



# Braintree Water & Sewer

## 2024 Water Quality Report

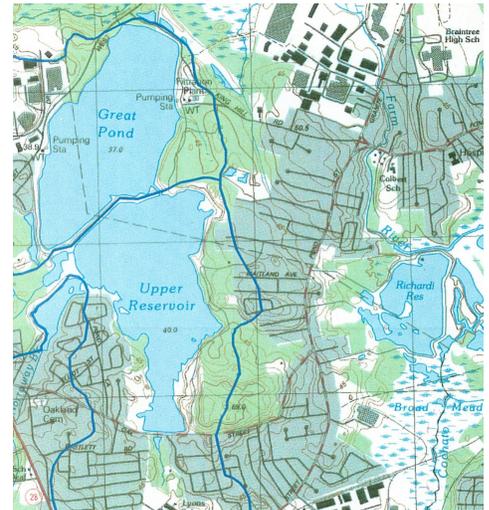
### PWS ID #4040000

Released July 1, 2025

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.

## **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.

**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 requirements 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

**Unregulated Contaminants:** Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted. determine lead and copper compliance.

**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 microbial 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 contamination.

**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 our water system.

**Level 2 Assessment:** A Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and /or why total coliform bacteria have been found in our water system on multiple occasions.

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

**ppb:** parts per billion or micrograms per liter ( $\mu\text{g/L}$ )

**ppt:** parts per trillion

**NTU:** Nephelometric Turbidity Units

**ND:** Not detected

**N/A:** Not applicable

# 2024 Water Quality Results

Contaminants	Unit	Date Tested	Detected Level	Range	MCL	MCLG	SMCL	Violation	Major Sources
<b>Inorganic Contaminants</b>									
Sodium	mg/L	2024	81.5	62.7 - 81.5	N/A	N/A	N/A	NO	Chemicals used for highway snow and ice removal
Barium	mg/L	2024	0.021	N/A	2	<2.0	2	NO	Erosion of natural deposits
Nitrate	mg/L	2024	0.14	N/A	10	<5	N/A	NO	Naturally present in water
<b>Volatile Organic Contaminants</b>									
Chloroform	ug/l	2024	7.40	N/A	N/A	N/A	N/A	NO	Erosion of natural deposits
Bromodichloromethane	ug/l	2024	8.30	N/A	80	N/A	N/A	NO	Erosion of natural deposits
Bromoform	ug/l	2024	ND	N/A	N/A	N/A	N/A	NO	Erosion of natural deposits
Dibromochloromethane	ug/l	2024	4.50	N/A	N/A	N/A	N/A	NO	Erosion of natural deposits
<b>Disinfectants and Disinfection Byproducts</b>									
Chlorine Residual	mg/L	2024	1.37	.96-1.37	4	<4.00	N/A	NO	Disinfection Chemical
Trihalomethanes	ug/l	2024	53.0	0-53	80	<60	N/A	NO	Disinfection byproduct
Haloacetic Acids	ug/l	2024	15.0	0-15	60	<20	N/A	NO	Disinfection byproduct
<b>Secondary Contaminants</b>									
PH	N/A	2024	7.75	7.37-7.75	N/A	>7.0	6.5-8.5	NO	Naturally present in water
Alkalinity	mg/L	2024	36.0	21-36	N/A	N/A	N/A	NO	Naturally present in water
Manganese	mg/L	2024	0.088	.001 -0.088	N/A	<0.05	0.05	NO	Decay of natural and man-made deposits
Total Dissolved Solids	mg/L	2024	200	N/A	N/A	<500	500	NO	Naturally present in water
Chloride	mg/L	2024	120.0	N/A	N/A	<200	250	NO	Decay of natural and man-made deposits
Aluminum	mg/L	2024	0.01	N/A	N/A	<0.1	0.2	NO	Treatment Residual
Calcium	mg/L	2024	13.9	N/A	N/A	<20	N/A	NO	Naturally present in water
Hardness	mg/L	2024	47.8	N/A	N/A	<100	N/A	NO	Decay of natural and man-made deposits

Contaminants	Unit	Date Tested	Detected Level	Range	MCL	MCLG	SMCL	Violation	Major Sources
<b>Secondary Contaminants</b>									
Potassium	mg/L	2024	2.30	N/A	N/A	<10	N/A	NO	Naturally present in water
Magnesium	mg/L	2024	3.17	N/A	N/A	<7	N/A	NO	Naturally present in water
Iron	mg/L	2024	0.01	N/A	N/A	<0.3	N/A	NO	Naturally present in water
Sulfate	mg/L	2024	6.4	N/A	N/A	<20	250	NO	Naturally present in water
<b>PFAS</b>									
PFAS6	ppt	2024	18.26	9.53-18.26	20	N/A	N/A	NO	Erosion of man-made deposits
<b>Lead &amp; Copper Rule</b>									
Lead	mg/L	2024	0.0271	ND-.0271	0.015	<0.015	N/A	NO	Corrosion in household plumbing
Copper	mg/L	2024	0.10	0.008-0.10	1.3	<1.30	N/A	NO	Corrosion in household plumbing
<b>Turbidity Data</b>									
Turbidity	NTU	2024	0.03	0.03-0.12	<0.30	N/A	N/A	NO	Soil Runoff
<b>Contaminant</b>									
Total Organic Carbon	mg/L	2024	2.6	1.3-2.6	TT	>1.00	N/A	NO	Decay of natural and man-made deposits
<b>Bacteria</b>									
Total Coliform		2024	0	0	0	0	0	NO	Naturally present in water
<b>Lead &amp; Copper Rule</b>									
	Units	Date Tested	90th Percentile	Action Level	Ideal Goal MCLG	# of sites sampled	# of sites above AL	Range	Typical Sources in Drinking Water
Lead	mg/l	2024	0.0068	0.015	0	30	1	0 - 0.0271	Corrosion in household plumbing
Copper	mg/l	2024	0.067	1.3	<1.30	30	0	0.008 - 0.10	Corrosion in household plumbing
*The detected level is in compliance with the 90th percentile standard for the Lead and Copper Rule									
There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.									

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

## **Educational Statements**

1. 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).
2. 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. 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 byproducts 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 be the result of oil and gas production and mining activities.
3. 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/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 (1-800-426-4791).
4. In order to ensure that tap water is safe to drink, EPA and MassDEP prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. FDA and Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health).
5. 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. Braintree Water & Sewer Dept. is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in

plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Braintree Water & Sewer Dept. at 781-843-8097. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

6. 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. Braintree Water & Sewer Dept. 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 the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water 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, 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 your water tested, contact Braintree Water & Sewer Dept. at 781-843-8097. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>

Check out [www.braintreema.gov/1259/Lead-and-Copper-Rule](http://www.braintreema.gov/1259/Lead-and-Copper-Rule) for more information.

**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.



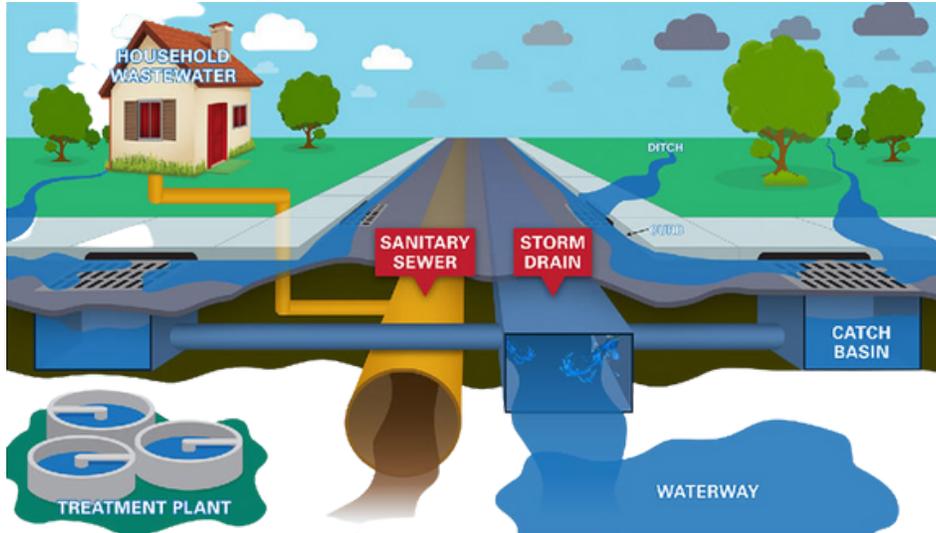
3. Soak up any remaining fats with paper towels and dispose with your trash.
4. Before you wash your dishes scrape any meats and greasy / fatty foods into the trash.
5. Put strainers in sink drains to catch food scraps and other solids and empty into the trash.
6. Use the garbage disposal for fruits,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

# Stormwater and Water Quality

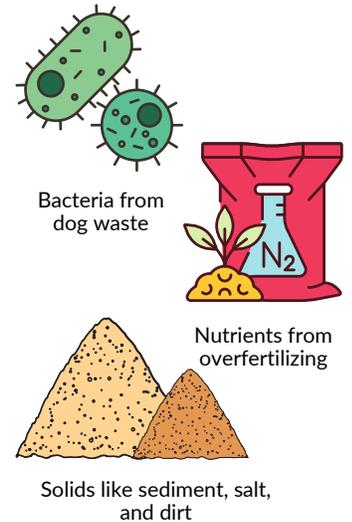
5 things you should know about Braintree's Stormwater and how it effects your water quality

## 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

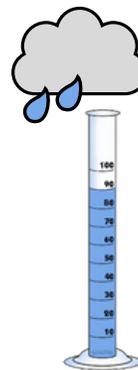


**10.3 billion**

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!

## CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION

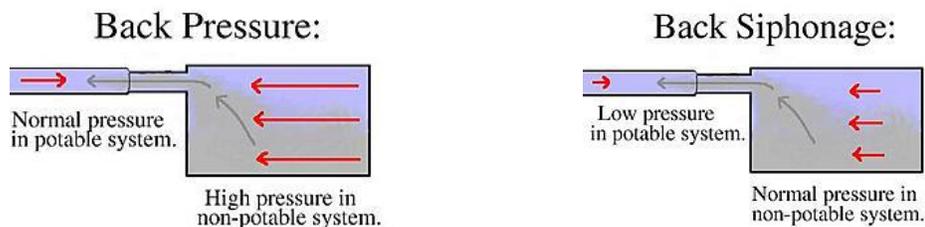
The Braintree Water and Sewer Department makes every effort to ensure that the water delivered to you home and business is clean, safe and free of contamination. Our staff works very hard to protect the quality of the water delivered to our customers from the time the water is withdrawn from our surface 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.

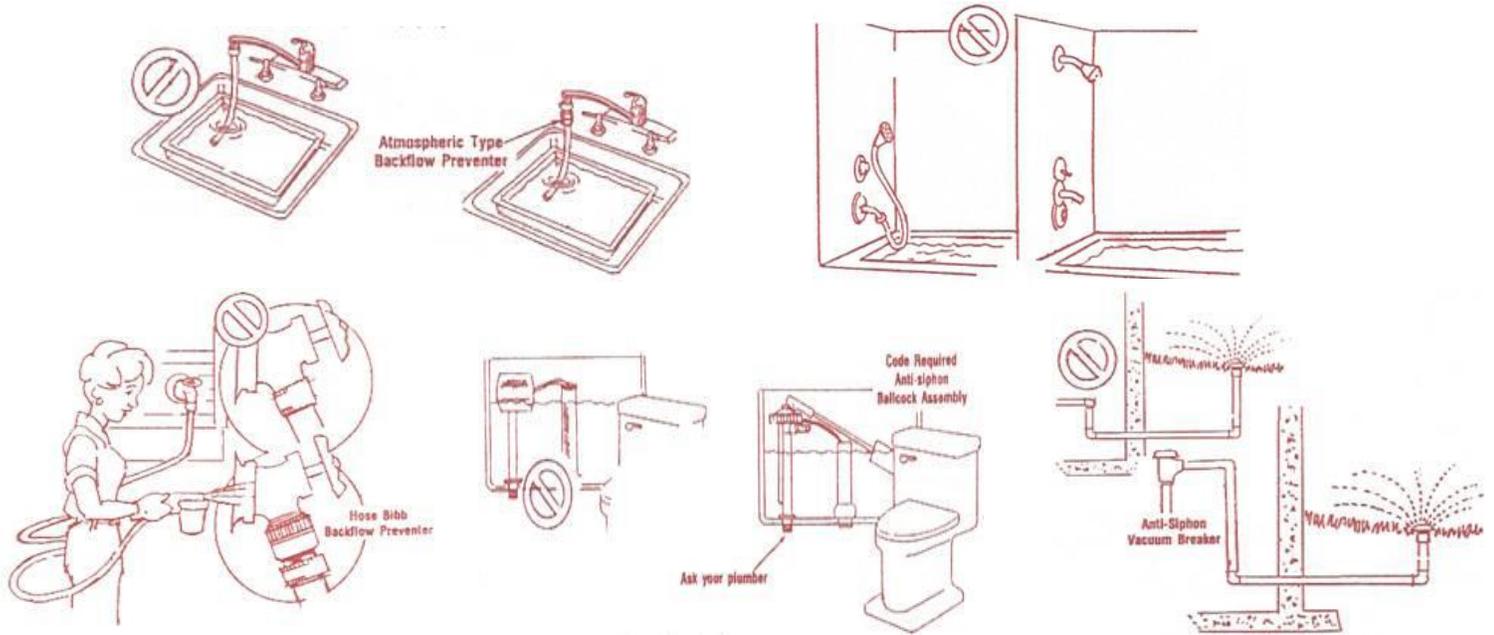
If you are the owner or manager of a property that is being used as a commercial, industrial or institutional facility you must have your property's plumbing system surveyed for cross-connection by your water purveyor. If your property has NOT been surveyed for cross-connection, contact your water department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



### Dye Test

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!

