



2024 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. All compliance tasks have been completed.

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 accessed in an emergency.

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 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).

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) Quarter 1 of this year. MassDEP has set the MCL for HAA5 at 60ppb. Our testing showed an elevated (HAA5) results of 72.5 ppb (North Plain Road) and 78.5 ppb (Depot Road) for the samples collected on 2/13/2024. The results of HAA5 samples taken since this exceedance have fallen within legal limits.

The Company has worked with engineers and MassDEP to correct the HAA5 issue. The new 2-stage chlorine disinfection process 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

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:

- **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, or 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 byproducts 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, 7/24/2024 for Radioactive Contaminants, 7/24/2024 for Sodium, 10/30/2023 for Volatile Organic Compounds (VOCs), and 4/10/2024 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.

A water samples collected on July 24, 2024 showed manganese levels of 0.74 mg/L, which is in excess of the Massachusetts Department of Environmental Protection (MassDEP) advisory level. We will continue to monitor for manganese, work to lower the manganese concentrations and work with the MassDEP to keep you informed of all current information on this issue. For more information regarding the Manganese exceedance and its effect on health, see the informational statement found in the "UNREGULATED AND SECONDARY CONTAMINANTS" chart below.

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							
Perchlorate (ppb)	7/12/2023	0.074	N/A	2	N/A	No	Rocket propellants, fireworks, munitions, flares, blasting agents.
Nitrate (ppm)	7/12/2023	0.138	N/A	10	10	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
DISINFECTANTS AND DISINFECTION BY-PRODUCTS							
Chlorine Residual (ppm)	Daily	1.12	.8-1.5	4	4	No	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	Quarterly (2 Locations)	34.286	0.52-85.5	80	N/A	No	Byproduct of drinking water chlorination
*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.							
Haloacetic Acids (HAA5) (ppb)	Quarterly (2 Locations)	28.094	1.69-78.5	60	N/A	No	Byproduct of drinking water disinfection
*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.							

Contaminant (units)	Dates Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source(s) of Contamination
UNREGULATED AND SECONDARY CONTAMINANTS						
Sodium (ppm)	7/24/2024	8.4	N/A	N/A	20	Natural Sources, runoff from use of salt on roadways, byproduct of water treatment process.
Chloroform (ppb)	Quarterly	34.5-75.8	53.6	N/A	70	Trihalomethane; by-product of drinking water chlorination
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.						
Bromodichloromethane (ppb)	Quarterly	4.08-8.87	6.11	N/A	N/A	Trihalomethane; by-product of drinking water chlorination
Some people who drink water containing bromodichloromethane at high concentrations for many years could experience liver and kidney problems.						
Manganese ** (ppb)	Monthly	ND-74	3.2	50	300	Naturally occurring, corrosion of cast iron pipes
<p>Manganese is a naturally occurring mineral found in rocks, soil, groundwater, and surface water. Manganese is necessary for proper nutrition and is part of a healthy diet, but can have undesirable effects on certain sensitive populations at elevated concentrations. The United States Environmental Protection Agency (EPA) and MassDEP have set an aesthetics-based Secondary Maximum Contaminant Level (SMCL) for manganese of 50 ug/L (microgram per liter), or 50 parts per billion. In addition, MassDEP's Office of Research and Standards (ORS) has set a drinking water guideline for manganese (ORSG), which closely follows the EPA public health advisory for manganese. Drinking water may naturally have manganese and, when concentrations are greater than 50 ppb, the water may be discolored and taste bad. Over a lifetime, the EPA recommends that people drink water with manganese levels less than 300 ppb and over the short term, EPA recommends that people limit their consumption of water with levels over 1000 ppb, primarily due to concerns about possible neurological effects. Children younger than one year old should not be given water with manganese concentrations over 300 ppb, nor should formula for infants be made with that water for more than a total of ten days throughout the year. The ORSG differs from the EPA's health advisory because it expands the age group to which a lower manganese concentration applies from children less than six months of age to children up to one year of age to address concerns about children's susceptibility to manganese toxicity. See EPA Drinking Water Health Advisory for manganese at: https://www.epa.gov/sites/production/files/2014-09/documents/support_cc1_magnese_dvreport_0.pdf and MassDEP Office of Research and Standards (ORSG) for manganese http://www.mass.gov/eea/agencies/massdep/water/drinking/lead-and-other-contaminants-in-drinking-water.html#11</p> <p>Use of water containing manganese at concentrations above the secondary MCL may result in aesthetic issues including the staining of laundry and plumbing fixtures and water with an unpleasant bitter metallic taste, odor, and/or black-brown color.</p> <p>**Infants and children who drink water containing manganese at high concentrations may have learning and behavior problems. People with liver disease who drink water containing manganese at high concentrations may have neurological disorders.</p>						

LEAD AND COPPER – Q2 (May 2024) and Q4 (December 2024)						
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)
Lead (ppb)	15	Q2 – ND Q4 – 1.1	Q2 -20 Q4 - 20	Q2 – 0 Q4 - 1	Corrosion of household plumbing	No
Copper (ppm)	1.3	Q2 – 0.329 Q4 – 0.912	Q2 -20 Q4 - 20	Q2 – 0 Q4 - 0	Corrosion of household plumbing	No

Turbidity	TT	Lowest monthly % of Samples	Highest Detected Daily Value	Violation	Possible Sources of Contamination
Daily Compliance (NTU)	5	N/A	.527	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

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.

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 Works 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 information about testing, contact Housatonic Water Works at 413-528-1780. 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>.

SERVICE LINE INVENTORY AND LEAD AWARENESS

In 2024, the U.S. Environmental Protection Agency (EPA) mandated that all Non-Transient Non-Community (NTNC) and Community (COM) water systems conduct a service line inventory to identify and document the materials of all service connections. As part of this effort, Housatonic Water Works was required to catalogue and report on all service connections within its water system.

To review the Service Line Inventory (2024) for Housatonic Water Works, visit the State of Massachusetts Public Water Supplier Document Search webpage:

<https://www.mass.gov/info-details/public-water-supplier-document-search>

1. Select the name of the water supply (Housatonic Water Works).
2. Navigate to the “Documents for Download” section.
3. Open the file titled “Service Line Inventory (2024).”

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

If you have any questions, please don’t hesitate to contact us.



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