

2017 Consumer Confidence Report

For

“Marlborough DPW” Water Division

Marlborough, Massachusetts

MASSDEP PWSID # 2170000

This report is a snapshot of the drinking water quality provided by the City of Marlborough for calendar year 2017. Included in this report are details regarding the source of the drinking water, its makeup, and how it compares to state and federal standards. Safe drinking water is vital to the health of our community. Please read this report carefully and if you have any questions please call the phone number listed below.

PUBLIC WATER SYSTEM INFORMATION

Address: 135 Neil Street

Contact Person: Gerry Ouillette, General Foreman-Water and Sewer Division

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email gouillette@marlborough-ma.gov

Internet Address: www.marlborough-ma.gov

Public Water System

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP). MassDEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to you. To ensure that we provide the highest quality of water available, the City of Marlborough’s drinking water system is operated by Massachusetts Distribution and Treatment certified operators who oversee the day to day operations of our system.

The Marlborough DPW Water Division maintains approximately 180 miles of water mains, more than 1500 fire hydrants, and 3 storage tanks. We maintain the system through leak detection, repairs to water main breaks, water main replacements, water main flushing, maintaining and replacing hydrants, as well as responding to the needs and concerns of our residents. We conduct a thorough water sampling and testing program to meet all State and Federal requirements. We also maintain an active Cross Connection Control Program, continuously surveying (inspecting) facilities and testing devices to protect the water system from contamination.

WATER SYSTEM COMPLIANCE INFORMATION

The “Marlborough DPW” Water Division maintained full compliance with all State and Federal regulatory agencies throughout 2017.

YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

100 percent of the drinking water for 2017 was supplied by the Massachusetts Water Resources Authority (MWRA). In 2017, the City of Marlborough used 1.47 billion gallons of water with an average of 4 million gallons a day.

IMPORTANT DEFINITIONS

Maximum Contaminant Level (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 (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.

90th Percentile – Out of every 10 homes sampled, 9 were at or below this level.

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

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.

Massachusetts Office of Research and Standards Guideline (ORSG) – 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.

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

Running Annual Average (RAA) – The average of four consecutive quarter of data.

- ppm = parts per million, or milligrams per liter (mg/l)
- ppb = parts per billion, or micrograms per liter (ug/l)
- ND = Not Detected
- N/A = Not Applicable

WATER QUALITY TESTING RESULTS

	Date Collected	90th Percentile	Action Level	MCLG	Number of sites sampled	Number of sites above Action Level	Possible Source of Contamination
Lead (ppb)	1/4/2017-1/18/2017	6.3	15	0	60	3	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1/4/2017-1/18/2017	0.071	1.3	1.3	60	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

	Date Collected	90th Percentile	Action Level	MCLG	Number of sites sampled	Number of sites above Action Level	Possible Source of Contamination
Lead (ppb)	8/29/2017-9/13/2017	11.4	15	0	60	4	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	8/29/2017-9/13/2017	0.093	1.3	1.3	60	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Bacteria	MCL/TT	MCGL	Value	Date	Violation (Y/N)	Possible Sources
Total Coliform Bacteria	None	0	Positive		N	Human and animal fecal waste

Disinfectants and Disinfection By-Products							
Regulated Contaminant	Date Collected	Highest quarterly running annual average	Range	MCL	MCLG	Violation Y/N)	Possible Source
Total Trihalomethanes (TTHMs) (ppb)	Quarterly in 2017	11	3.0 to 18	80	N/A	No	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	Quarterly in 2017	14	8.1 to 22	60	N/A	No	Byproduct of drinking water chlorination
Chlorine (total)	Monthly in 2017	2.37	2.19 to 2.65	4	4	No	Water additive used to control microbes

Secondary Contaminants (Entry Point)

Secondary Contaminants	Date Collected	Result	SMCL	ORSG	Possible Source
Aluminum (ppm)	11/27/2017	0.0162	0.2	0.2	Residue from water treatment process; erosion of natural deposits
Chloride (ppm)	11/27/2017	35.6	250	250	Runoff and leaching from natural deposits and road salt
Color (C.U.)	11/27/2017	20	15	N/A	Naturally occurring organic material
Copper (ppm)	11/27/2017	.0043	1	N/A	Naturally occurring organic material
Iron (ppm)	11/27/2017	<0.0500	0.3	N/A	Naturally occurring, corrosion of cast iron pipes
Manganese (ppb)	11/27/2017	12.3	50	Health Advisory of 300	Natural sources as well as discharges from industrial uses
Odor (T.O.N.)	11/27/2017	1	3	N/A	Erosion of natural deposits; Leaching from wood preservatives
pH	11/27/2017	9.39	6.5 to 8.5	N/A	Increased for corrosion control
Silver (ppb)	11/27/2017	1	100	N/A	Erosion of natural deposits
Sulfate (ppm)	11/27/2017	<25.0	250	N/A	Runoff and leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	11/27/2017	114	500	N/A	Erosion of natural deposits
Zinc (ppm)	11/27/2017	0.119	5	N/A	Erosion of natural deposits, leaching from plumbing materials

CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION

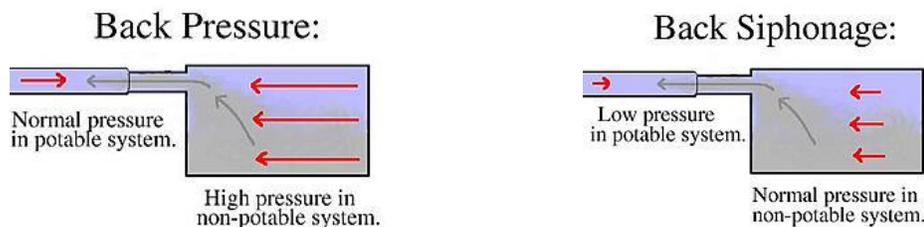
The Marlborough DPW Water Division makes every effort to ensure that the water delivered to your home and business is clean, safe and free of contamination. Our staff works very hard to protect the quality of the water delivered to our customers from the time the water is extracted via deep wells from underground aquifers or withdrawal point from a 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 equipment that allows 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 equipment or a system such as a boiler or air-conditioning is higher than the water pressure inside the water distribution line (back pressure), 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 (back siphonage). 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 backflow preventers.
- 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.

LEAD SERVICE LINE REPLACEMENT PROGRAM

The City is currently taking part in the MWRA loan program over the next 5 years and replacing Lead Service Lines (LSL) throughout Marlborough. For more information regarding lead in the drinking water and if your property has a LSL, please visit the Water and Sewer Division's web page at www.marlborough-ma.gov and then navigate to the Water and Sewer Division.

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 Marlborough DPW Water Division 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 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>.