

2022 Consumer Confidence Report

Your Annual Drinking Water Quality Information



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Massachusetts Department of Environmental Protection
Public Water Supply ID #1113003

This report provides a review 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). 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 a Massachusetts certified operator who oversees the routine operations of our system. Our filtration and disinfection treatment systems are extremely reliable. Reservoir water is directed through slow sand filters and then a controlled amount of sodium hypochlorite (bleach) is added. The chlorinated water flows through a maze-like structure prior to entering our 1.1-million gallon storage tank, providing time to ensure complete disinfection of the drinking water. The water quality is monitored by us and MassDEP to determine the effectiveness of existing water treatment and to determine if any additional treatment is warranted. MassDEP conducts regular Sanitary Survey inspections on our water system every 3 years to assess and inspect our water system. Our last Sanitary Survey was conducted in September of 2020. As part of our ongoing commitment to you we make regular repairs to the system and address concerns of our customers and regulators.

YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Housatonic Water Works' water comes from a surface water source, Long Pond Reservoir, located southwest of the Village of Housatonic. Long Pond has a surface area of 115 acres and storage capacity of 263 million gallons. 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?

MassDEP has prepared a Source Water Assessment Program (SWAP) Report for the water supply source(s) serving this water system to assess the susceptibility of the supplies. A susceptibility ranking of "moderate" was assigned to this system using the information collected during the assessment by MassDEP, which included the absence of hydrogeological barriers that can prevent potential contaminant migration from the surface. Typical agricultural, commercial, industrial, and residential land uses can contribute to contamination. The complete SWAP report is available by contacting the Water Department, or online at <https://www.mass.gov/service-details/the-source-water-assessment-protection-swap-program>. For more information you may also contact the MassDEP Western Region Office at (413) 755-2215.

What causes occasional color in the water?

HWWC's source water is sometimes affected by summertime spikes of naturally occurring manganese, which can react with the chlorine used as a disinfectant and then cause color ranging from light yellow to dark yellow to brown to grey to black. HWWC conducted pilot testing of a proposed GreensandPlus™ filtration system in September 2022 under a variety of flow conditions, and at a time when manganese in the Long Pond source water was at relatively high levels. The filters removed manganese to mostly non-detect levels, and always met the goal of ≤ 0.015 ppm. A report on the pilot study results was submitted to MassDEP, and is publicly available on the water company's website. HWWC is prepared to proceed with design and construction of the manganese removal system as soon as MassDEP approves doing so. Removing the manganese will prevent the color episodes.

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.

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.

Quarterly testing is conducted for two classes of Disinfection Byproducts (DBPs) – haloacetic acids (HAA5) and total trihalomethanes (TTHM). MassDEP has set the maximum contaminant level (MCL) for HAA5 at 60 ppb and the MCL for TTHM at 80 ppb, and compliance is determined using Locational Running Annual Averages each quarter for two sampling sites in the distribution system. HWWC has consistently met the limit for TTHM. However, during 2022 the MCL for HAA5 was exceeded during the 1st and 2nd quarters at the Depot St. monitoring location (LRAA = 73 and 74 ppb, respectively), and then during the 4th quarter at the N. Plain Rd. location (LRAA = 66 ppb).

The Company has worked with water quality scientists and engineers and MassDEP to find a solution to the HAA5 issue. MassDEP has approved a new two-stage chlorine disinfection process that we will be implementing in the near future. The process aims to decrease the rate and extent of disinfection byproduct formation, while maintaining compliance with disinfection requirements and preventing bacteria within the distribution system. More information will be posted on our website as it becomes available.

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 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.

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.

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.

WATER QUALITY TESTING RESULTS

The 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 MassDEP.

MassDEP has reduced the monitoring requirements for perchlorate, Inorganic Contaminants (IOCs), and Synthetic Organic Chemicals (SOCs), because the source is not at risk of contamination. The last samples were collected 7/14/2021 for perchlorate and IOCs, and 6/1/2021 for SOCs, and all were found to meet all applicable USEPA and MassDEP standards. The water quality information presented in the table is from the most recent testing done in accordance with the regulations. All data shown was collected during the last calendar year (2022) unless otherwise noted in the table. With the exception of those compounds noted on the tables below, all other compounds reported undetectable levels. "Quarterly" samples were collected on the following dates: 2/9/2022, 5/11/2022, 8/8/2022, and 11/29/2022.

| Regulated Contaminant | Date(s) Collected | Highest Result or Locational Running Annual Average ² | Range Detected | MCL | MCLG | Violation (Yes/No) | Possible Source(s) of Contamination |
|-------------------------------|-------------------|--|----------------|------------|------------|--------------------|---|
| INORGANIC CONTAMINANTS | | | | | | | |
| <i>Perchlorate (ppb)</i> | <i>7/14/2021</i> | <i>0.10</i> | <i>N/A</i> | <i>2.0</i> | <i>N/A</i> | <i>No</i> | <i>Rocket propellants, fireworks, munitions, flares, blasting agents.</i> |

| DISINFECTANTS AND DISINFECTION BYPRODUCTS | | | | | | | |
|--|------------------|-------------------------|-----------------|-----------|------------|--------------|---|
| <i>Chlorine Residual (ppm)</i> | <i>Daily</i> | <i>1.39²</i> | <i>0.49-1.9</i> | <i>4</i> | <i>4</i> | <i>No</i> | <i>Product of drinking water chlorination</i> |
| <i>Total Trihalomethanes (TTHMs) (ppb)</i> | <i>Quarterly</i> | <i>69</i> | <i>43 - 100</i> | <i>80</i> | <i>N/A</i> | <i>No</i> | <i>Byproduct of drinking water chlorination</i> |
| <i>Haloacetic Acids (HAA5) (ppb)</i> | <i>Quarterly</i> | <i>74</i> | <i>32 - 86</i> | <i>60</i> | <i>N/A</i> | <i>Yes*)</i> | <i>Byproduct of drinking water disinfection</i> |

*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 | | | | | | |
| <i>Sodium (ppm)</i> | <i>8/8/2022</i> | <i>10.8</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>37-89</i> | <i>55</i> | <i>N/A</i> | <i>70</i> | <i>Trihalomethane; by-product of drinking water chlorination</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>Bromodichloromethane (ppb)</i> | <i>Quarterly</i> | <i>5-12</i> | <i>7.6</i> | <i>N/A</i> | <i>N/A</i> | <i>Trihalomethane; by-product of drinking water chlorination</i> |
|-----------------------------------|------------------|-------------|------------|------------|------------|--|

Some people who drink water containing bromodichloromethane at high concentrations for many years could experience liver and kidney problems.

LEAD AND COPPER – May 2022 and December 2022

| Contaminant (units) | Action Level | Date Sampled | 90 th Percentile | Number of Sites Sampled | Total number of sites above the Action Level | Possible Sources of Contamination | Violation (Yes/No) |
|---------------------|--------------|--------------|-----------------------------|-------------------------|--|--|--------------------|
| <i>Lead (ppb)</i> | <i>15</i> | <i>May</i> | <i>0.5</i> | <i>20</i> | <i>0</i> | <i>Corrosion of household plumbing</i> | <i>No</i> |
| | | <i>Dec.</i> | <i>0.5</i> | | | | |
| <i>Copper (ppm)</i> | <i>1.3</i> | <i>May</i> | <i>0.85</i> | <i>20</i> | <i>1</i> | <i>Corrosion of household plumbing</i> | <i>No</i> |
| | | <i>Dec.</i> | <i>0.38</i> | | | | |

| TURBIDITY | TT | Lowest monthly % of Samples | Highest Detected Daily Value | Violation | Possible Sources of Contamination |
|---|----------------------|-----------------------------|------------------------------|-----------|-----------------------------------|
| Daily Compliance (NTU) | < 5 | N/A | 0.32 | No | Soil Runoff |
| Monthly Compliance* | At least 95% < 1 NTU | 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.</i> | | | | | |
| <i>*Monthly turbidity compliance is related to a specific treatment technique (TT). At least 95% of our samples each month must be below the turbidity limits specified in the regulations.</i> | | | | | |

ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (µg/l)

N/A = Not Applicable
NTU = Nephelometric Turbidity Unit

HEALTH NOTES

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. All 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 Environmental Protection Agency Safe Drinking Water Hotline (800-426-4791).

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.

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 MassDEP. MassDEP 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

OPPORTUNITIES FOR PUBLIC PARTICIPATION

Housatonic Water Works sponsors bi-annual public information meetings and we encourage dialogue on water quality issues on an on-going basis. If you have any questions about the water you drink, please contact us at 413.528.1780. For more information regarding our system, you may also visit the EPA website at <https://www.epa.gov/enviro/sdwis-search>.

This report is a compilation of best available data sources including licensed operators' reports, MassDEP public records and EPA online records. The report represents an accurate account of your water quality to the best of our knowledge. Prepared by Housatonic Basin Sampling & Testing on behalf of your water supplier.