



MA DEP PWS 2021000

Town of Barre 2023 Consumer Confidence Report

Department of Public Works
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What is a Consumer Confidence Report?

The purpose of this report is to keep *you*, the consumer, informed about the quality of your drinking water. Included are details about where your water comes from, what it contains and also how your drinking water compares to state and federal standards.

“We are committed to providing you with this information because we believe that informed customers are our best allies.”

Water System News

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, your water system is operated by Eric Qualters, a Massachusetts certified operator. Alongside Eric, is Assistant Chief Water Operator, Christopher Chabot. The team oversees routine operations of our system. As part of our ongoing commitment to you, we made the following improvements and/or changes to our system in the past year:

- Water Main leaks were located and repaired on: Austin Street, Kendall Street, North Brookfield Road, Summer Street and Wheelwright Road (2).

Opportunities for Public Participation

What better way to ensure that your water system is running smoothly than to get directly involved? The Barre Water Department invites you to participate in discussions regarding your water quality by attending a **Water Commission Meeting**.

Water Commission Meetings are held on the second Monday of every month at 6:30PM. They are located in the DPW Building, at 441 Wheelwright Rd. Barre, MA 01005. (Water Commissioners – Ronald Higgins, Ronald Hosley and John Pimental)

Can’t make it to a meeting? Let us know if you have questions or concerns. We can be contacted via email at: dpw@townofbarre.com or by telephone: 978-355-5013. The DPW Office hours are: Monday through Thursday 6:30 am to 3:00 pm.

More information can be found on The Town of Barre website: www.townofbarre.com. (Click: Government/Public Works/Water Division)

Where Does My Drinking Water Come From?

The Town water is produced by three ground water, gravel packed wells. The wells are:

Well#1 (2021000-01G)- located at 570 South Barre Road

Well#2 (2021000-02G)- located at 257 South Barre Road

Well#3 (2021000-03G)- off of Oakham Road

Is My Water Treated?

Yes. Our water team makes every effort to provide you with safe and pure drinking water. The water quality of our system is continually monitored by our team and by the MassDEP, to determine the effectiveness of our water treatment and to determine if any additional treatment is required. The treatment of your water is necessary, in avoiding the presence of contaminants.

What chemicals are used in the treatment of your water system?

- **Potassium Hydroxide** is added to increase the pH, which reduces lead and copper concentrations.
- **CP767D** is added to reduce levels of iron and manganese.
- **Sodium Hypochlorite**, a disinfectant, is added to protect you against microbial contaminants.

How Are These Sources Protected?

The Department of Environmental Protection (MassDEP) has prepared a Source Water Assessment Program (SWAP) Report for the water supply source(s) serving this water system. The SWAP Report assesses the susceptibility of public water supplies. A susceptibility ranking of **high** was assigned to this system. The report recommends that we inspect Zone I regularly and when feasible, remove any non-water supply activities. It also recommends that we educate residents on ways they can help to protect our drinking water sources, work with emergency response teams to ensure that they are aware of storm water drainage, monitor progress on any ongoing remedial action conducted for known oil and/or contamination sites.

The complete SWAP report for the Town of Barre is available at the DPW Office and online at: <https://www.mass.gov/doc/central-region-source-water-assessment-protection-swap-program-reports-0/download>

How can you help?

Residents can help protect sources by practicing good septic system maintenance, supporting water supply protection initiatives at the next town meeting, taking hazardous household chemicals to hazardous materials collection days, contacting the Water Department or Board of Health to volunteer for monitoring or education outreach to schools, limiting pesticide and fertilizer use etc.

Educational Information

- 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 from their health care providers. Environmental Protection Agency (EPA)/Centers for Disease Control and Prevention (CDC)

- Guidelines on appropriate means to lessen the risk of infection of cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).
- 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 Barre Water Department 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Sources of Drinking Water and Drinking Water Contaminants

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 left behind by the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contamination. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effect can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Contaminants 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, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and farming.
- **Pesticides and herbicides**, that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants**, that 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, the Department of Environmental Protection (MassDEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Water Quality Testing Results

The water quality information presented in the table(s) below is from the most recent round of testing done in accordance with regulations. All data shown was collected during the last calendar year, unless otherwise noted in the table(s).

The Barre Water Dept. has been given Monitoring Waivers from MassDEP for Volatile Organic Contaminants, Inorganic Contaminants, and Arsenic at Wells # 1 and 3. In addition we have a waiver for Perchlorate at all three wells because the source is not at risk of contamination. The last samples collected for these contaminants were found to meet all applicable US EPA and MassDEP standards.

Key:
mrem/year = milliremms per year (a measure of radiation absorbed by the body) **N/A** = Not Applicable
ND = Not Detected **pCi/l** = picocuries per liter (a measure of radioactivity)
ppb = parts per billion, or micrograms per liter (ug/l) **ppm** = parts per million, or milligrams per liter (mg/l)
ppt = parts per trillion, or nanograms per liter

	Date(s) Collected	90 TH percentile	Action Level	MCLG	# Of sites sampled	# Of sites above Action Level	Possible Source of Contamination
Lead (ppb)	09/27/2022	1.1	15	0	21	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	09/27/2022	0.3	1.3	1.3	21	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

2022	Highest # Positive / month	MCL	MCLG	Violation Y/N	Source of Contamination
Total Coliform	4	1	0	Y	Naturally present in the environment
Fecal/E. Coli	0	0	0	N	Human and animal fecal waste

Regulated Contaminant	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Inorganic Contaminants							
Radium 226 & 228 (pCi/L) (combined values)	05/14/2018	0.57	.11-.57	5	0	N	Erosion of natural deposits
Gross Alpha (pCi/L)	4/21/2021	2.3	--	15	--	N	Erosion of natural deposits
Barium (ppm)	05/06/2021	.015	ND-.015	2	--	N	Erosion of natural deposits

Regulated Contaminant	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Disinfection Contaminants							
Haloacetic Acids (HAA5s) (ppb)	8/07/2023	ND	--	60	--	N	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	8/07/2023	2.2	--	80	--	N	Byproduct of drinking water chlorination
Chlorine(ppm)-2023	Monthly	0.90	0.00-0.90	4	--	N	Byproduct of drinking water chlorination

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

Unregulated and Secondary Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Inorganic Contaminants						
Sodium (ppm)	04/13/2021	10.8-26.3	19.6	--	20	Natural sources; runoff from use as salt on roadways; by-product of treatment process
Secondary Contaminants						
Iron (ppm)	04/03/2023	.106-8.37	2.83	300	--	Naturally occurring, corrosion of cast iron pipes
Manganese (ppm)	04/03/2023	.06-.12	0.06	50*	300	Erosion of natural deposits

* The EPA has established a lifetime health advisory (HA) value of 0.3 mg/L for manganese to protect against concerns of potential neurological effects, and a one-day and 10-day HA of 1 mg/L for acute exposure.

MassDEP Compliance Report:

The Barre Water Department is committed to providing you with the best water quality available. We are proud to report that last year your drinking water met all applicable health standards regulated by the state and federal government.

Health Effects Statements

- **Sodium** sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the sodium levels where exposures are being carefully controlled.
- **Manganese** – EPA has established a lifetime health advisory (HA) value of 0.3 ppm for manganese to protect against concerns of potential neurological effects, and a One-day and 10-day HA of 1 ppm for acute exposure. However, it is advised that for infants younger than 6 months, the lifetime HA of 0.3 ppm be used even for an acute exposure of 10 days.

Cross Connection Control Program / Backflow Device Inspections

Per the Massachusetts drinking water regulations, an approved public water supply may not be connected to an *unapproved* supply, such as a private well. A connection of that nature is considered an illegal cross connection. A cross connection occurs whenever the drinking water supply is or could be in contact with potential source of pollution or contamination. Cross-connections exist in piping arrangement or equipment that allows the drinking water to come in contact with non-potable liquids, solids or gases in event of a backflow. Backflow is the undesired reverse of the water flow in the drinking water distribution lines. Backflow is a problem that many water consumers are unaware of. You can receive water from a private well or from a public water supply – but **not** both, unless the two sets of pipes are kept completely separate. Cross Connections expose the public water supply to potential contamination. The Barre Water Department utilizes Toomey Water Service to assist with inspections and reporting requirements.

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.

- NEVER submerge a hose in soapy water buckets, pet watering containers, pool, tubs, sinks, drains or chemicals.
- NEVER attach a hose to a garden sprayer without the proper backflow preventer.
- Buy and install a hose bib vacuum breaker on 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

Water Use Mandatory Restrictions – Annually, May through September

Due to our Mass DEP Water Withdrawal Permit stipulations, we must restrict non-essential outdoor water use between May 1st and September 30th. Outdoor water use will be permitted on Tuesday's and Thursdays, after 5:00 p.m. using a hand-held hose only.

Non-essential uses include: Irrigation of lawns, washing of vehicles other than for safety, washing exterior building surfaces, parking lots, driveways, sidewalks (except as necessary to apply paint, preservatives, stucco, pavement or concrete).

Water Conservation Tips

- When washing dishes by hand, don't let the water run while rinsing.
- Some refrigerators, air conditioners and ice-makers are cooled with wasted flows of water. Consider upgrading with air-cooled appliances for significant water savings.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Use the garbage disposal sparingly. Compost vegetable food waste instead and save gallons every time.
- Monitor your water bill for unusually high usage. Your bill and water meter are tools that can be used to discover leaks.
- We're more likely to notice leaks indoors, but don't forget to check outdoor faucets, sprinklers and hoses for leaks.
- When buying new appliances, consider those that offer cycle and load size adjustments. They're more water and energy efficient.
- Upgrade older toilets with water efficient models.

Glossary of Terms

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

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

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.

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.

Maximum Residual Disinfectant Level (MRDL) -- The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) 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 (chlorine, chloramines, chlorine dioxide) below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

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

Variations and Exemptions – State or EPA permission not to meet an MCL, or a treatment technique under certain conditions.