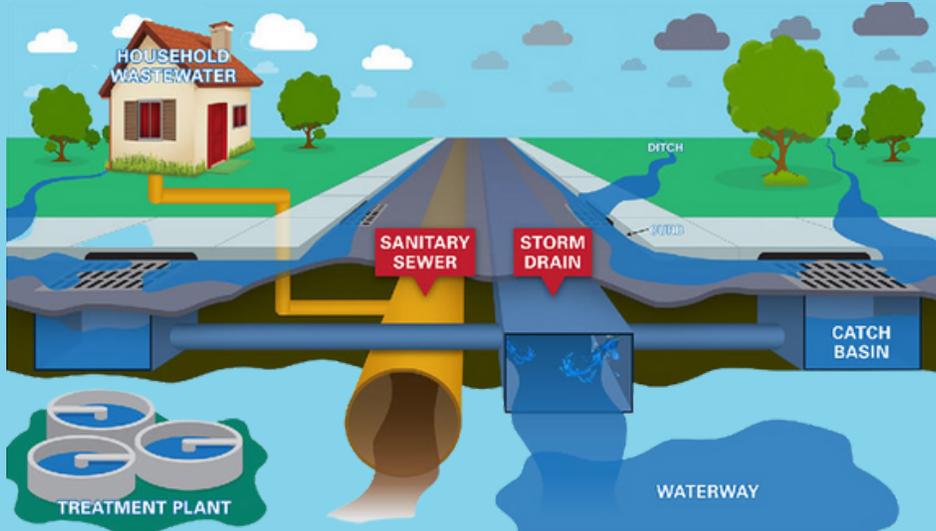
Contaminants	Date Tested	Unit	MCL	MCLG	SMCL	Detected Level	Range	Major Sources	Violation
<b>Inorganic Contaminants</b>									
Sodium	2023	mg/l	N/A	N/A	N/A	99.8	73.8 - 99.8	Chemicals used for highway snow and ice removal	NO
Barium	2023	mg/l	2	<2.0	2	0.025	N/A	Erosion of natural deposits	NO
Nitrate	2023	mg/l	10	<5	N/A	0.07	N/A	Naturally present in water	NO
<b>Volatile Organic Contaminants</b>									
Chloroform	2023	ug/l	N/A	N/A	N/A	4.40	N/A	Erosion of natural deposits	NO
Bromodichloromethane	2023	ug/l	80	N/A	N/A	6.80	N/A	Erosion of natural deposits	NO
Bromoform	2023	ug/l	N/A	N/A	N/A	0.51	N/A	Erosion of natural deposits	NO
Dibromochloromethane	2023	ug/l	N/A	N/A	N/A	4.90	N/A	Erosion of natural deposits	NO
<b>Disinfectants and Disinfection Byproducts</b>									
Trihalomethanes	2023	ug/l	80	<60	N/A	68.0	29-68	Disinfection byproduct	Yes
Haloacetic Acids	2023	ug/l	60	<20	N/A	15.0	5.0-15	Disinfection byproduct	Yes
<b>Secondary Contaminants</b>									
PH	2023	N/A	N/A	>7.0	6.5-8.5	7.95	7.28-7.95	Naturally present in water	NO
Alkalinity	2023	mg/l	N/A	N/A	N/A	30.0	20-30	Naturally present in water	NO
Manganese	2023	mg/l	N/A	<0.05	0.05	0.015	.001 -0.015	Decay of natural and man-made deposits	NO
Sulfate	2023	mg/l	N/A	<20	250	8.2	N/A	Naturally present in water	NO
<b>PFAS</b>									
PFAS6	2023	ppt	20	N/A	N/A	16.56	6.47-16.56	Erosion of man-made deposits	Yes
<b>Lead &amp; Copper Rule</b>									
Lead	2023	mg/l	0.015	<0.015	N/A	0.0359	ND-.0359	Corrosion in household plumbing	NO
Copper	2023	mg/l	1.3	<1.30	N/A	0.0690	ND-0.069	Corrosion in household plumbing	NO
<b>Turbidity Data</b>									
Turbidity	2023	NTU	0.3	<0.30	N/A	0.09	0.04-0.09	Soil Runoff	NO
<b>Misc.</b>									
Total Organic Carbon	2023	mg/l	1	>1.00	N/A	2.7	1.7-2.7	Decay of natural and man-made deposits	NO
Chlorine Residual	2023	mg/l	4	<4.00	N/A	1.42	.82-1.42	Disinfection Chemical	NO
<b>Bacteria</b>									
Total Coliform	2023		0	0	0	0	0	Naturally present in water	NO

Unregulated Contaminants									
Contaminants	Date Tested	Unit	ORSG	MCLG	SMCL	Detected Level	Average Detected	Possible Source	Violation
Nickel (ppb)	2023	mg/l	100	N/A	N/A	<0.001	<0.001	Discharge from domestic wastewater, landfills, and mining and smelting operations	NO
Perfluorobutanesulfonic <sup>1</sup> Acid (PFBS)	2023	ppt	N/A	N/A	N/A	2.77	1.53 - 2.77	Manmade chemical; used in products to make them stain, grease, heat and water resistant	NO
Perfluorohexanoic acid (PFHxA)	2023	ppt	N/A	N/A	N/A	4.15	2.32 - 4.15	Manmade chemical; used in products to make them stain, grease, heat and water resistant	NO
Lead & Copper Rule									
	Date Tested	Units	Ideal Goal MCLG	Action Level	# Homes Exceeding Action Level	Detected Level	Typical Sources in Drinking Water		Violation
Lead	2023	mg/l	0	0.015	2 of 30	0.007	Corrosion in household plumbing		NO
Copper	2023	mg/l	<1.30	1.3	0 of 30	0.055	Corrosion in household plumbing		NO
*The detected level is in compliance with the 90th percentile standard for the Lead and Copper Rule									

# Stormwater and Water Quality

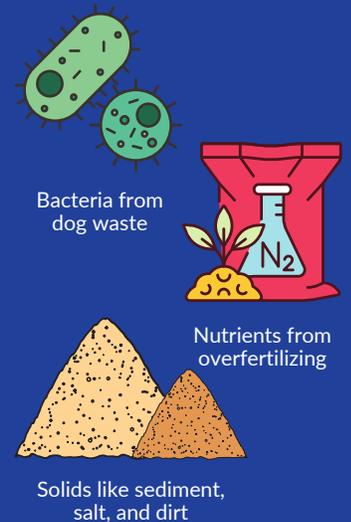
5 things you should know about Braintree's Stormwater and how it effects your water quality

## 1) We have a separate storm system and sewer system



This means that all the water that flows into our storm drains goes **untreated** directly into our waterways.

## 2) The top pollutants in Braintree's waters are...



## 3) One piece of dog waste contains

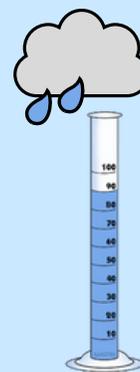


**10.3 billion**

harmful bacteria that flow directly into our waterways if left on the ground!

## 4) After 1 inch of rain...

**748**  
gallons of  
stormwater  
run off a 1,200  
square foot roof



**27,150**  
gallons of  
stormwater  
run off a 1-acre  
parking lot



## 5) You can be a Braintree Stormwater Superhero!

ADOPT  
A STORM  
DRAIN



Join us and other Braintree residents by adopting your own drain today and **help reduce stormwater pollution** and **improve your water quality!**

To learn more about Braintree's stormwater, visit our [website](#) or subscribe to our [newsletter](#) today!

# Explanation of Violations

The Town of Braintree is not in violation of any drinking water regulations during the year of 2022.

In the first quarter of 2023 we have three violation for failure to monitor.

## Required Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

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 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 (800-426-4791)**. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds & reservoirs. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and 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:

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

(B) 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 storage or farming.

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

(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

(E) Radioactive contaminants, which 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is 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 are available from the **Safe Drinking Water Hotline (800)-426-4791**.

For more information about this report please call:

**Braintree Water and Sewer Dept: 781-843-8097**

**James Arsenault, Department of Public Works Director, 781-794-8254**

**Louis R. Dutton, Superintendent of Water and Sewer, 781-794-8943**

Also, please visit our new website located at **[www.braintreema.gov](http://www.braintreema.gov)**

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

## Braintree Water Department Water and Sewer Department Failed to Perform Activities Required to Address Coliform Bacteria Contamination of the Water System

During routine monitoring in September 2023, our water system tested positive for total coliforms. However, due to a miscommunication with the laboratory, we collected a single repeat sample, instead of three repeat samples. Failure to collect all required repeat samples is a Treatment Technique Trigger (TTT). We were required to conduct a Level 1 Assessment by October 5, 2023, but failed to do so, due to the miscommunication with the laboratory. Failure to submit the assessment by the due date constitutes a Treatment Technique Violation.

*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 assessments to identify problems and to correct any problems that are found. We failed to conduct the required assessment by October 5, 2023. In addition, we failed to notify MassDEP of the Treatment Technique Trigger and the Treatment Technique Violation within the required timeframes.*

As our customers, you have a right to know what happened and what we are doing to correct this situation.

### What should I do?

- You do not need to boil your water or take other corrective actions. However, if you have specific health concerns, consult your doctor.
- If you have a severely compromised immune system, are pregnant, or are elderly, you may be at increased risk and should seek advice from your healthcare provider about drinking this water. You should also seek advice from your healthcare provider about using the water if you have an infant. General guidelines on ways to lessen the risk of infection by bacteria and other disease-causing organisms are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

### What does this mean?

Since total coliform bacteria are generally not harmful themselves, this is not an emergency. If it had been you would have been notified within 24 hours. Failure to identify and correct the defects has the potential to cause continued distribution system contamination. Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.

### What is being done?

We completed the required assessment and submitted it to MassDEP on November 2, 2023, along with a Plan to Prevent Future Non-Compliance to ensure that this issue does not reoccur. We have returned to compliance with the Revised Total Coliform Rule. No sanitary defects were found during the assessment. No corrective actions were required by the PWS.

### Where can I get additional information?

If you have questions about your water system's operation, water quality monitoring, or response to this issue, please contact the system operator directly. If you have questions about the drinking water regulations or health risks posed by this contaminant you can contact the MassDEP Drinking Water Program at: [program.director-dwp@mass.gov](mailto:program.director-dwp@mass.gov) or 617-292-5770. If you have questions about specific symptoms, you can contact your doctor or other health care provider. If you have general questions about public health, you can contact the Massachusetts Department of Public Health at 1-617-624-5757.

For more information, please contact Brian Doran at 781-794-8255

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

This notice is being sent to you by Braintree Water and Sewer Department, State Water System ID#: 4040000

Date distributed: November 3, 2023

## CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION

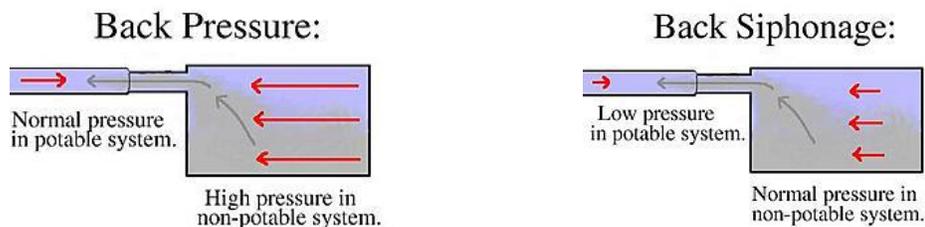
The Braintree Water and Sewer Department makes every effort to ensure that the water delivered to you home and business is clean, safe and free of contamination. Our staff works very hard to protect the quality of the water delivered to our customers from the time the water is withdrawn from our surface water source, throughout the entire treatment and distribution system. But what happens when the water reaches your home or business? Is there still a need to protect the water quality from contamination caused by a cross-connection? If so, how?

### What is a cross-connection?

A cross-connection occurs whenever the drinking water supply is or could be in contact with potential sources of pollution or contamination. Cross-connections exist in piping arrangements or equipments that allowed the drinking water to come in contact with non-potable liquids, solids or gases (hazardous to humans) in event of a backflow.

### What is a backflow?

Backflow is the undesired reverse of the water flow in the drinking water distribution lines. This backward flow of water can occur when the pressure created by an equipment or system such as a boiler or air-conditioning is higher than the water pressure inside the water distribution line (backpressure), or when the pressure in the distribution line drops due to routine occurrences such as water main breaks or heavy water demand causing the water to flow backward inside the water distribution system (backsiphonage). Backflow is a problem that many water consumers are unaware of, a problem that each and every water customer has a responsibility to help prevent.



### What can I do to help prevent a cross-connection?

Without the proper protection something as simple as a garden hose has the potential to contaminate or pollute the drinking water lines in your house. In fact over half of the country's cross-connection incidents involve unprotected garden hoses. There are very simple steps that you as a drinking water user can take to prevent such hazards, they are:

- NEVER submerge a hose in soapy water buckets, pet watering containers, pool, tubs, sinks, drains or chemicals.
- NEVER attached a hose to a garden sprayer without the proper backflow preventer.
- Buy and install a hose bibb vacuum breaker in any threaded water fixture. The installation can be as easy as attaching a garden hose to a spigot. This inexpensive device is available at most hardware stores and home-improvement centers.
- Identify and be aware of potential cross-connections to your water line.
- Buy appliances and equipment with a backflow preventer
- Buy and install backflow prevention devices or assemblies for all high and moderate hazard connections.

If you are the owner or manager of a property that is being used as a commercial, industrial or institutional facility you must have your property's plumbing system surveyed for cross-connection by your water purveyor. If your property has NOT been surveyed for cross-connection, contact your water department to schedule a cross-connection survey.

The Massachusetts Drinking Water Regulations, 310 CMR 22.00, requires all public water systems to have an approved and fully implemented Cross-connection Control Program (CCCP). The Braintree Water and Sewer Department is working diligently to protect the public health of its drinking water customers from the hazardous

caused by unprotected cross-connections through the implementation of its cross-connection survey program, elimination or properly protection of all identified cross-connections, the registration of all cross-connections protected by a reduced pressure backflow preventers (RPBPs) or a double check valve assemblies (DCVAs), and the implementation of a testing program for all RPBPs and DCVAs.

If you have any questions, please contact Louis Dutton at (781)-843-8097.

### Some Examples Where Cross-connections Occur

