



2023 Consumer Confidence Report

Your Annual Drinking Water Quality Information

HOUSATONIC WATER WORKS

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Massachusetts Department of Environmental Protection
Public Water Supply ID #1113003

This report provides a snapshot of the drinking water quality that was achieved last year. Included are details about where your water comes from, what it contains and how its quality compares to state and federal standards. We are committed to providing you with information because informed customers are our best allies.

PUBLIC WATER SYSTEM INFORMATION

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP) 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 a Massachusetts certified operator who oversees the routine operations of our system. A treatment process that includes filtration and disinfection is also provided. Reservoir water is directed through slow sand filters and then a controlled amount of sodium hypochlorite is added and mixed in a contact time basin. This maze-like structure mixes the chlorinated water and provides treatment over time that helps ensure complete disinfection of the drinking water. In 2023 HWWC upgraded the water treatment system to allow for two-stage chlorination with the goal of reducing the formation of disinfection byproducts such as HAA's and THM's. Our last Sanitary Survey conducted by the MA DEP was completed on October 6, 2023. The findings on this inspection list a potential for lower pressures in the event water would be needed for fire flows. We have conducted a hydraulic study that recommends installing an additional storage tank in the Village Center to address this issue.

YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Housatonic Water Works water comes from the surface water source, Long Pond Reservoir and is located southwest of the Village of Housatonic. Long Pond has a surface area of 115 acres and storage capacity of 263 million gallons. The source is designated by MassDEP Source Name and ID Source Number as: Long Pond [1113003-01S]. The water system supplies approximately 824 service connections and serves a population of approximately 1300 people. Great Barrington Fire District's Water system can be used in emergencies.

How are These Sources Protected?

A Source Water Assessment (SWAP) Report for our water supply source has been prepared by MA DEP and lists its susceptibility to contamination. A susceptibility ranking of "moderate" was assigned based on land use characteristics. For example, the absence of hydrogeological barriers that can prevent potential contaminant migration from the surface is a noted concern. Typical agricultural, commercial, industrial, and residential uses can also contribute to potential vectors for contamination. This report is available online at <https://www.mass.gov/service-details/the-source-water-assessment-protection-swap-program>

IMPORTANT HEALTH 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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800)-426-4791.

COMPLIANCE WITH REGULATIONS

Does Drinking Water Meet Current Health Standards?

We are committed to providing you with the best water quality available. Last year we conducted hundreds of water tests for over 80 contaminants. While nearly all of these tests showed that our water quality meets or exceeds MassDEP and EPA standards, there were instances of violations which are described below or visit the EPA website at:

<http://www.epa.gov/enviro/facts/sdwis/search.htm>

During our quarterly testing for Haloacetic Acids (HAA5) it was determined that our levels exceeded the maximum contaminant level (MCL) Quarters 3 of this year. MassDEP has set the MCL for HAA5 at 60ppb. Our testing showed an elevated (HAA5) results of 64.1ppb (North Plain Road) for the sample collected on 8/7/2023.

The Company has worked with engineers and MassDEP to correct the HAA5 issue. A new 2-stage chlorine disinfection process was installed in 2023 and has proven effective in controlling disinfection byproducts. The process will be monitored in the upcoming years for continued control of byproduct formation, while maintaining compliance with disinfection requirements, and preventing bacteria within the distribution system.

SUBSTANCES FOUND IN TAP WATER

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.

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 stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and 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 can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants - which can be naturally occurring or be the result of oil and gas production and mining activities.

WATER QUALITY TESTING RESULTS

The following water quality tables show the most recent water quality testing results where levels were detected and compares those levels to standards set by the Environmental Protection Agency and Massachusetts Environmental Protection Agency.

MassDEP has reduced the monitoring requirements for Inorganic Contaminants (IOCs), and Synthetic Organic Contaminants (SOCs) because the source is not at risk of contamination. The last sample was collected on 7/12/2023 for Perchlorate, 7/14/2021 for IOC contaminants, 6/1/2021 for SOCs, 10/30/2023 for Volatile Organic Compound (VOCs), and 7/28/2022, for PFAS6 all were found to meet all applicable US EPA and MassDEP standards. The water quality information presented in the tables is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table. With the exception of those compounds noted on the tables, reported undetectable levels.

DEFINITIONS

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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 expected risk to health. MCLG's 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.

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

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

Unregulated Contaminants - Contaminants for which EPA has not established drinking water standards. The purpose is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

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.

Massachusetts Office of Research and Standards Guidelines (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.

Regulated Contaminant	Date(s) Collected	Highest Result or Running Annual Average ²	Range Detected	MCL	MCLG	Violation (Yes/No)	Possible Source(s) of Contamination
INORGANIC CONTAMINANTS							
<i>Perchlorate (ppb)</i>	<i>7/12/2023</i>	<i>0.074</i>	<i>N/A</i>	<i>2</i>	<i>N/A</i>	<i>No</i>	<i>Rocket propellants, fireworks, munitions, flares, blasting agents.</i>
<i>Nitrate (ppm)</i>	<i>7/12/2023</i>	<i>0.138</i>	<i>N/A</i>	<i>10</i>	<i>10</i>	<i>No</i>	<i>Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits</i>
DISINFECTANTS AND DISINFECTION BY-PRODUCTS							
<i>Chlorine Residual (ppm)</i>	<i>Daily</i>	<i>1.1²</i>	<i>0.63-2.3</i>	<i>4</i>	<i>4</i>	<i>No</i>	<i>Byproduct of drinking water chlorination</i>
<i>Total Trihalomethanes (TTHMs) (ppb)</i>	<i>Quarterly (2 Locations)</i>	<i>52</i>	<i>30.2-75.2</i>	<i>80</i>	<i>N/A</i>	<i>No</i>	<i>Byproduct of drinking water chlorination</i>
<i>*Some 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.</i>							
<i>Haloacetic Acids (HAA5) (ppb)</i>	<i>Quarterly (2 Locations)</i>	<i>50</i>	<i>35-65.1</i>	<i>60</i>	<i>N/A</i>	<i>No</i>	<i>Byproduct of drinking water disinfection</i>
<i>*While the average for the year did not exceed the MCL at the North Plain Road sample site, there was one individual violation in August. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.</i>							

Contaminant (units)	Dates Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source(s) of Contamination
UNREGULATED AND SECONDARY CONTAMINANTS						
<i>Sodium (ppm)</i>	<i>7/12/2023</i>	<i>8.39</i>	<i>N/A</i>	<i>N/A</i>	<i>20</i>	<i>Natural Sources, runoff from use of salt on roadways, byproduct of water treatment process.</i>
<i>Chloroform (ppb)</i>	<i>Quarterly</i>	<i>25-54.4</i>	<i>41.1</i>	<i>N/A</i>	<i>70</i>	<i>Trihalomethane; by-product of drinking water chlorination</i>
<i>Some people who drink water containing chloroform at high concentrations for many years could experience liver and kidney problems and may have an increased risk of cancer.</i>						
<i>Bromodichloromethane (ppb)</i>	<i>Quarterly</i>	<i>4.61-9.57</i>	<i>6.18</i>	<i>N/A</i>	<i>N/A</i>	<i>Trihalomethane; by-product of drinking water chlorination</i>
<i>Some people who drink water containing bromodichloromethane at high concentrations for many years could experience liver and kidney problems.</i>						

LEAD AND COPPER – Q2 (April 2023) and Q4 (December 2023)						
Contaminant (units)	Action Level	90 th Percentile	Number of Sites Sampled	Number of sites above the Action Level	Possible Sources of Contamination	Violation (Yes/No)
<i>Lead (ppb)</i>	<i>15</i>	<i>Q2 – ND Q4 – ND</i>	<i>Q2 -20 Q4 - 20</i>	<i>Q2 – 0 Q4 - 0</i>	<i>Corrosion of household plumbing</i>	<i>No</i>
<i>Copper (ppm)</i>	<i>1.3</i>	<i>Q2 – 0.103 Q4 – 0.0145</i>	<i>Q2 -20 Q4 - 20</i>	<i>Q2 – 1 Q4 - 0</i>	<i>Corrosion of household plumbing</i>	<i>No</i>

Turbidity	TT	Lowest monthly % of Samples	Highest Detected Daily Value	Violation	Possible Sources of Contamination
Daily Compliance (NTU)	5	N/A	0.48	No	Soil Runoff
Monthly Compliance*	At least 95%	100%	N/A	No	
<i>Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and filtration effectiveness.</i>					
<i>*Monthly turbidity compliance is related to a specific treatment technique (TT). Our system filters the water so at least 95% of our samples each month must be below the turbidity limits specified in the regulations.</i>					

HEALTH NOTES

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. Housatonic Water 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>.

Cross connections are potentially hazardous situations for public or private potable water supply and a source of potable water contamination. A cross connection is any potential or actual physical connection between potable water supply and any source through which it is possible to introduce any substance other than potable water into the water supply. Common cross connection scenarios are a garden hose whose spout is submerged in a bucket of soapy water or connected to a spray bottle of weed killer.

Cross connections between a potable water line and a non-potable water system or equipment have long been a concern of the Department of Environmental Protection (MA DEP). MA DEP established regulations to protect the public health of water consumers from contaminants due to back-flow events. The installation of back-flow prevention devices, such as a low-cost hose bib vacuum breaker, for all inside and outside hose connections is recommended. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your community. For additional information on cross connections and on the status of your water system's cross connection program, please contact Jim Mercer.



Residents can help protect sources by:

-) practicing good septic system maintenance,
-) supporting water supply protection initiatives
-) proper disposal of hazardous materials
-) volunteer for monitoring or education outreach
-) limit pesticide, fertilizers, or other chemical use

We encourage customer participation and hold bi-annual public information meetings relating to water quality. If you have any questions, please don't hesitate to contact us.



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